

1881

Maine Mining Journal v4 [July 8, 1881 - December 30, 1881]

E M. Blanding

W F. Blanding

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Maine Mining Journal.

DEVOTED TO THE MINING INTERESTS OF THE NEW ENGLAND STATES AND BRITISH PROVINCES.

[Entered at the Post Office in Bangor, Maine, as second-class mail matter.]

4.—1.—80.

BANGOR, MAINE, JULY 8, 1881.

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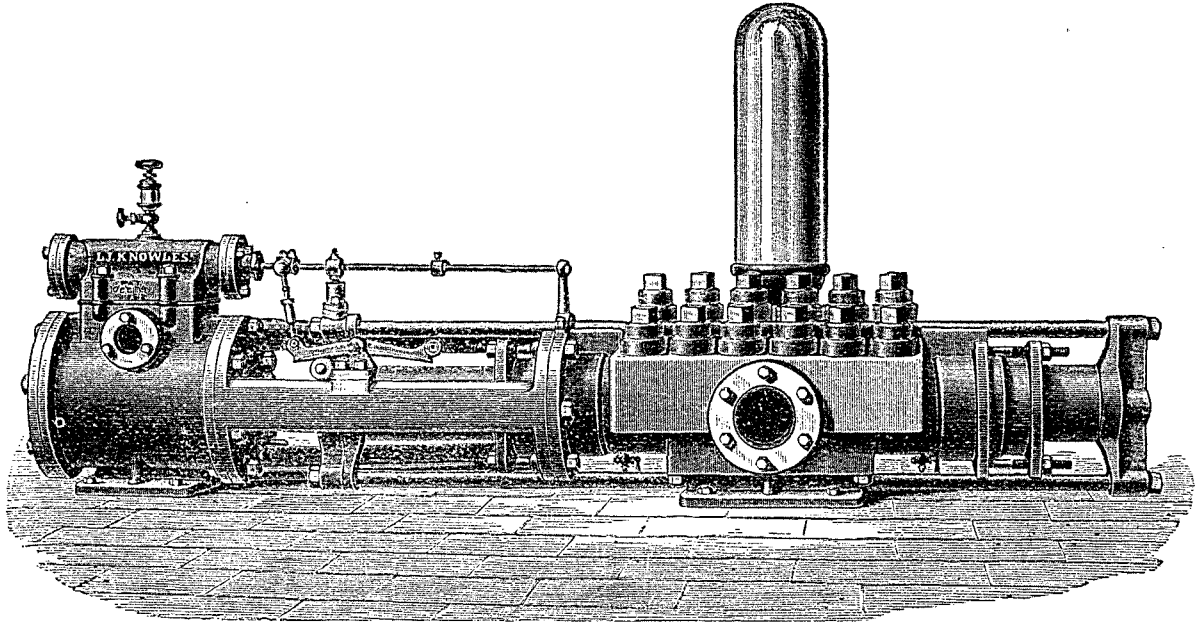
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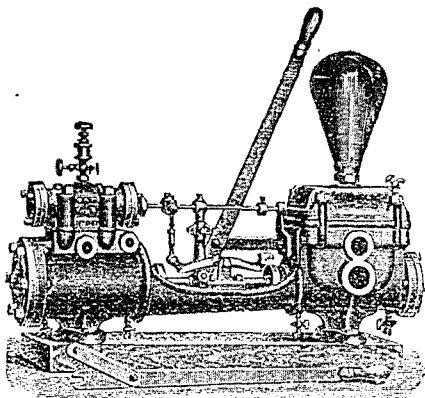
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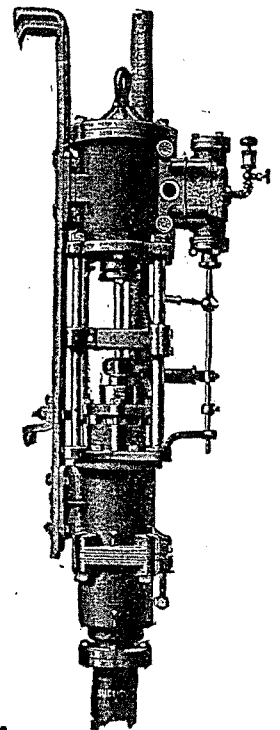


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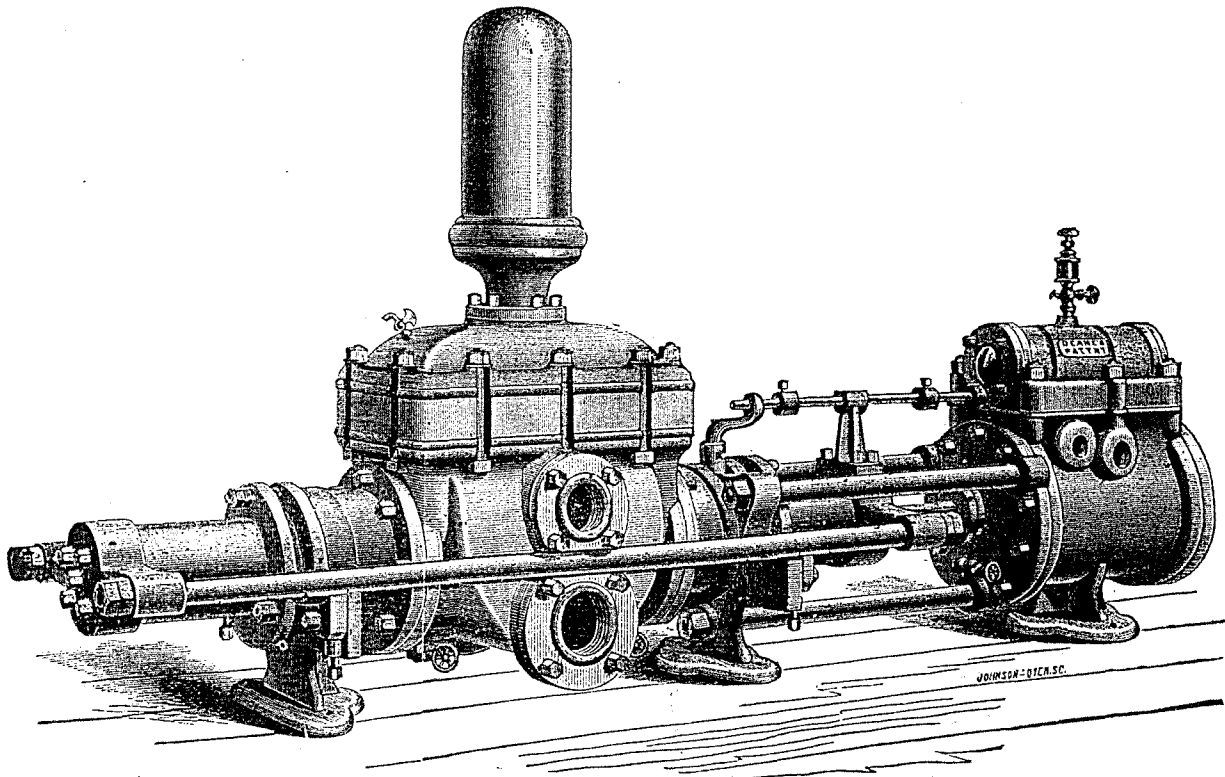
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PUBLISHED EVERY FRIDAY AT

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E. M. BLANDING, } EDITORS.
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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, JULY 8, 1881.

An improvement in the copper market is noticeable and the extremely low prices which have ruled during the past few weeks for copper have given place to somewhat better figures and a fair price is now expected for this useful metal during the summer.

We have received with the compliments of the author a valuable paper on "The Age of the Copper-bearing Rocks of Lake Superior," which was read before the American Association for the Advancement of Science by Prof. M. E. Wadsworth of Harvard University.

As during the previous week, Copperopolis, Milton and Empire have monopolized the business of the Boston Mining Exchange during the week ending on Wednesday last. According to the official report, Milton sold on Wednesday at prices ranging from \$1.60 to \$1.65, Copperopolis \$1.85 to \$1.87, and Empire started at 60c, sold as low as 55c and closed at 58c. Sales were reported of Sullivan at \$3.75, and Douglass at \$2.00. Sales were made during the week of Granger at 45c and 48c, Young Hecla 40c and Twin Lead 90c and 92c.

According to the New York Herald, it was the intention of the Presidential party to visit Maine during the present month. The party comprising among others Secretaries Windom, James, Hunt and Blaine, with their wives were to have been at Mt. Washington last Monday. From there they were to go to Portland and then to Augusta where they were to be the guests of Secretary Blaine. The Secretary had secured a revenue cutter, and the party were to

take a trip along the Maine coast, visiting Mount Desert and other places of interest. They were then coming to Bangor and from here were going to Boston.

The startling and terrible news of the attempt at assassination of President Garfield has been, since the occurrence, the all absorbing topic of conversation and has occupied the minds of the people to the exclusion of almost all else. It is gratifying, however, to observe that no serious break has occurred in the stock market, although, as a matter of course, there has been a great falling off in the number of transactions at the various Exchanges throughout the country. It is now thought that in the event of the President's death nothing approaching a panic would be likely to ensue. Had the news been flashed over the wires at a time when the Boards were in session, the result might have been far more serious: but coming at a time when most of the Exchanges were adjourned over until Tuesday, in the interval there was time for calm reflection, and, meanwhile, reports of a more hopeful character as to the President's condition have had a reassuring and beneficial effect.

The introduction and passage of the bill abolishing compulsory pilotage on coastwise vessels via Hell Gate was mainly due to the indefatigable efforts of Mr. Geo. B. Mason, Secretary of the Vessel Owners' and Captains' Co-operative Association. The objects of this Association are to oppose legislation which is detrimental to the interests of masters and owners of vessels engaged in the coasting trade, and to advocate such measures as will enhance the value of vessel property, and to eradicate, as far as possible, the evils and impediments in the way of profitable employment of coastwise vessels. There are many impositions at New York and other ports that impoverish our shipping and cause capital invested therein to be less remunerative than capital used in other trades. The efforts of organized bodies only can remedy the evils that depress our commerce. It remains for captains and owners to unite with the Association and thereby bring this movement to a successful issue.

Personals.

PROF. EDISON has been honored with the degree of Ph. D. by Lewis University of Vermont.

J. E. WOLFF, General U. S. Census Inspector of Granite and Slate Quarries, is in the city.

DR. SYLVESTER, Supt. of the Castine Copper and Silver Mine, made us a call Wednesday.

MR. F. B. DOLE, of the Blue Hill C. M. & S. Co. made a brief trip to Blue Hill last week.

SURT. LONG, of the celebrated Ely mine of Vermont, made a visit to Blue Hill during the past week.

COL. CHAS. DUFF, Supt. of the Twin Lead, was in the city on Monday and favored us with a pleasant call.

F. H. WILLIAMS, Esq., of the firm of F. H. Williams & Co., Boston brokers, has been in the city the past few days.

HENRY N. STONE, Esq., President of the Granger Cop-

per Mining Company has been stopping at Blue Hill several days.

HON. W. A. SIMMONS has returned from his trip to Arizona and Mexico. He brings glowing reports of properties in the district which he visited.

E. M. HERSEY, Esq., President of the Twin Lead, and his brother, Mr. EDWARD L. HERSEY, of Stillwater, Minn., visited the mines of Blue Hill on Friday last.

EDWARD H. GOFF, of the Boston firm of Goff, Hastings & Co., has gone on a trip to Colorado to look after his extensive mining enterprises in the Centennial State.

JOHN MACKAY, the bonanza king, will leave the Comstock in a few days for New York whence he will sail for Europe. He is expected to return to America in October.

I. W. ENGLAND, publisher of the New York Sun, and A. S. FULLER, mining editor of the same paper, have recently been visiting the Dutch Creek mine, near Salisbury, N. C., in which they are large owners.

SUPT. CAHILL, of the Sullivan, and his wife, arrived in Bangor on Saturday evening and remained in the city over the Fourth. During his stay, Mr. Cahill made several agreeable calls on the MINING JOURNAL.

HANSON GREGORY, JR., President of the Douglass Copper Mining Company, was in Bangor a portion of yesterday. He is much pleased with the outlook at the Douglass and is very enthusiastic as regards its future.

W. A. PEARSON, the well known Superintendent, and J. W. MILLIKEN, Esq., have made a visit to New Brunswick during the past few days and examined a copper property in the vicinity of Dorchester. The showing is carbonates and oxides of a very high grade and it is apparently a prospect of wonderful richness.

MR. W. A. ROOKS, who will be remembered as having exhibited, during a short stay at the Bangor House in this city, some wonderfully rich ores from the now famous Wood River District, has arrived at Wood River, having succeeded in placing a large interest in his valuable claims on Warm Spring Creek with eastern capitalists. A vigorous development of the properties will follow.

During the past week a party of Boston and Salem gentlemen, embracing JOSEPH D. PRESCOTT of the brokerage firm of Prescott & Hersey, GEO. E. HARRINGTON, President, and S. L. SYMONDS, Treasurer, of the Copperopolis Mining Company, and FRANCIS TUCKERMAN, visited the Milton and Copperopolis mines. They passed through this city Monday evening on their return.

The MINING JOURNAL acknowledges a recent call from COL. WM. H. DARLING of Blue Hill. The Colonel will be remembered by all as a pioneer in the mining business of our State and as the first promoter of the promising copper mines of Blue Hill. The Colonel has for many months suffered from a severe attack of rheumatism but has now entirely recovered and is himself again.

MR. J. P. FROST, city editor of the Boston Daily Globe, has been severely afflicted in the loss of his estimable wife who died on Saturday morning last. She was 24 years of age and had been ill for several months with consumption,

but her death was quite sudden. Mrs. Frost was a general favorite among all her acquaintances, winning their affections by her sympathetic nature and many lovable traits of character. The blow falls heavily upon her husband, who loses a loving and devoted wife after a married life of but a few short months. Lieutenant Frost has the sincerest sympathies of all his associates in journalism and his host of personal friends.

Dips, Spurs and Angles.

—Raising stock—bulling the market.

—We are not all horse jockeys, but we all become, sooner or later, patrons of the turf.

—One of the leading ministers of Boston plays the violin. A sort of a fiddle D. D., so to speak.

—A society has been formed in San Francisco to encourage geographical exploration and discovery on the Pacific Coast.

—Would it be proper to call Jay Gould, William H. Vanderbilt and other millionaires, dolorous fellows.—[Dexter, in Cambridge Tribune.]

—Having violated every one of the Ten Commandments, it is expected that the New York Legislature will shortly adjourn.—[Boston Globe.]

—When we used to quarrel with our little brother over a piece of pie, he always took our part—as well as his own. Like Boston girls, he was very intense.—[Omaha Item.]

—The witness said that the laundryman, very much ruffled, collared the boy and gave him a cuff, because he caught him in the act of stocking himself with the contents of the drawers.

—A seaside belle left her bathing shoes hanging out of the hotel window to dry, and the next day the local paper announced that "such a hotel had put up new awnings of an antique design."

—The Boston Globe has conceived a new motto for the Fourth of July—"Melons and colic, one and inseparable, now and forever." E pluribus cucumbers.—[New York Commercial Advertiser.]

—The New York Legislature has, astonishing as it may seem, passed one good law. Plumbers are to register their names with the Board of Health, which board is to pass judgment upon their work.

—A New York paper says a funeral in that city recently was attended by "a throng of bibliophiles, bibliognostes, bibliotactes, bibliographers, bibliopees and bibliopoles." The paragraph was probably written by a bibulous reporter.

—Leadville has a high school building constructed of gold bearing stone. It was obtained from a mountain near Granite, upon which several gold mines have been discovered and which are at present being operated with much profit.

—The editor of the Boothbay Register, who has been taking a ride, declares that he passed a pleasant day. Unless he had a better horse than most editors can afford to drive, the day would be the only thing he could expect to pass.—[Richmond Bee.]

—Jeff Davis is visiting in Toronto. Toronto has to stand almost everything.—[Rockland Courier.] The above saying was especially true during Jeff Davis' administration in the South, when more than one weak-kneed individual found Toronto a convenient place to-run-to.—[Richmond Bee.]

—Among the pre-revolutionary buildings in Boston may

be enumerated the Province House, built in 1679; the Old South, in 1669; present edifice, 1729; the Old State House, 1637; present edifice, 1748; King's Chapel, 1688; present edifice, 1749; and Faneuil Hall, 1742; present edifice, 1763.

—We have a high grade comet at this camp visible to the naked eye some time after nightfall. Its first appearance here was greeted by our miners with a salvo of big guns in the way of Hercules powder explosions. Our miner boys appreciate the grand and beautiful in nature and hail all strange phenomena with appropriate demonstrations.—[Arkansas Mining Journal.]

—Letters are very devout. A great many of them go to Mass. every day.—[Philadelphia News.] A large number of them go directly from Mass. to Cin., and some straight to Rouen.—[Yawcob Strauss.] And that isn't the worst of it; a few of them have so little respect for themselves that they go to Chicago.—[Gunnison News and Democrat.] Worse than all, some go to Durango.—[Lake City (Col.) Silver World.]

—“This,” remarked an expert a few evenings ago while viewing a mineral specimen in the Sun office, “is a malicious formation and is a sure prognosticator that at a time long past into the future there has been a great corruption of the earth's bowels. It is very rich argenteiferous gold, carrying the extract of copper from the carboniferous period with a trace of brass. Would you be after telling me where it comes from?”—[Socorro Sun.]

—Each year thousands of tourists and those who look for pleasure in gazing upon the ruins and monuments of the past, leave America to visit the continent of Europe, the deserts of Asia, and the valley of the Nile; ignorant that America, though young in its modern development and the institutions of to-day, it is yet hoary with an age that reaches far beyond the memory of man. The civilization of America is new, but the rocks and strata of her mountains prove that she was old when Europe was young; and that, before the isles of Greece were born, or Egypt had an existence above the waters of the sea, the sun shone down and lighted up the Sierras of New Mexico.—[Exchange.]

—Who would not be a San Francisco newspaper man, and live in clover? We clip the following from the Daily Report of June 25: “The Daily Report publishing establishment is probably the finest printing office in the world. The walls of the building in which it is located are of cut granite, five feet in thickness. The walls and ceiling of the composing room are elegantly frescoed; the window-casings are of carved prima vera wood, and a wainscot of encaustic tiles, five feet in height, surmounted by a moulding of prima vera, decorates the walls. The doors are of solid black walnut, beautifully carved, and the steps at the entrance are of white marble. The editorial rooms are carpeted with elegant Turkish tapestry and furnished with solid walnut desks and escritoirs; the cuspidors are of porcelain, painted in floral designs by well-known artists, while the chandeliers are of bronze, with gold-plated ornaments and glass pendants.”

A Circular Addressed to Mining Companies.

The following circular in regard to the exhibition in the Department of Mining, Mineralogy and Metallurgy of the New England Manufacturers' and Mechanics' Institute, is worthy of perusal:

Mining in New England is an industry of so much general importance and so little understood by the masses, that a general exhibit of Ores and Metals would be an event calculated to impress the public with the magnitude of this new and laudable industry of New England. This department of the exhibition offers an unprecedented opportunity to bring into prominence legitimate enterprises of this character by a full display of Minerals and Metals from the various mines.

Being the first exhibition of this kind and magnitude in New

England, the management is desirous of having a full and complete representation of every Mining Company operating in the Eastern States. The building covers eight acres of ground within the city limits and is rapidly nearing completion. The Exhibition opens August 18th. Being so near at hand, those wishing to be represented in this department will apply as early as possible.

The following Companies have already secured space: New England Smelting Company., Boston Ore Milling and Metallurgical Works, Sullivan Mining Company, Milton Mining and Milling Co., Pine Tree Silver Mining Co., Copperopolis Mining Co., Douglass Copper Mining Co., Blue Hill Copper Mining Co., Granger Copper Mining Co., Twin Lead Copper Mining Co., Shelburne Silver Mining Co., Mascot Silver Mining Co., Oriental Silver Mining Co.

For space and particulars apply to A. H. Kidney, M. E., Manager Boston Ore Milling and Metallurgical Works, 33 Hawkins Street, Boston, Mass.

CORRESPONDENCE.

New Mexico.

SANTA FE, NEW MEXICO, June 28, 1881.

To the Editor of the Maine Mining Journal:

DEAR SIR:—Since my last, I have been spending some time in the mountains to the N. and E. of Santa Fe with a view to gaining a general geological knowledge of the range and the likelihood of their proving eventually good ground for the prospector. I myself did little real prospecting, as the expedition was more with a view of determining on the best region for future researches than hunting up the mineral itself.

For general information I will give the outfit necessary for such a trip. The cooking utensils consist of a frying pan, camp kettle, coffee pot, plates, cups, knives, forks and spoons; the edibles, bacon, flour, beans, sugar, salt, baking powder and pepper—the latter very necessary in case one kills game, for fresh wild meat without plenty of pepper is very apt in this climate to bring on dysentery; as many blankets as one can conveniently carry, including two rubber dittos for the bed; axe, pick, shovel and pan in the way of tools; rifle and pistols are almost indispensable as also one or two good strong clasp or butcher knives. These articles packed on two “burros” or donkeys are all that are really necessary, but other things such as canned goods, saddle horses, and a Mexican to mind camp and drive the burros will be found great additions. Thus equipped the prospector can range all over the country provided the provisions hold out. A tent is a great luxury but is superfluous except one stays a long time in one place. Rubber blankets should by all means be taken, one to lie on and the other to keep the bed dry in the event of rain storms; they may also be used for covering the packs while moving from place to place.

This mountain range forms the southern portion of the Rocky Mountains, having a general course of N. and S., their actual termination or descent into the plain being supplemented by low ranges of hills of a more recent date than the main range itself. These low hills or foothills, as they are generally termed, are composed of sand and limestones, the latter bearing such fossils as *Terebratula vulgaris*, *Encrinurus liliiformis*, *Spirifer undulatus*, *Fenestella retiformis*, *Productus cembreticulatus* (?) &c., all of which, with the exception of the last, point to the Permian formation. These fossils I collected myself in a short hour's ramble; but the last, which is essentially a carboniferous fossil and was not found in place, may belong together with a trilobite that was described to me as having been found in the same locality (probably *Phillipsia pustulata*, although I have not seen it), to underlying coal measures which a more diligent search would determine. These hills are covered with debris of granite and allied rocks, of which the adjacent mountains are composed, thus at once giving proof of their upheaval into their present position taking place subsequent to the existence of the main range. Owing to this cause and a thick growth of pinons or dwarf pines, added to the almost total absence of water, prospecting in the foothills is any thing but expeditious or pleasant work. However, coal has been discovered in several localities as also gold in small quantities in the beds of the dry water courses or “arroyos,” to use the local parlance, and last but not least good indications of carbonates, and it only requires courage, perseverance and a little capital to prove this matter beyond a doubt, which would convert Santa Fe into a second Leadville and thus confirm the expectations of the most sanguine. I am of opinion that the indications thus far are good but that ultimate success is an open question. Here is a great field for exploration, ranging as these hills do nearly all round the main range. Some hand-

some specimens of chalcedony may be obtained out of a band of "cherty limestone" in this vicinity.

Turning from the foothills to the main range, we have, as far as I could judge by hastily travelling across it, nearly every variety of granite and granitic rocks usually met with in such regions. Among others I may mention granite composed of white, grey or pink felspar, white or dark mica and white to smoky quartz, granulyte, gneiss shading almost into mica schist, such varieties as gneissoid, hornblendic and garnetiferous being of frequent occurrence; then again syenite and its varieties, as syenite gneiss shading into hornblende schist and many others I did not determine. Most of these rocks carry a little magnetic iron but I did not come across any considerable quantities of it. The mountains are crossed by numerous veins of quartz but none mineral bearing, although mica in large sheets can be found in various places from which the Indians used to fetch the material for glazing their windows before glass was obtainable. This granitic belt, which appears to run parallel with the general trend of the range, seems to be about 20 to 25 miles wide on the W. side, as I crossed in two different places and had to travel this distance in each case before finding a change of rock. Upon crossing this granitic zone quartzite is encountered, forming a second zone of about the same width as the former. The rock is white, grey or dark in colour and from coarse to fine grained in texture. Several varieties of this rock also could be mentioned. About the centre of this belt finely stratified slates and shales crop out in conjunction with limestones, the quality nearly approaching roofing slate. I also discovered coal in this region. Continuing an easterly course the same rock is encountered until descending from the main range again on to the lower ground in the neighborhood of Mora. In this district shales and slates are found well stained in many places by copper carbonates both green and blue. Galena is also met with, from an average piece of which, taken from the surface, I obtained an assay of \$30 in silver. The quartzite is traversed by an innumerable number of beautifully defined quartz leads but as far as my superficial examination went failed to show indications of mineralization. However, it is a good looking region and ought to carry mineral whether it does or not. These eastern slopes offer a good chance to the prospector and I should strongly recommend some attention being paid to it, for I feel assured copper and galena will be found in paying quantities. The whole of the main range is well watered and timbered, and supplied with an abundance of game. I have avoided stating exact localities, my observations being too general and in the absence of reliable maps almost impossible.

R. A. VARDEN,
Mining Engineer & Assayer.

Wood River Mining District.

GALENA CITY, HEAD OF WOOD RIVER, }
IDAHO, June 28, 1881. }

To the Editors of the Maine Mining Journal:

DEAR SIRS:—As Maine is my native State, I read of the new developments and fine prospects there with a great deal of pride. There is not a particle of doubt, in my mind, but that Maine is to take high rank as a mining State. But while Maine is making tremendous strides in that direction, perhaps your readers would like to know how we are getting along on the Pacific Coast.

I was formerly employed on the Comstock, Nev., in the Con. Va. mill, but now am in the Wood River District, Idaho, prospecting and mining. This is a new mining camp, comparatively speaking, but I never have been in a mining district that looked more favorable. The mineral belt is very extensive, timber and water all that one can wish, and the mines, for the amount of labor expended upon them, show large bodies of very rich ore.

The Senate Mining Co., whose mines are located two and a half miles from Galena City, are working three separate mines, the Senate, Red Cloud and Chief, all of which are looking very fine, particularly the Red Cloud, in which they have struck a vein of fine galena some two feet in width in a highly mineralized ledge of perhaps six feet in width, at a depth of ten feet. The Chief is showing some very fine ore in limited quantities, with every prospect of an increase. The Senate mine has become a fixed fact, showing high grade ore in abundance.

Superintendent Moore, of these mines, and foreman Collingridge, both men of great experience, very cautious too, have advised the owners as to the condition of the mines, and there is a furnace of goodly capacity on the road, which, Supt. Moore informed the writer, would probably be running in the course of a month. Mr. Moore is highly pleased with the mines in this camp, not only those in which he is interested but those also operated by other companies. The Unus, Gladiator,

Little Chief, Pilgrim and others are showing well in the prospect shafts. They have run a tunnel in the Gladiator some 250 feet and, reports say, have "struck it big." Specimens from the Unus assayed several thousand dollars to the ton.

This mineral belt extends all the way from Bellevue to Sawtooth, a distance of over sixty miles. At Sawtooth are located some fine mines from which they are taking out free-milling ores and are erecting some fine quartz mills. There are also some good placer claims on the Salmon River, near by. Some experts wonder why this great mineral belt has remained a secret so long. The fact is, it has been rather an unhealthy place for miners and prospectors, on account of Indians who have a great hankering after the curly locks of the pale face. But that trouble is all passed now and a prospector is perfectly safe so far as the Indians are concerned, as there are none of the tribe within 200 miles of this place.

More anon.

F. M. BISBEE.

The Newfoundland Railway Project.

AN UNRELIABLE CORRESPONDENT SHOWN UP.

(Correspondence to the Boston Traveller.)

The advocates of a progressive policy in Newfoundland are much indebted to you for your efforts to counteract the effects of false intelligence forwarded from this place regarding our projected railway, and evidently sent for the purpose of discrediting the enterprise in the eyes of the Americans, to whom we look for carrying it out. I refer to telegrams which stated that the Railway Act had been disallowed by the Imperial authorities. No such statement was made public here, and no such rumor even was circulated or believed.

Any person who understands even a little of the working of "responsible government" in the British Colonies must be aware that no act is ever disallowed unless it is found to conflict with Imperial interests, or with international treaties; and as the construction of a railway from St. John's to Hall's Bay involved only colonial interest, and as the Act authorizing it was passed constitutionally, and by an overwhelming majority of the Legislature, there never could have been even the shadow of a reason for supposing that an Imperial veto would be interposed. No one here who understood the matter ever imagined such a possibility, as there was no conceivable ground for Imperial interference. Railway enterprise in a colony is sure to be welcomed by the home authorities as a sign of progress and advancing prosperity.

It appears, however, that the local agent of the Associated Press forwarded repeated telegrams to New York, in which he stated that the royal assent had been positively refused. He has been publicly charged with it in our local press, and has neither denied it nor offered any explanation. He is editor of the Evening Telegram, a paper which has offered the bitterest opposition to the railway; and in this fact a sufficient explanation of the origin of these false telegrams is found.

I may add that another item of misleading intelligence was lately forwarded to the New York Herald, regarding a fire at Little Bay Copper Mine, which was pictured as frightfully destructive—the people flying for safety to the vessels and burying their goods.

The whole amount of injury from the fire was the destruction of three small "shanties" in the outskirts of the village, caused by the woods having taken fire in the vicinity. This splendid copper mine, one of the richest yet discovered in any country, has happily sustained no injury whatever from what was pictured as a terrible conflagration in the columns of the Herald, and its working proceeds most satisfactorily. I do not think that this news item had any other origin than carelessness on the part of the sender, as to the facts, and a desire to create a sensation in a small way, and secure a place for the communication in the columns of the Herald. It is easy to see, however, how much mischief might follow from an untrue paragraph of this kind.

St. John's, N. F., June 29, 1881.

A recent discovery of gold is reported in the town of Ashford, Windham County, Connecticut, which promises to prove of considerable importance. Specimens sent to a mining company in New York City assayed from \$18 to \$27 a ton. The company were desirous of investigating further, and directed the Connecticut prospectors to send on 300 pounds more of the rock, saying that if it would assay \$30 a ton they would put \$10,000 into the working of the mine, and send 100 men to begin operations at once. This amount has accordingly been shipped and is said to be much richer in gold than the first lot.

LODES, LEADS AND VEINS.

ATRATO.—The Atrato Mining Company have secured the exclusive right to operate for 200 miles on the Quito River and its tributaries during a term of six years. Letters received recently from members of the party give encouraging reports of the richness of the streams in which they are working and speak in high terms of the valuable rights they have secured and the kindly attitude of the government toward the company.

EXETER.—Operations have been resumed at the Exeter mine and developments are progressing vigorously. The shaft is being sunk on the vein and some excellent ore is being taken out. The shaft is now about 70 feet in depth and there is decided improvement in the ore.

SUNBURST.—The mine is looking well. The vein at the present depth is 1 1-2 to two feet in width, while on the surface it was only three inches.

FANEUIL HALL & SULLIVAN.—Supt. Hayward's weekly report, dated July 6, is as follows: "The crosscut has been advanced, during the week ending Wednesday morning, 7 feet, notwithstanding that we lost four shifts on account of the Fourth. We still continue in good blasting ground. The machinery continues to give entire satisfaction and with the present good ground and the fine crew of men we have, we shall hope to furnish some important news for the public ere long.

COPPEROPOLIS.—More than a year ago we had occasion to refer to a remarkable surface showing of copper upon what was then known as the Custer property, owned by Dr. L. W. Hodgkins, of Ellsworth. Although the first blast into the ledge was yet to be made, the croppings were of such wonderful richness and the ore zone or belt of such apparently unlimited extent that we could but think a proper development of the property would prove the existence at this point of one of the most valuable mines yet discovered in eastern Maine. The several superficial openings which have been made from time to time since have given us no cause for changing our views, but, on the contrary, have greatly strengthened our opinions. Dr. Hodgkins has, from the first, steadfastly refused to dispose of this valuable piece of property until he could be positively assured it would pass into the hands of parties who proposed to work it for what there was in it and who would proceed at once to its development in a vigorous and systematic manner. For this the Doctor deserves the thanks of all interested in the successful establishment of the mining industry in Maine, as we have already seen too many of our most valuable properties tied up in an almost hopeless condition through a sale effected to parties who intended to use them merely as a basis for stock jobbing operations or else had neither the means nor the good judgment required to open them up in a proper manner. Full particulars of the comparatively recent change in the ownership of the Copperopolis mining property, as also the most important portion of Prof. Stewart's able and exhaustive report, have already been placed before our readers in these pages; and as the work thus far performed has been mainly confined to surface improvements preparatory to future operations, there is little for us to say at present except to again express our confidence in the stability and integrity of the Copperopolis Mining Co. and our belief that the mine is every way worthy of being developed on the extensive scale now proposed. The Copperopolis property is 50 rods square, across which, running nearly east and west, extends an immense mineralized belt recently proved to be fully 350 feet in width. The linear extent of this great ore-channel is unknown, but it has been traced in either direction as far as the ledge is exposed, a distance of more than 3,000 feet. Within the limits of this belt no opening or excavation yet made has failed to show more or less of the rich ore characteristic of the lode. This ore is mainly the purest of yellow sulphurets, but also consists of blue and green carbonates with some native copper. The ore dumps at the several prospecting pits on the property have already assumed fair proportions. A large force of carpenters have been engaged for several weeks past in erecting a boarding house with accommodations for upwards of one hundred men. This is now nearly completed and is one of the finest and most imposing structures in Hancock County. It has a commanding situation on high ground overlooking the Bay and presents the appearance of a fine summer hotel. It is two and a half stories in height, surmounted by a cupola and surrounded by a broad and spacious veranda. The building is situated upon a terrace at a considerable elevation above the main carriage road, which is reached by a broad stairway of massive granite. Quite a quantity of good copper was taken out while excavating for the cellar. As soon as the boarding house is ready for business, which will be within a few days, a large force of miners will be set at work as fast as they can be secured, and the mine will be opened up and developed in the most vigorous manner.

Meanwhile the work of prospecting is going on, and an open cut is being carried across the entire width of the ore-channel for the purpose of determining upon the most favorable points for locating the permanent shafts. This crosscut has shown some very fine ores and also considerable native copper. Mr. R. C. Johns, an experienced Cornish miner, formerly in the employ of the Milton Company is foreman of the mining department. The Messrs. Mullan also give their constant attention to the work now being carried forward and the whole is under the immediate supervision of Supt. Shoensbar of the Milton. This, of itself, is a sufficient guarantee that the business of the Company will be conducted ably and honorably while the mining will be performed in the same energetic, careful and systematic manner which has characterized the developments at the Milton. The surface showing made by the Copperopolis has not, so far as we know, yet been equalled in Maine, and every indication points to the existence at no great depth of an extensive and wonderfully rich deposit of ore. The Company, as organized, is a most excellent one and is in a substantial financial condition. Under the present enterprising and intelligent management it must shortly become one of our most important producing mines. A quantity of fine specimens, which show to good advantage the general character of the Copperopolis ores, may be seen at the office of the MINING JOURNAL.

Blue Hill.

DOUGLASS.—The mine is in excellent shape and is making a better showing than ever before in its history. The smelters are running steadily and doing effective work. Another furnace is now in process of building. This is to treat the matte as it comes from the cupolas and before going to the reverberatory furnaces. Two vessels have just arrived at Blue Hill with coke for the Douglass smelters. The directors of the company held a meeting in this city Wednesday evening. W. D. Swazey was elected Treasurer in place of Stephen Jennings, resigned.

STEWART.—Vigorous operations are being conducted on the Stewart and the developments are very encouraging. President Laughton will probably visit the mine during the week.

BLUE HILL.—Capt. Moyle has returned from his trip to Boston and under his charge the developments at the mine are progressing in a highly satisfactory manner. Ore of a high grade continues to be taken out in large quantities.

TWIN LEAD.—Developments on the Twin Lead are concentrated on the south crosscut which on the last day of June had reached a length of 62 feet.

FAVORITE.—A meeting of the Favorite Stockholders was held in Blue Hill on Saturday last, but owing to the absence of one of the most prominent Stockholders, Mr. W. D. Swazey, who had been called to Boston on business, an adjournment was made until a later date.

REVERE.—A special meeting of the stockholders of the Revere Silver Mining Company will be holden at the Bangor House on Saturday, June 16th.

Bagaduce.

CASTINE COPPER AND SILVER.—Developments on the mine of the Castine Copper and Silver Mining Company are being pushed continuously. The drift or tunnel into the bluff is now in about 50 feet.

NORTH CASTINE.—It has been decided by the officers of the new company who have secured the North Castine mine to at once resume work at the mine, and a crew of men under the charge of Messrs F. W. Leavitt and Charles Dunton have left Bangor this week for North Castine. It is the intention to commence work in the bottom of the shaft and sink as speedily as possible to a depth of 100 feet.

COLTON.—The developments on the Colton have been exceptionally satisfactory to the management. The crosscut at the bottom of the shaft northward from the foot wall of the vein passed through some thirteen feet of ore that will run about three per cent. copper, and then after running through barren rock and a heavy streak of iron another ore body carrying very fine copper sulphurets and averaging five per cent. was met on the hanging wall side of the vein.

DODGE.—A Bangor party, who recently returned from an inspection of the Dodge property in Brooksville, reports that he is highly pleased with the prospects. A shaft is being sunk on the so called Pine Tree vein and fine copper and silver ore is found.

CAPE ROSIER.—The Cape Rosier mine is being vigorously developed under the direction of Supt. Pollard. The company embraces leading capitalists of New York City who have great

confidence in the Cape Rosier property and it is proposed to open the mine on a grand scale. It is probable that during the present month a large party of prominent business men from the Metropolis will visit the mine.

British Provinces.

A discovery of mica in very large quantities is reported from Thunder Bay, Lake Superior. It is said blocks 12 to 15 inches square can readily be broken off.

A rich lead of silver was discovered by an Indian, at Bridgewater one day last week. A prospector from this city viewed the lead and bought up several claims.—[New Era.

The Halifax New Era says the "Free Claim" mine at Renfrew, N. S., from which another bar of gold, worth \$1,000 has been obtained, was abandoned ten years ago as played out.

The Tancook Island Mine, near Chester, is a success. The vein is rich, and it is not uncommon for the workmen to pick \$15.00 worth of pure metal from the sand in a day.—[New Era.

SATEMO.—The Superintendent under date of July 1st, reports: "New shaft sunk sixty feet in last thirty days. Big strike on Kent lode which is now four feet wide. Nugget lode looking better than ever. Accumulating quartz rapidly; will have fifteen hundred tons ready for the mill."

The Queen Manganese Co. (Alfred Markham, manager) recently received a large portable engine from the Waterous Co. of Brantford, Ont., and a latest improved rotary saw-mill from the Erie Iron Works, Pa., to be used in sawing lumber wanted in and about the mines. The company have five or six teams daily hauling ore to the Sussex station.—[St. John Sun.

The steamer Victoria, which sailed from Halifax recently for New York, took 24 men, who were engaged by Mr. Percy W. Rose, to work for the Cusihiuachic Silver Mining Co., of Chihuahua, Mexico. If these men prove suitable for mining it is the intention of Mr. Rose to send off 100 more. He is paying them \$40 per month and their expenses from Halifax to Mexico.

The Messrs. Foster are working their claim at Montague systematically. They have a trolley and tramway for removing the rock from the shaft, and an electric battery for firing shots. The battery is kept in the blacksmith's shop, and after the holes are drilled and ready a charge of dynamite is put in and fired, after the men have all left the shaft, by electricity. A visit to this mine will repay sight-seers.—[New Era.

A Provincial exchange says that Rev. Mr. Hickson, of Carleton, N. B., and others, have formed a company to open up a silver and lead mine in the vicinity of Bathurst. An assay has been taken of the ore, and it has been found to contain one-third lead of the entire bulk and thirty-one ounces of silver to the ton of lead. Steps are already being taken to incorporate a company to be known as the Nigadoo Silver Mining Co. The capital announced is \$150,000, of which \$50,000 is open to the public.

The Chezzetcook Gold Mines lately discovered promise to gain immediate notoriety. Mr. W. J. Gates has shown us several specimens of quartz collected by him during an hour's visit to the locality. These specimens are really some of the richest we remember ever to have seen, and were taken from the claims of Messrs. McLeod & Co. Miners of experience pronounce the boulders as indicating the richest mines ever discovered in Nova Scotia. The main lode has not yet been discovered, but skillful parties are searching.—New Era.

A correspondent of the Halifax New Era, under date of June 20th, says: "The outlook at Montague is brighter now than it was a few days ago. The Rose Lode which formerly yielded so well although recently not showing very rich quartz is giving indications of getting better. Two enterprising gentlemen from the States, Mr. Foster and son, have opened some lodes near Major Montague's gate which show well, and they express themselves satisfied with the results of their prospecting. The best quartz ever taken out at Montague were got last week on Mr. Symonds' property. I am acquainted with the Gold Mines at Montague since they were first opened, and it was the richest quartz that I ever saw either there or at any other place. The oldest miners who saw it all give the same opinion. Mr. Shattick is working Mr. Sutherland's property and the quartz taken out shows well."

A correspondent of the MAINE MINING JOURNAL, writing from Renfrew, N. S., under date of June 26, says: "The Nova Scotia mines are looking very promising at present; new and important discoveries are made almost every week. The latest discovery is in the Caribou District, Musquodoboit, which, according to all appearances just now, is going to be a 'bonanza.' Will give you further particulars concerning it in my next let-

ter. I had the pleasure of examining our conglomerate and alluvium mine at Gay's River in company with a noted German expert. He says that it is by all means 'The King of the Nova Scotia Mines,' and that there are heavy deposits of coarse gold in the gulch. He sailed for England by last steamer, and will advise his friends to invest all their spare dollars in 'The N. S. King Alluvial and Conglomerate Mine.' I have just seen some ore from a recent discovery in Pictou County—silver and lead; it looks very finely—cannot say what per centage of silver it carries."

General Mining Notes.

The Salisbury Watchman estimates that nearly \$200,000 have been expended for mining machinery in each county situated on the "gold belt" of North Carolina, within the past twelve months.

CHAPPARAL.—The Supt. of Chapparral reports: "Everything is going ahead as fast as it can be pushed. Tracks laid, cars in place, and all preparations for the extraction of ore completed. Vein looks well. Slightly improved in quality."

W. G. Harris, a prospector, has found some rich mines in the Grand Quivira Mountains, sixty miles northeast of Socorro, New Mexico, a locality which has been but little explored. The most wonderful of his discoveries, however, were tons upon tons of pottery, mostly broken, but a large portion of which was as perfect as the day it was made.

The London Stock Exchange received something of a shock on Tuesday last, when it was ascertained that a telegram to the Indian Gold Mines Company, of Glasgow, which had been interpreted to read "nineteen tons of ore crushed yielded two ounces per ton," meant two ounces for the entire nineteen tons. The shares which a few weeks ago were selling at 66 are now quoted at 25.

The Salisbury (N. C.) Watchman announces an important transfer of timber and mineral lands in Montgomery County to a New York company, represented by Mr. E. G. Hinckley. The property consists of 3,300 acres, on which there are not less than thirty veins of gold bearing quartz. Mr. Hinckley states that \$50,000 have been invested in machinery to be shipped immediately to the property.

J. M. Miller and Orriu Miller are suing in Bodie for one-half of the May Lundy mine. They claim it on the ground that the defendant was "staked" to the prospecting, and if he found a mine the plaintiffs were to have half of it. Butterfield was the locator of the May Lundy mine, and subsequently sold all of it. In this connection we understand that a man in this city intends to bring a suit for one-half of the Nevada Bank and its contents, basing his claim on the ground that he once gave Mr. Flood a point on stocks.—[San Francisco Daily Report.

JUNE DIVIDENDS.—Alice, \$40,000; Boston & Montana, \$20,000; Copper Queen, \$25,000; Catalpa, \$60,000; Consolidated Gold Mining Company, of Georgia, \$4,000; Deadwood-Terra, \$40,000; Dunkin, \$15,000; Eureka Con., \$25,000; Evening Star, \$25,000; Father de Smet, \$25,000; Green Mountain, \$9,375; Gold Stripe, \$22,500; Great Western Quicksilver, \$12,500; Homestake, \$30,000; Idaho Gold, \$23,500; Indian Queen, \$6,250; Iron Silver, \$20,000; La Plata, \$15,000; New York Hill, \$10,000; Northern Belle, \$37,500; Ontario, \$75,000; Robert E. Lee, \$50,000; Robinson Con., \$50,000; Silver King, \$25,000; Standard Con., \$75,000; Starr-Grove, \$20,000; Tombstone, \$50,000; Western, \$37,500. Grand total, \$907,875.

The mining of copper ore is attracting a great deal of attention, and the eyes of capitalists are turning toward Arizona and New Mexico. A very interesting article appears in the Albuquerque (New Mexico) Journal, in describing the copper mines known as Santa Rita Del Cobres, located five miles east of Fort Bayard. These mines were discovered by an officer in the Spanish army in 1800, who, not possessing means to work them, sold them out entire to a wealthy Spanish gentleman in 1804, who commenced working the property extensively. His first shipment of copper to Mexico proved a success. On account of the extraordinary quality of the metal he was enabled to make a contract with the royal mint for the purpose of coinage for the full annual product of the mines. The copper was transported to the City of Mexico, 1,000 miles on pack mules to Chihuahua, from thence by wagon. One hundred mules were continually employed, each mule carrying 300 pounds. The force employed in working consisted of 390 men. It is claimed that the last year the mine was worked the proprietors cleared the net sum of \$500,000, and that the gold found in the copper paid all expenses. Notwithstanding a good title is vested in these mines, they have been several times jumped by prospectors. While the Santa Ritas are by very many consid-

ered the richest deposits of red oxide of copper known, they are strictly the most peculiar and really singular copper mines in the world. They are not veins or lodes; but on sinking a shaft the miner continually meets with veins of native sheet copper from one-eighth of an inch to two inches thick all rough the country or porphyry rock. He often meets with boulder or nugget copper in nuggets weighing from 50 to 150 pounds. These lumps are, on account of their peculiar formation, called by the miners kidney lumps. These mines, according to account, are inexhaustible, and bid fair to become more famous in the present day than they were in the past.

Nuggets.

—The Superintendent of the Sullivan mine wants thirty good miners.

—A large number of visitors are expected in the mining regions during the summer months.

—Mr. J. P. Bass, of the Bangor Commercial, has patented a machine for burnishing photographs.

—The Boston Advertiser has changed its form and now appears as a publication of eight pages.

—A party of prominent young men from this city are now cruising in a yacht along the Maine coast.

—It is understood that several of the recently invented Royal Rock Drills are being manufactured in this city to fill orders.

—The State Railroad Commissioners have visited Milo this week to consider the location of the Bangor and Katahdin Iron Works Railroad.

—The annual meeting of the stockholders of the Sullivan Mining Company will be holden at West Sullivan on Wednesday, July 13th, at 10 A. M.

—The granite quarries throughout the State are doing a very flourishing business and experienced workmen are now obtained only with difficulty.

—Prospect work has been conducted with encouraging results on the Leach property in the vicinity of the Hercules mine in the town of Penobscot.

—The latest brilliant freak of Edison's genius is the alleged discovery of a method of converting the sea sands of Long Island into iron ore. A magnet is used in the process.

—The publication of a semi-weekly paper known as the Mt. Desert Herald will soon be commenced at Bar Harbor with Mr. Joseph Wood, Secretary of the Maine Press Association, as editor and publisher.

—The directors of the European & North American Railway at a meeting in this city on Tuesday last voted to at once order one hundred new freight cars. The business of the E. & N. A. R. is rapidly increasing.

—A patent has recently been taken out by Philadelphia parties for an electric drill for boring rock. The drill is a stroke, or reciprocating instead of rotary, and does away with all steam or compressed air.

—Engineers will soon go over the route of the proposed railroad extension from Bucksport to Ellsworth. Two routes will be surveyed. Nothing will probably be done in the line of construction before next year.

—The stockholders of the Portland Smelting and Reduction Works were to hold a meeting in Portland yesterday at which it was expected the sale of a controlling interest to New York capitalists would be ratified.

—The Holman English Opera Company play in Norombega Hall on Friday and Saturday evenings, under the auspices of the Buskin Club, presenting "Olivette" the first evening and "Billee Taylor" the second.

—Copper has been discovered on the farm of Lyman H. Smith, at Richford, Vt., and a foreign firm has leased the farm for one year, for the privilege of working the same, they giving three thousand dollars for the same.

—Mr. F. O. Beal, proprietor of the Bangor House, has assumed control of the mail stage line between this city, Ellsworth and Mt. Desert. Under his watchful care, the wants of the travelling public will be thoroughly attended to.

—The woodboat New England, while passing up the St. John's river a few days since, careened over on one side, and a deck load consisting of 580 steel rails slid into the water and was lost. The rails were for the New Brunswick Railway.

—After the recent annual meeting of the Granger Copper Mining Company, pleasant festivities were held at the Blue Hill House. Mr. Joseph Kimball, the accomplished engineer of the Granger, presided at the piano and the occasion was very interesting.

—The handsome steamer "Queen City" made its trial trip on the Penobscot yesterday afternoon. A pleasant party of stockholders and invited guests participated in the excursion. The new craft will run in connection with the "City of Bangor" between here and Bar Harbor.

—The trouble between the Eastern Railroad managers and the Old Orchard Beach Company has been settled, and the former will be compelled, by the laws of Maine, not only to allow of the connection, but also to delay its trains at least twenty minutes for the trains on the Beach road.

—The Boston & Maine Railroad Company have offered to the station agents three prizes, namely—\$50, \$30 and \$20—for the best kept stations and the grounds about them. Each station master will be allowed a sum of from \$5 to \$10 for seed according to the size of his grounds and the facilities for improving the same. Everything necessary for the keeping of their stations in a neat and tasty condition will also be given to them, and those who fail to make a good showing will be considered inefficient and treated accordingly.

—Mr. H. N. Pinkham, the Portland broker, was in the city a portion of Wednesday, and called on the MINING JOURNAL. He has general charge throughout Maine of the sale of the Boston Globe, and on this trip he perfected arrangements in regard to the sale of the Sunday Globe, which commencing next Sunday will be distributed in the principal cities of the State, arriving from Boston Sunday forenoon by special train. Arrangements have been perfected with Beal's Stage Line by which the Sunday Globe will be taken to Ellsworth and Mt. Desert.

—The island of Campobello, which our readers will remember as having been recently purchased by Gen. Pike, of Calais, for Boston and New York capitalists, is at present being surveyed under the direction of Prof. N. S. Shaler, of Harvard University. When this work is completed, the island, containing thirty square miles, will be cut up into lots and converted into a fashionable summer resort. The company is organized with a capital of \$1,000,000. Alexander Cochrane is president, and Quincy A. Shaw, Henry L. Higginson, George A. Goddard, F. B. Beaumont, Alex. S. Porter, of Boston, and E. E. Chase, of the firm of Chase, Higginson & Co., New York, are directors. Alex. S. Porter, the well-known real estate broker, of Boston, is general manager. The large hotel to be erected immediately will be known as "The Owen."

Gold and Silver Refining and Assaying.

[Commercial World and U. S. Exporter.]

The mining interests of this country in the precious metals are becoming constantly developed to a greater degree, and an immense amount of additional capital is being invested in such enterprises. In this emergency it is highly important for buyers of stocks to assure themselves of the existence in the mines placed upon the market, of a paying quality of ore.

With a view of aiding both the owners of *bona fide* mines and those desiring to invest, in aiming at the real facts, the New England Mining Bureau was established with headquarters at No. 119 Mathewson street, Providence, R. I. The principal of this bureau, Mr. L. B. Darling, is an expert assayer, and has had years of experience in that line. The "New England Mining Bureau" negotiate the sale of mines upon their real value, and assay samples of the ores sent them at their reduction and smelting works in Providence. They have branches in the different States and territories.

Mr. L. B. Darling also carries on, on the same premises, the business of assaying and refining gold and silver, smelting ores and sweeps, and does with promptness and accuracy special work for jewelers and silversmiths. He has furnaces capable of smelting one ton of ore per diem, and every facility and appliance for his branch of business. He has a large trade with jewelers and other establishments working in the precious metals. This is the oldest house of its kind in New England, having been started in 1853. Mr. Darling was previously engaged in the manufacture of jewelry, and had the misfortune to lose \$40,000 by fire. By his energy and enterprise he has succeeded in building up a flourishing trade in the assaying line, and his thorough work and knowledge have won for him the esteem and patronage of the leading manufacturers of jewelry, etc., in this country.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Favorite Mining Co.,	Blue Hill,	July 1,	\$500,000.
Gallihar Gold Mining and Milling Co.,	Portland,	July 1,	500,000.

Silver Lake Hotel, Katahdin Iron Works.

The Lakes of Northern Maine have long been considered by sportsmen, tourists and invalids as the most attractive summer resorts to be found within the limits of the United States. The only drawback to the full enjoyment of their charming scenery, their healthful and invigorating climate and fine sporting privileges, has been their inaccessibility, and remoteness from rail facilities and the comforts and luxuries of civilized life. Gradually, however, these picturesque and delightful spots are being brought nearer by the extension of railroad, steamboat and stagerlines, and the wonderful and varied resources of this almost unknown northern wilderness are becoming more generally known and beginning to be better appreciated. The Kineo House, at Moosehead, has for years past been crowded with visitors from June to October, and other similar, but less noted resorts have had a fair share of patronage.

This year a new resort has been opened to the public which bids fair to at once become a great favorite with the summer seeker after health or pleasure. For several seasons past a favored few have passed the summer months at the Katahdin Iron Works, and its merits as a place for summer recreation are not, therefore, entirely unknown to fame; but not until the present season has the public house at this lovely village in the wilderness, attained the dignity of a summer hotel. During the past winter the house has been repaired, enlarged and fitted up in a first class manner, and under the management of Mr. J. E. Harriman, late of the Globe Hotel in this city, is supplied with all the conveniences necessary for the comfort and enjoyment of guests. The Silver Lake Hotel is situated at the outlet of a beautiful sheet of water known as Lake Mamma-nunna-lungen, but which, to ensure against accidents to visitors, the proprietor of the hotel has re-christened "Silver Lake." The valley and Lake are encircled on all sides by mountains from 2500 to 3000 feet high, and the settlement is the last outpost of civilization on the border of the great wilderness which stretches away northward to the St. Lawrence and beyond. The boating, fishing and hunting privileges of the vicinity cannot be excelled, while the natural attractions of the locality are absolutely unrivaled. Not the least item to be con-

sidered is the water from the famous Katahdin Mineral Spring, and wonderful stories are told of its health-giving properties. A short visit made last season to this charming retreat has made us an enthusiast with regard to its virtues as a sanatorium, while we can also assure our readers that the views of forest, lake and mountain scenery are unsurpassed. The Iron Works may be reached by means of the Piscataquis R. R. to Milo station, whence a delightful stage ride of twenty miles, stopping at Brownville for dinner, brings the traveller to his destination.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, JULY 6, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Alouez	2	2 1/4	2	2 1/4					2	2 1/4	2	2 1/4
Atlantic L. S.	12	12 1/4	11 3/4	12					8		8	
Atlas												
Aztec		3 1/2										
Blue Hill Copper	3 1/2	4	3 1/2	3 1/2					3 1/4	3 1/2	3 1/4	3 1/2
Brunswick	15	20	17	20								
Calumet & Hecla	229	230	226	227					225	227	230	232
Catalpa	17 1/2	2	17 1/2	2					1 1/2	1 1/2	1 1/2	1 1/2
Central												
Copper Falls	5	6	4	5					6	6 1/2	6	8
Contentment				2								
Dana												
Douglass	2	2 1/2	2	2 1/2					2	2 1/2	2	2 1/2
Duncan Silver	2 1/2	2 1/2	1 1/2	2					1 1/2	2	1 1/2	
Empire	70c	75c	72c	75c					60c		55c	60c
Franklin	11	11 1/4	11 1/4	12					10 1/2	11 1/2	11 1/2	12
Hanover												
Harshaw	8		8	8 1/2					7 1/2	9	8	9
Humboldt												
Huron	3 1/2	3 1/2	3	3 1/2							2	4
International												
National		2 1/2	2	2 1/2								2 1/2
Oseola		33	31	32						32		32
Pewabic	10 1/2	11	11 1/4	11 1/2					11 1/4		12	13
Phoenix												
Pontiac												
Quincy	33	36	34	35					34	36	37	37 1/2
Ridge		3 1/2	3	3 1/2					3			4
Silver Islet	44	46	45	46					43 1/2	44	43	44
Star				1								
Sullivan	3 1/2	4	3 1/2	4					3 1/2	4	3 1/2	4

Copperopolis Mining Company.

OFFICE, 4 SEARS' BUILDING, BOSTON, MASS.

Capital, \$500,000. Par Value of Shares, \$3.50. Unassessable.

GEO. E. HARRINGTON, President. S. L. SYMONDS, Treasurer.
W. OSCAR ARNOLD, Secretary.

Directors — GEO. E. HARRINGTON, GEO. WEST, FRANCIS TUCKERMAN of Salem, Mass.; P. MULLAN, L. W. HODGKINS of Ellsworth, Me. JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$5.00. Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, Jr., Treasurer.
W. OSCAR ARNOLD, Secretary.

Directors — COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, Jr., of New York.

BOSTON ORE MILLING and METALLURGICAL WORKS

Metallurgists, Assayers and Analytical Chemists.

GOLD AND SILVER REFINERS.

Ores Crushed, Sampled and Tested.

PRACTICAL MILL RUNS 500 POUNDS AND UPWARDS.

Assays of Ores and Metals.

Refractory Ores Treated by a New Process

SURVEYS, EXAMINATIONS, REPORTS, SKETCHES AND MAPS CAREFULLY MADE.

Construction of Works and Supplies Furnished.

33 HAWKINS ST., BOSTON, MASS.

Sullivan Mining Company.

WEST SULLIVAN, ME., June 22, 1881.

The stated annual meeting of the stockholders in the Sullivan Mining Company will be held at the office of the Secretary in West Sullivan, Maine, on

Wednesday, July 13, 1881,

at 10 o'clock A. M., for the election of officers for the ensuing year and for the transaction of any other business that may legally come before the meeting.

CHARLES L. PERRIN,
Secretary.

SILVER LAKE HOTEL,

Katahdin Iron Works, Me.

This well known resort of the sportsman, invalid and tourist, has been thoroughly renovated, repainted, repapered and refurnished throughout, and is now open for the season.

Every effort will be made to attend to the comfort and pleasure of guests.

Water from the far-famed "Katahdin" Spring always on draught.

Morning train over E. & N. A. R. connects at Milo daily for stage to Iron Works.

A special stage will connect at Milo with the 2 P. M. train from Bangor every Saturday.

J. E. HARRIMAN, Manager,
Katahdin Iron Works.

WELSH ABERNANT "DINAS"

Fire Bricks and Cement,

Unrivaled for endurance under intense heat.

PER CENT OF SILICA, 95:64

All shapes and sizes made to order. Diagrams furnished.

A. T. CHUR,

Sole Agent for the United States,

No. 64 BROADWAY, N. Y.

H. E. DILLINGHAM & CO.,

Bankers and Brokers,

No. 13 New St., New York,

Buy and sell either upon margin or for investment, Railroad Stocks, Bonds and other Securities usually dealt in on the New York Stock Exchange.

H. E. DILLINGHAM, }
R. H. PARKS, } C. G. WHITE,
Member of the New York Exchange.

M. S. NICHOLS,
(Of M. S. Nichols & Co., Chicago,) Special.

**"THE OLD RELIABLE"
HALL'S SAFES.**

— FOR —
LOW ESTIMATES

on them and on the following goods, please address me before buying elsewhere:

*Oil Tanks,
Coffee Mills,
Scales,
Show Cases,*

or anything in the line of

STORE FIXTURES,

I have inside prices.

Respectfully,

W. H. SAUNDERS,

Care of FAIRBANKS, BROWN & CO.,

Boston, Mass.

BELFAST FOUNDRY

— AND —
MACHINE SHOP.

Mining Work of All Kinds

Promptly attended to. The

CONSTRUCTION OF MINING PUMPS

Made a Specialty.

General Repairing of Mining Machinery Done with Dispatch.

Orders should be addressed to

C. J. HALL, Proprietor,

BELFAST, ME.

**H. A. TRIPP,
Counsellor & Attorney at Law**

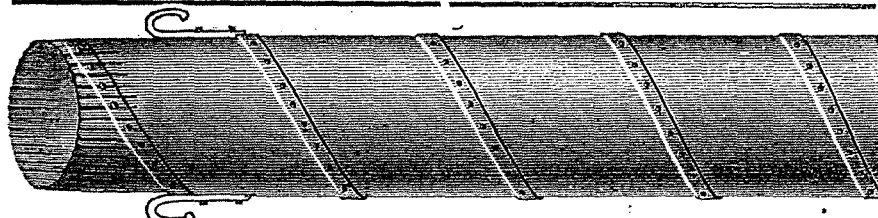
BLUE HILL, MAINE.

Special attention paid to Mining titles and rights.

**Reed's Sectional Covering,
For Boilers, Steam and Water Pipes.**

It is cheap, durable, and the best non-conductor of heat of any covering made. It can be taken off and replaced on the pipes any number of times without injury to the covering. Any person can put it on the pipes. SEND FOR A CIRCULAR.

J. A. LOCKE & SON, 40 Courtlandt Street, New York.



**Root's Patent Heavy Sheet Iron Hydraulic Pipe,
WITH RIVETED SPIRAL SEAM.**

of all Diameters; Strength or Thickness according to pressure required, for MILLS, MINES, and WATER WORKS, made of galvanized or black iron and dipped in coal-tar and asphalt. Furnished with slip joint, sleeve and nipple, or flange connections. In lengths of from 5 to 25 feet, each tested to required margin of safety.

BURSTING PRESSURE 300 TO 1000 LBS. PER SQUARE INCH, according to diameter and weight of pipe.

AVERAGE FIRST COST FROM 10 TO 60 PER CENT LESS than other tubing; the greatest difference being in the larger diameters.

AVERAGE WEIGHT 50 TO 75 PER CENT less than wrought or cast iron tubing.

AVERAGE SAVING IN COST OF TRANSPORTATION 50 TO 75 PER CENT.

The advantage of the spiral over the straight or longitudinal seam is that the Spiral Seam is the STRONGEST while the straight seam is the weakest part of the pipe by about one half.

Where it is found inconvenient or undesirable to ship tubing already formed up we can supply punched and formed sheets nested and packed for shipment (which can be riveted into pipe at destination) in packages of any desired weight.

Estimates and Price list furnished on application. A full stock always on hand.
ABENDROTH & ROOT MFG CO, 28 CHURCH ST. N. Y.

RAND DRILL CO.

Rock Drills and Compressors.

IN USE IN CALUMET AND HECLA and SULLIVAN AND WAUKEAG MINES.

Send for Descriptive Circular.

GEO. H. SAMPSON, Agent,

25 Congress St., BOSTON.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Wernmouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE COPPER MINING CO.
Bluehill, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., '880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Lafan, Jeremiah Wooster.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sauborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sauborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 60,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Redier, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

OSHKOSH CONSOLIDATED MINING CO.,
Lawson, Colorado. Organized under the laws of the State of Maine.
Capital, \$500,000. Shares, \$5 each, unassessable; 40,000 shares in the Treasury.
President, E. C. Nichols, of Bangor; Treasurer, C. T. Plympton, of Boston; Secretary, S. P. Johnson, of Bangor. Directors—E. C. Nichols, S. P. Johnson, Dr. W. K. Knowles and John R. Mason, Bangor; C. T. Plympton, Henry A. Piper and Geo. W. May, Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James P. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 Shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 365,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

FOR SALE.

One 40 horse power Steam Engine.
Can be put in good order in a short time.
One tubular Boiler, two years old, sufficient to drive the 70 horse power engine. Address,
BELFAST FOUNDRY,
Belfast, Me.

Blanchard Slate Co., OF MAINE.

Quarry in operation at terminus of Bangor and Piscataquis Railroad.
Quality and natural advantages unsurpassed. Damage and drainage unequalled, Railroad transportation adjoining. Stock for sale. Sections leased on favorable terms. Capitalists invited to inspect.
A. C. HAMLIN, President, Bangor.

BLUE HILL CENTRAL Mining and Smelting COMPANY.

OFFICE.....BANGOR, ME.
MINES AT.....BLUE HILL, ME.
CAPITAL, \$500,000.

100,000 Shares: Par Value, \$5.00.
Treasury Fund, 30,000 Shares.
Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

YOUNG HECLA Mining and Smelting COMPANY.

Office at Bangor, Me. Mines at Blue Hill, Me.
Capital, \$500,000.
100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.
President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Scovley, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

SEND YOUR ORDERS

—BY—

GILBERT, CRANDON & CO'S EXPRESS.

For Bangor, Machias, Portland, Boston, and all intermediate towns,
Connecting with all points west and south from Boston, and at Rockland with points east to Machias and west to Portland, leaving Bangor every boat at 11 A. M.
Low rates and satisfaction guaranteed.
N. M. JONES & CO., Agents,
24 West Market Square,
At E. G. Ingall's Jewelry Store.

Bucksport and Bangor R. R.

CHANGE OF TIME, June 27, 1881.

	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	6.00	10.00		5.03
Arrive Bangor,		7.03	11.15	6.00
Leave Bangor,			7.35	2.00
Arrive Bucksport,			8.40	3.15

The 6.00 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
STAGE CONNECTIONS.—At Bucksport, daily, for Castine, Penobscot, Blue Hill, Ellsworth, Sullivan and Mt. Desert.
L. L. LINCOLN, Supt.

Portland & Boston Steamers.

One of the first-class side-wheel steamers of this line will leave India Wharf, Boston, and Franklin Wharf, Portland, at 7 P. M., daily, (Sundays excepted.)

CONNECTIONS are made at Portland with GRAND TRUNK, PORTLAND & OGDENSBURG, MAINE CENTRAL, KNOX & LINCOLN Railroads, and with Steamers of the BANGOR & MACHIAS LINE; and at Boston with all lines for points South and West. Tourists will find this one of the finest OCEAN TRIPS on the New England coast.
WM. WEEKS, J. B. COYLE, Jr.,
Agent, Boston. Gen. Ag't, Portland

Blue Hill Steamboat Co.

Rockland and Ellsworth.

SPRING ARRANGEMENT, 1881

After May 11th, Str. HENRY MORRISON, Capt. O. A. CROCKETT, will make two trips per week, leaving Rockland, Wednesday and Saturday, at 6:30 A. M., or on arrival of Boston and Portland Steamer, for Northwest Harbor, Green's Landing (Deer Isle), Blue Hill, Surry and Ellsworth. Leave Ellsworth, Monday and Thursday at 8 o'clock, touching as above, connecting at Rockland with Boston and Portland Steamers and Knox and Lincoln Railroad. Free Coaches to and from the boat at Ellsworth. Passengers by Rail stop in Rockland over night. After the 15th of June three trips per week will be made.
JAMES FERNALD, Sec. and Treas. GEO. GREGORY Supt.

BUCKSPORT AND BLUE HILL STAGE LINE.

The stage leaves Bucksport daily, Sundays excepted, at 1 P. M. for Blue Hill and Sedgwick. Returning, leaves Blue Hill, daily, Sundays excepted, at 8 A. M. for Bucksport.
Tickets sold at the depot in Bangor through to Blue Hill, and by the Blue Hill driver through to Bangor.
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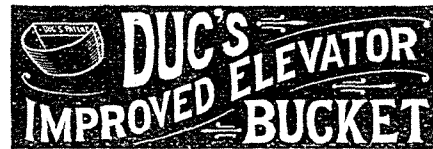
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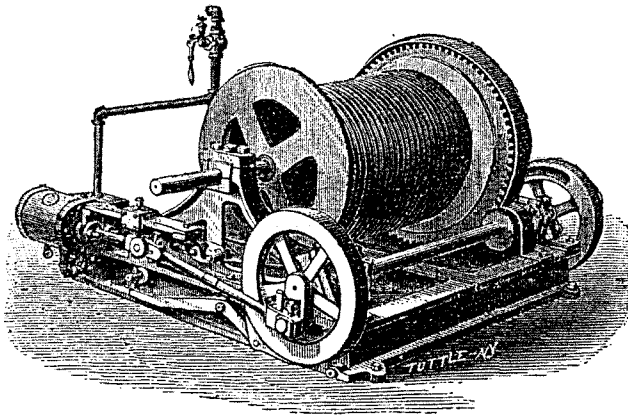
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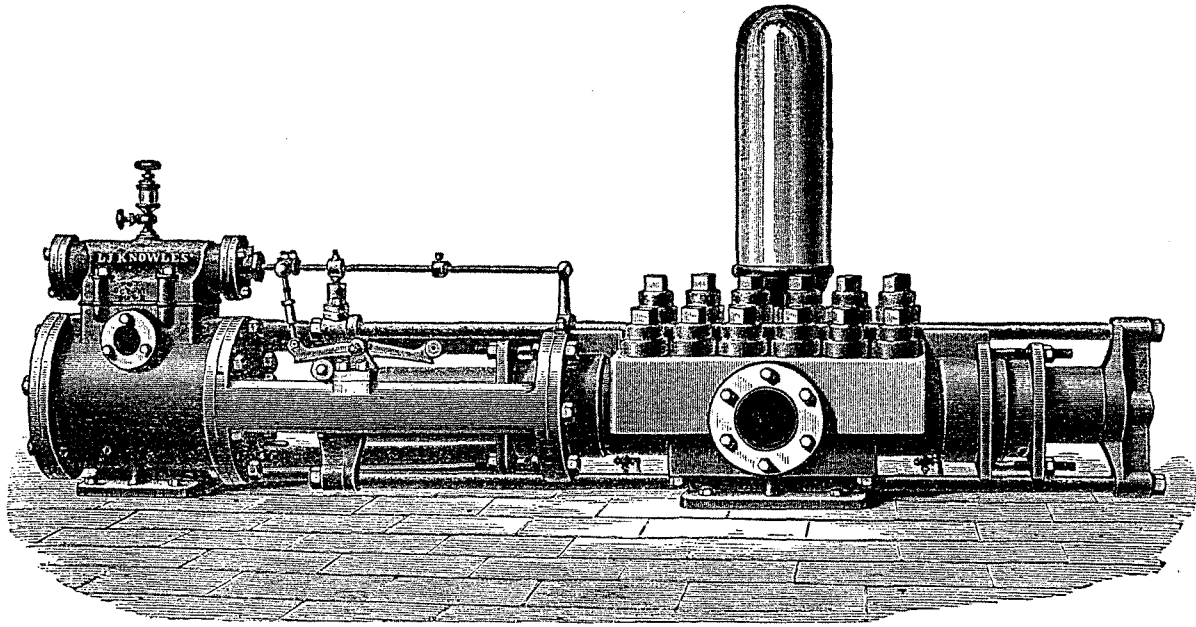
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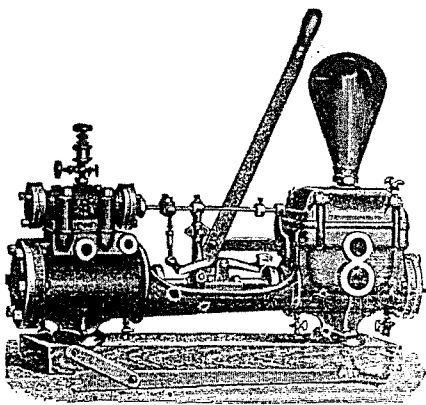
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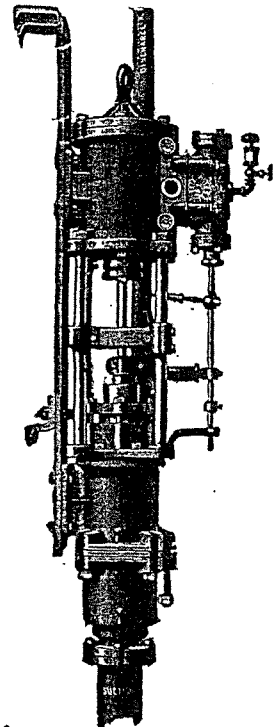


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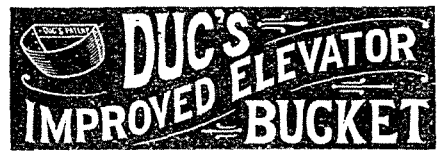
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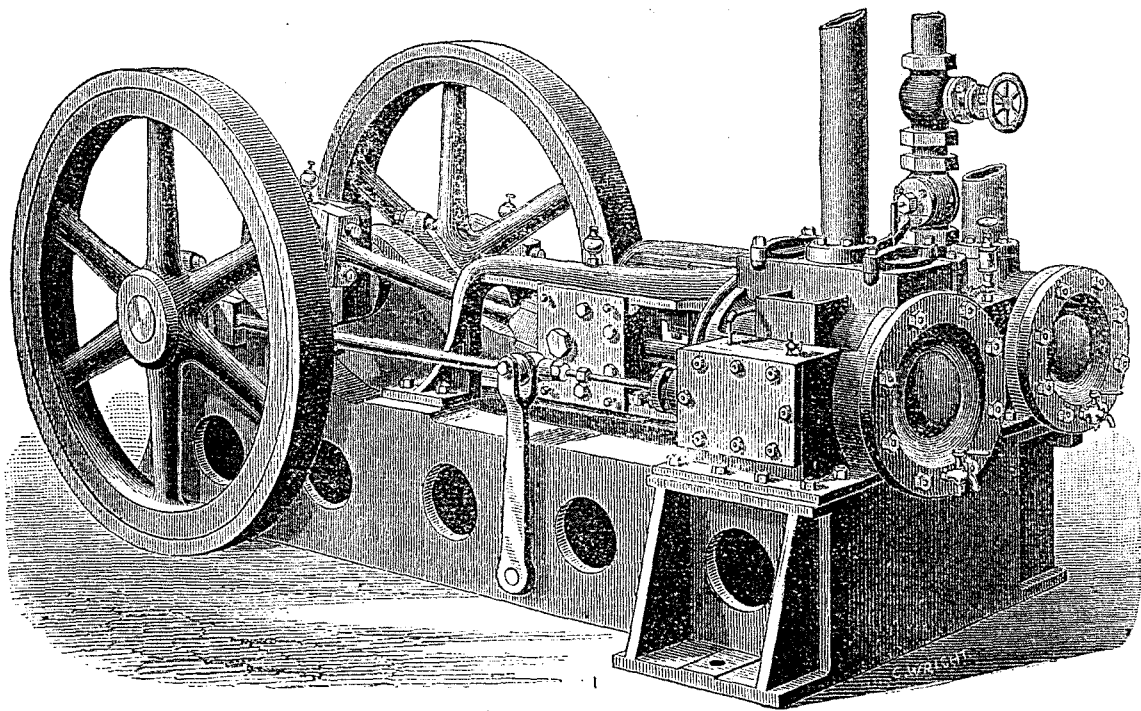
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E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, JULY 15, 1881.

Although there have been no developments of special importance for us to chronicle the present week, the several districts in this State where work is progressing, notably Sullivan, Egypt, Blue Hill, Bagaduce, Jones' Hill, etc., continue to make as favorable a showing as could be wished. Wherever the mineral veins in these localities have been penetrated the results have more than fulfilled expectations.

When the "sharps" are through with their "curious ways" in mining stocks and the men who mean business in mining, same as men mean business in lumbering, manufacturing, etc., are left to prosecute the business there will come prosperity and Maine's mines of silver and copper will come to be understood, appreciated and made to pay good dividends, adding to the industry and wealth of the people.—[Machias Union.

That the interest which the investing public are taking in the mining industry of Maine is on the increase is evident from the activity witnessed in the shares of Maine companies at the Exchanges in Boston and the general and increasing tendency toward an advance in prices. Another cause for encouragement is the large number of important transfers of mining property now pending with every probability of a successful issue. There are good times ahead and not very far in the future, either.

We are not much given to predicting the course of the stock market, and mining shares especially are susceptible to so many outside influences that it is never safe to place implicit confidence upon an immediate advance or decline.

But it can do no harm to inform our readers that every indication points to a decided advance in the leading Maine stocks, which is likely to develop into a "boom," within the coming week. It has been long delayed, but the time is ripe for it, and in our opinion it is coming.

We wish to call the attention of mining companies once more to the fact that the laws of the State require Treasurers of such corporations to publish semi-annually, in the months of January and July, a statement under oath of the financial condition of the company; of the existing capital, of the debts due, of the capital invested in real estate and the fixtures upon it, including machinery, and the last valuation of the real estate, etc., etc. The penalties for neglect or refusal to comply with these requirements are very severe.

The copper market is again easy. The recent heavy purchases have had a desirable effect upon producers. The copper companies' pool has been formed, and 20,000,000 pounds of copper have been sold to the Connecticut manufacturers at sixteen cents a pound, deliverable during the next six months. The dividend copper stocks are very much improved. The lake ingot market in New York is now sixteen and a half cents per pound. In London, Chili bars are £59 steady. Considering all the circumstances, ingot copper cannot now go down, but sixteen cents was a low price for this amount of copper.—[Economist.

The Tharsis Sulphur and Copper Company have declared a dividend upon their operations for the fiscal year ending March 1st, 1881, aggregating \$1,420,000, leaving a clear balance in the treasury of \$91,000. It is especially worthy of notice that this large dividend or net profit for the year of more than a million and a half of dollars was mainly derived from treating pyrites. This company are successfully using the Claudet process for the extraction of silver and gold from pyrites and are also preparing to test the Designolle process for the same purpose upon a very large scale. The chief seat of the works of this gigantic English corporation is in the vicinity of Glasgow.

A fair amount of business has been done in the mining share market during the week. At the Boston Mining Exchange Maine stocks, as usual, take the lead. Copperopolis has still further advanced to \$1.90; Milton is "off" a little, at \$1.56; Pine Tree started a few days since at \$2.75 and advanced to \$3.00; on the Old Board it started at \$2.00, advanced to \$3.50, afterward receded to \$3.00 and closed on Wednesday at \$3.25. Other Maine stocks are showing an upward movement, Douglass having advanced to \$2.75, and Blue Hill and Sullivan are each held strong at \$4. Silver Hill, one of the Garland properties just coming into notice, was called at the Mining Exchange this week for the first time, selling at 25c. and afterwards at 27c. and 28c. Sales are reported of Twin Lead at 88c., Young Hecla 45c. and Granger 48c. Empire has declined to 41c.

In the midst of a business boom that is almost continental, California remains stagnant. What will be its condition when the existing boom shall subside, as of course it

will? We shall have to depend on our mines. In former days they bridged us over the chasm into which our sister States sank. California was saved by her gold, and by her neighbor's silver, from the hard times the other States had to endure. But, strange to say, there are many Californians who are now enemies of mining, and rejoice in seeing it crippled and in the hope of seeing it actually killed. We hope the necessary bonanzas will be discovered before the railroad collapse takes place or our condition—nothing too good even now—will be very bad indeed. The future of California for the next ten years and perhaps longer depends now upon a Comstock development. Without that, mining will be more or less under a cloud here. Of course, the Eastern States are gradually acquiring vast amounts of Pacific Coast mining property; but that makes no boom for California, and a financial crisis in New York would at once check the westward flow of capital. Taking all things into consideration, the search now going on in the lowest levels of the Comstock, is a most momentous one for the whole Coast, and involves the future of this city for many years to come.—[San Francisco Daily Report.

Personals.

MR. F. H. WILLIAMS, of Boston, is in the city.

MR. EDWARD P. MAYO, of the Somerset Reporter, visited our sanctum on Friday last.

PROF. J. H. HUNTINGTON has recently made a professional visit to the Brunswick Antimony mine.

MR. F. A. McLAUGHLIN, the well-known Superintendent, has recently examined the Hercules mine for Boston parties.

JAMES R. KEENE, the winner of the Grand Prize at Paris, has generously presented \$10,000 to the poor of that city.

MR. CHADBOURNE, the retiring President of Williams' College, is intending to manage some gold mines in North Carolina.

PROF. ELDER, of Colby University, has started on a geological examination of the Maine coast, between Portland and Freeport.

CAPT. J. H. MOYLE, Superintendent of the Blue Hill and CAPT. DUNN, Superintendent of the Stewart, were in Bangor yesterday.

MR. WASHINGTON E. CONNOR is said to have made over \$1,000,000 in stock speculation in Wall Street during the past twelve months.

THOMAS GILL, formerly a resident of Portland, in this State, recently met with an accident which caused his death in a Colorado mining camp.

HON. FREDERICK M. LAUGHTON, President of the Stewart Copper Mining Company, returned on Monday last from Blue Hill. He is much pleased at the outlook of the mines of that section.

CAPT. HENRY A. FORD is in the city and has favored us with a call. He is compiling an elaborate history of Penobscot County which will be issued in a few months by Williams Brothers, the well known publishers.

MR. THOMAS STEVENS, a practical mining man of large

and varied experience, is making a thorough examination of the Carmel Antimony Mine for the New York owners. If his report is favorable he will probably remain and direct developments.

MR. C. H. WILDER, Superintendent of the Mount Uniacke Gold Mine, Nova Scotia, passed through this city on Monday last and favored the MINING JOURNAL with a call. MR. WILDER is doing good work in bringing the mineral resources of the Provinces to the attention of American capitalists.

PROF. W. FRANK STEWART is sojourning at the Windsor Hotel, Denver, Colorado, enjoying a brief rest preparatory to field work among the mountains of that State and, possibly, New Mexico. Last week he visited the famous Reduction Works at Argo, and it was his intention the present week to take a run up to Leadville and have a look at the mines of that carbonate camp. The Professor writes that Denver is a beautiful, progressive and wide-awake city, but he found it enshrouded in the all-pervading National gloom. He says: "The news had just flashed across the continent that President Garfield had been stricken down by the hand of a diabolical assassin. The good citizens of Denver were jubilant in the anticipations of a joyous celebration of the National holiday; but this most hideous news from Washington has turned the expected merry-making into a season of unutterable grief and dismay."

The Great Monopolies.

[Peck's Milwaukee Sun.]

There is an association of old fossils at New York calling themselves the "Anti-Monopoly League," that has taken the job on their hands of saving the country from eternal and everlasting ruin in the hands of the gigantic monopolies, the railroads; and this league, through its President, L. E. Chittenden, is sending editorials and extracts from speeches delivered by great men who have been refused passes, or who have not been retained by railroads to conduct lawsuits as much as they think they ought to be, to newspapers all over the country requesting their publication. The Sun gets its regular share of these documents each week, which go into the waste basket with a regularity that is truly remarkable, considering that we are not a railroad monopoly. But there is something so ridiculous about these articles that one cannot help laughing. They claim that the country is in the grasp of the gigantic monopolies, and that they will choke the country to death and ruin everybody, though what the object can be in ruining the country and everybody in it, is not stated. These monopolies have taken the country when it was as weak as water gruel, and hoisted it by the slack of the pants to the leading position among nations. The monopolies have built their track all over God's creation, where land could not be given away, have hauled emigrants out there and set them up in business, and made the waste land of the government valuable. They have made transportation so cheap that the emigrant from Germany of last year can send wheat from Dakota to the Fatherland, and Bismarck and King William can get it cheaper than they can grow wheat within a mile of their castles. These monopolies that the played out nine-spot anti-monopoly leagues are howling against have made the country what it is, and if there are those in this country who don't like it they can get emigrant tickets and go to Germany or Norway and take the places of the men that the monopolies are causing to settle here. Of course we could all run railroads better than the owners run them, but as long as we have not got money enough to buy them we had

better shut up our yawp and let Jay Gould and his fellows do what they please with their own, as long as they permit the country to prosper; and it is prospering now. The anti-monopoly leaguers had better go to driving street cars.

A Lay of the Golden West.

MONTH THE FIRST—JUNE.

I am a rustling tenderfoot;
I'm laying for a claim;
Can any of you rustlers put
A fellow on the same?
I ain't a hog, I don't want much—
A thousand to the ton or such.

MONTH THE SECOND—JULY.

I am a peaceful tenderfoot;
I'm looking for a chance
To join some fortunate galoot
That's struck a circumstance.
I ain't a hog, I don't want much—
A hundred to the ton or such.

MONTH THE THIRD—AUGUST.

I am a struggling tenderfoot;
I'm hunting for some pard
That's got the downright moral root
To play a grubstake card.
I ain't a hog, I don't want much—
A burro, can of beans, or such.

MONTH THE FOURTH—SEPTEMBER.

I am a weary tenderfoot;
I want some eastern bum
Within my hand his hand to put
And sweetly murmur "Home."
I ain't a hog, I don't want much—
An empty through freight car, or such.

—[Gunnison News.

Dips, Spurs and Angles.

—The best end—the dividend.

—A shaft in an Australian mine has been sunk to a depth of 3,200 feet.

—A smelter's ton of copper is 21 cwt., and weighs 2,452 pounds.—[S. F. Daily Report.

—"Anything historical here?" he said at Mount Desert to a native. "Wal, yes," was the reply," that thar cow used to belong to Ben Butler."

—A Western report of a recent neck-tie party says: "He was unanimously chosen by a convention of six property holders to jump from a new pine platform into the sweet subsequently."

—The American lawn mower has gone through English grass so well that they won't have any other kind. The English machine is a cross between an ice-cream freezer and a washing-machine.

—How the Lord happened to select the Garden of Eden, in preference to some of the places of resort described in the thousand and one guides to travellers, published by the various transportation companies, will forever remain a mystery.—[Boston Globe.

—The Georgetown (Col.) Miner says a man by the name of W. R. Stevens, of Bangor, Maine, was recently taken in on the gold brick racket to the tune of \$3,000. He thought he was getting \$5,000 worth of gold for \$3,000, and got three worthless bricks instead.

—Nevada and California newspaper men are in the habit of saying plainly what they think, without mincing matters in the least. The Nevada (Cal.) Free Lance goes so far as to suggest that the Nevada Transcript Bohemian change ends in his chair, so as to give his brains a chance.

—The poetical writer who has made famous the astro-

nomical department of the Providence Journal, says of the comet: "It will vanish entirely from the physical eye, but as long as the eye of fancy endures, the memory of the fair-haired stranger that made the present year memorable by its presence will remain in imperishable colors."

—Speaking of the wonderful characteristics of Chicago, the Tribune mentions that there are thousands of witnesses to the fact that "Chicago has no rival in this country as a place of summer resort." The Philadelphia Bulletin, however, claims that it has one rival; Fort Yuma, in Arizona, where it is so hot that a Yuma dog walks on three legs, always keeping one in the air to cool it off.

—The Milwaukee Republican says that we ship "tons of copper ore" to Escanaba. According to the best of our individual recollection, the Menominee Range has not shipped a pound of copper ore for the last ten years. The nearest we come to it, is copper distilled whiskey, and what little we can spare of that, is shipped away in the paunch of some Milwaukee editorial reporter.—[Florence Mining News.

—Patrick Mulligan, the miner through whose body a two foot drill recently took an excursion, in the Grey Rock shaft, is now believed to be out of danger. He is recovering as rapidly as he deserves but he doesn't desire to be drilled any more. He now cheerfully says that if the boys, after the drill had been extracted, had loaded up the hole with giant powder, tamped it, and lit the fuse as they usually do, he might have been injured for life. Mulligan is a hero.—[Butte (Montana) Inter Mountain.

—When Mercury is playing among the nineties it Mars the pleasure of existence, and we feel as though we might Diana minute, and as though we needed something to Bacchus. If we have Centaur family into the country it is not such a Ceres matter, for we can manage to Pan out somehow or another. But if a fellow has several little Cupids to take care of he is in a bad fix. In a case of that kind I always find Minerva failing, and Juno yourself that it does in Vesta fellow with solicitude.—[Detroit Free Press.

—A Washington letter to the Boston Herald says: One letter out of 300 sent is unclaimed in the office to which it goes. One letter in every 283 sent turns up here dead. One letter out of every 3,100 sent is held for postage at the office of mailing and this amounts to near 300,000 a year. More than 200,000 letters every year are insufficiently addressed. Ten thousand letters this year bear no superscription whatever, and these letters often contain remittances of great value. More than 200,000 foreign letters fail to reach the persons to whom they are addressed.

—He was interested in mining operations, and was trying to induce a friend to join in a speculation in which he was concerned, and from which he anticipated large returns. He used a number of arguments to show the desirability of the venture, and the assurance of large returns which it held out. "There is also this advantage," he said in conclusion; "the stock is forever inaccessible." He evidently intended to show that it would be free from assessment, but many persons who have been parties to mining investments will consider that he couldn't have made a more significant selection of his words.

—Plenty of the old boys are finding it necessary to leave the Comstock and seek financial pastures where the grass is longer. It must come rather hard upon them to leave Virginia and Gold Hill—which, although together about the dreariest, most uncomfortable, and generally God-forsaken inhabited spot on the globe—nevertheless have a strange social charm for the Pioneer. There the Pioneer can surround himself with bullioniferous reminiscences of the past, in company with old pards, and there his old-time manners and his '49 lingo will give no offense, but will, on the con-

trary, earn him respect and consideration. There, also, will not his eye be offended by the abominations of imported refinement or the horrors of aesthetic affection. Hence his attachment for the dust, the snow, the zephyrs, and the "boys" of the Comstock, and hence his tears.—[San Francisco Daily Report.

—The MAINE MINING JOURNAL wants to know why railway corporations don't take more women into their employment. "Most of them," it says, "know how to manage trains, they can handle switches very carefully, there is less color-blindness among them than among men,—and occasionally one is to be found who can 'fire up' beautifully." All of which is very true, but then as train hands they would be too apt to fall into a tender passion, and blow up everybody on board; besides, it is not unlikely that if they were employed to attend the sleepers, they would Pullman about to such an extent that sidgey gentlemen wouldn't be able to get a wink of sleep. 'Most any woman is capable of making a fine carpet at home, but it is very doubtful whether they would make car pets on a railroad. There's nothing that brakeman up quicker than a railing woman, and we can conceive of nothing that would justify a railroad company in inflicting upon the travelling public so much bustle as would inevitably attend the employment of female conductors on passenger trains.—[Northwestern Mining Journal.

—"The trouble about Arizona"—said an Eastern capitalist, who had just returned from inspecting mining properties in that State, "the great trouble—is that people going there drop right into the first trade that comes along, whether they are fitted for it or not. For instance, down in the Tombstone District, there is a plumber keeping a hotel. He charges \$5 a day for board, and for "putty and extras," \$25. Then there is a restaurant run by a minister, but he passes around the contribution box so often that his trade is all gone. The only physician in town used to be a bill-poster in Chicago, and he does nothing but cover his patients with porous plasters. The cemetery is run by a couple of actors, but they work off the grave-digger scene so much that they are beginning to lose custom. There's a shoemaker in the tailoring business, and he sews all his clothes with waxed thread and a brad-awl. The night before I left I sent to the drug store for a prescription. When it was put up the label said: "To be well shuk and tooked as decreed." "The clerk who prepared it talked like a broken down horse jockey, so with great foresight I tried a couple of spoonfuls on my servant. He died in half an hour. Closest shave I ever had in my life! Queer place that, Arizona!"

An Empress in Overalls.

DOM PEDRO AND HIS WIFE GIVEN A BANQUET IN THE BOWELS OF BRAZIL.

A letter from Rio Janeiro says from the 4th to the 6th of April the Emperor and Empress of Brazil were at the famous gold mine of Morro Velho, in Minas Geraes. As the Emperor is never satisfied without going to the bottom of everything, he and the Empress donned brown linen overalls and leathern hats with a candle in front in proper mining fashion and descended into the mine, which is already a quarter of a mile under the surface, and where solids and liquids were laid out and utilized in toasts to the gnomes and other distinguished miners, including the lawyers; but, whatever the Emperor may have thought, it is certain that all the members of his suite blessed their stars fervently when they reached the surface and saw the sun again, for who could not be certain but some exalted Britisher or Brazilian of the Nihilist persuasion might not have the unlucky thought of firing a dynamite mine and giving royalty a golden grave in the bowels of the earth? Fortunately nothing of this kind occurred, and the only mishap was that as the Emperor was riding off to another mine, some nine leagues away, his superstitious horse, alarmed at the meeting with an elderly lady of bewitching aspect, started suddenly and left his surprised majesty gasping for breath on the broad of his back in the dusty road.

Portland Smelting and Reduction Works.

[From the Portland Daily Argus.]

A very important sale of the controlling interest in these Works has just been consummated with some New York gentlemen of high standing. About three weeks since a proposition was made to the company by these gentlemen that the Company sell them a controlling interest in the works. The proposition was favorably received and three weeks given for investigation. Prof. Alex. Trippel, of New York, late of Germany, was selected as an expert to examine into the construction of the works, their adaptability and accessibility for the treatment of ores from the New England states and Provinces. He made a most thorough and searching investigation of the present works and examined Prof. Bartlett's plans for the proposed addition. He returned to New York and advised them to purchase a controlling interest, if possible, in the company, as he considered the works complete, practical, and of the most improved construction. Having had thirty-odd years in the construction and running of smelting works great confidence was had in his report and the New York gentlemen immediately sent Walter S. Poor, Esq., to this city as their legal representative to arrange details of the proposed transaction. It was agreed that all stock issued should be called in and that every stockholder should take his stock at par value and the New York parties were to take their stock at the same rate, paying into the treasury \$100 for each and every share taken; it was also agreed that the present officers should resign and that new officers should be appointed, partly from New York and partly in Portland. Accordingly a meeting was holden recently, the money paid over and the following officers elected: President, Hon. J. H. Drummond; Treasurer, Lorenzo Taylor; Superintendent and Secretary, F. L. Bartlett; Directors, J. H. Drummond, Theo. C. Woodbury, F. C. Crocker and M. G. Palmer of this city, George C. Scofield, R. G. Beardslee and Dore Lyon of New York. Among the stockholders in New York are Messrs. Dodge, Potter & Co., bankers, Grosbeck & Schley, bankers, Stephen H. Thayer, Col. Lewis Carr, H. L. Phalen and several other well known gentlemen.

There will be only about twenty stockholders in all, making, as intended, a close business corporation. Ground was broken last week at the works for a new building 60 by 100 feet for the new furnace and machinery. A coal shed 70 feet long is being completed, and car tracks are being laid to connect all the buildings with the wharf and railroad. The buildings when completed will have a total length of over three hundred feet. In fact these works when completed will be by far the largest and most extensive this side of Colorado, and will employ altogether some one hundred and fifty men. Arrangements have been made for a full supply of ore for at least one year. All plans for the buildings, machinery and furnaces have been made by Prof. Bartlett, and they are intended to take in all the improvements of the best European smelting establishments up to the present time. The general plan followed is that of the smelting works at Swansea, Wales, which are so successfully operating in ores from all parts of the world.

Very few of our citizens are aware of the magnitude of this enterprise, which, through the efforts of Prof. Bartlett, Lorenzo Taylor, and Hon. Josiah H. Drummond, is now fairly set on foot in this city. The organization of the company, on the plan outlined above, is due to the legal skill of Mr. Drummond, whose knowledge in such matters is second to that of no lawyer in the state.

—The Agents' Herald is a sixteen page monthly, full of interesting articles and advertisements of interest to agents and the public generally. It exposes fearlessly all advertising frauds, and at the low price at which it is published, 50 cents per year, should have a large circulation. Address, Agents' Herald, Philadelphia, Pa.

The Atrato Expedition.

[Correspondence to the Portland Advertiser.]

QUIBDO, ATRATO RIVER,)
U. S. OF COLOMBIA, S. A., May 21, 1881. }

My last letter was from Cartagena. Two days sail brought us to Turbo, where we launched our steamers, Millicent and Alice, and two scows. We steamed across the Gulf of Darien 7 miles to the "Uraba" mouth of the Atrato river where we received the balance of our cargo, bade adieu to the noble little schooner J. P. Macheca, and began our journey up the Atrato.

The Atrato river is very crooked; is merely a channel in or through a swamp for 60 miles. This swamp district is full of beautiful trees, vines, parasites, &c., but it became monotonous. After reaching Lucio, the first dry land on the river, the scene changed. The banks were high, and every favorable spot had a plantain grove and a native hut on it. We found the people very hospitable and friendly toward us. Occasionally we obtained fine views of the Andes, but generally they were obscured by clouds, made gorgeous by a tropical sun. No change in the formation indicating a mineral country showed itself until we had passed Vahija del Fuerte, when the long wished for change occurred.

The expedition has reached its destination and is at work at the mouth of the Quito river on a *plya* (sand bar) and will soon send favorable reports to the stockholders. We have secured the exclusive right for six years, with privilege of renewal, to the Quito river and its branches, in all about 200 miles long. The Quito is known to be one of the richest rivers in this very rich country. The Atrato Mining Company now have vested rights of vast extent and great richness, and its future will be a grand success if the right sort of men are sent to work the river for them.

This is a fine field for the geologist and miner and there is sufficient room for thousands of them. But aqueous mining is not the only favorable opening for enterprise and capital. I apprehend that hydraulic mining will take a very prominent place here, for I never saw such favorable conditions for this class of mining before. The country is well watered, falls frequent in smaller streams, and the banks are composed of gravel containing a large amount of gold. The country is also rich in rubber, ivory nuts, chocolate and balsams, which the prospector can save and more than pay the expenses of prospecting. The whole region is heavily timbered, affording plenty of fuel, lumber and timber for mines. Miners should bring whip saws, or portable saw mills, according to the magnitude of their operations, as there are no mills in the country and boards 10 inches wide and 12 feet long cost one dollar each and transportation added. In fact, miners must bring everything they want in the shape of tools, ropes, buckets, working clothes, meats, flour, arms, ammunition, medicines, acids, &c., &c., as nothing can be obtained here at present.

I was pleased to find Mr. E. H. Prindle, an American and an old miner, doing business in Quibdo. He will procure me a stock of American mining tools as soon as a demand occurs. Mr. Prindle gave very valuable information and assistance during the week I spent in and near Quibdo prior to the arrival of the expedition, mainly to influence the modification of the hardships imposed by the mining laws of this State. These laws never contemplated sub-aqueous mining, so, as was to be expected, they were decidedly unfavorable and severe. As soon as the government saw the injustice of their rules they promptly changed them and they are now as favorable as capitalists could ask.

Very much of this country is owned under old Spanish grants, which can be purchased very cheap. I have had several offers of 3 miles square to 9 miles square for \$3,000 to \$7,000. Miners have the privilege of going to the headwaters of the streams now unknown and locating land for themselves. An ordinary claim is three miles square under the law if placer, and about a third that size if quartz, and these claims cost about \$70 to \$85 to obtain the title. If located as placer, and quartz is found which the miner wishes to secure title to, he must petition for the same as though he had no right whatever to the ground for any purpose.

Transportation is tedious and expensive. Twenty-five miles per day against the current is a large day's work in the native boats, which are our only means of travel, and the expense is about twenty cents per mile. This will be remedied as soon as a vessel and freight warrant putting a steamboat upon the river. A quick trip from Cartagena to Quibdo on the Barkatonos is from 35 to 40 days, and 20 days to return.

But very little sickness has occurred in the party. Our party was composed of robust men, and we took the precaution to filter all our drinking water. The less liquor Americans use in this climate the better.

A. H. SIMONTON, M. E.,
Mining Superintendent Atrato Mining Co.

The Cape Breton Oil Region.

(St. John Daily Telegraph.)

The development of the oil regions of Cape Breton appears to offer great inducements to the capitalists of New York and Boston and other cities in the United States. Already several companies have been formed and considerable boring and prospecting have been done. The centre of operations is around Lake Ainslie, in the Parish of Ainslie, County of Inverness, Cape Breton.

Margaric, or Lake Ainslie, is about seven miles long, and at its widest portion is about three and a half miles across. From the agent of one of the American companies, who passed through St. John recently, a Telegraph reporter obtained some facts that may be of interest to the people of St. John. The gentleman referred to had just left Cape Breton and is abundantly satisfied with the results, so far, of the operations of his company and will take to his directors a most flattering report of the capabilities of Cape Breton as an oil producing country, which he claims is second to neither of the great oil producing regions discovered in Pennsylvania twenty years ago nor that of Ontario opened up some years later. Should his predictions be correct there appears no reason why Cape Breton should not become a bonanza country to capitalists and be rapidly developed. The following is a record of the operations so far as they have been proceeded with.

INVERNESS OIL AND LAND CO.

This company have taken up 6,500 acres of land about Lake Ainslie and have a capital of \$500,000. The manager is Mr. J. J. Loughhead. They have sunk well No. 1 to a depth of 480 feet and have been rewarded by an excellent showing of an exceedingly odorless lubricating oil, of even a higher test than the celebrated Mecco oil of Ohio.

Well No. 2 is also going down on the west side of the Lake. No. 3 well is being put on the east side of the lake, on the property of Mr. McKay, the fish warden.

This company will sink ten wells at various points.

AMERICAN OIL COMPANY.

The American Oil Company will on next week start their four wells which were put down last fall and winter and which are now being put in readiness for pumping, and they anticipate a great show.

CAPE BRETON COMPANY.

The Cape Breton Oil Company, W. A. Smith, manager, are putting down a well on the east side of Lake Ainslie, and have already, at a depth of 500 feet, reached petroleum oil in quite free quantities. After getting through the bed rock no doubt is anticipated of a good yield. This showing reminds one of the latitude of Petrolia in Canada or Oil City in Pennsylvania.

It is stated that about twenty-five wells are contracted for, and will go down this season, and it may be expected that quite an influx of oil and mineral explorers will visit Cape Breton within sixty days.

THE VICTORIA OIL COMPANY.

The Victoria Oil Company are working at Bedeck and have reached a depth of 550 feet with excellent prospects.

The only difficulty experienced is the shifting of heavy machinery over the rough country roads, but with the discovery of lubricating and petroleum oil in large quantities the building of railroads and other essentials must soon follow. In the meantime the capabilities of the oil region will be thoroughly tested, and should the experiment prove a profitable one there appears to be no lack of capital to furnish all the facilities of laying it down in the markets of Europe and even in the United States at a very moderate cost for transportation.

"The Balance Sheet of the World."

This is the title of a remarkable book by Mr. Michael G. Mulhall in which he condenses a vast mass of statistics relating to the world's progress from 1870 to 1880. The elements of progress for this period are represented in the following figures:

Percentage of increase in population, 9.76; in agriculture, 8.58; manufactures, 18.60; commerce, 38.20; mining, 47.06; carrying trade, 53.32; earnings of nations, 19.84; public wealth, 10.57; taxes, 22.34; public debt, 43.39. It is stated the tangible increase in public wealth since 1870 would be sufficient to pay off 88 per cent. of all existing national debts.

With regard to the money of the world it is stated that the trade of the world in 1880 was conducted with—

	Percentage.
Gold Coin.....	19.95
Silver.....	9.61
Bank notes.....	27.81
Checks, etc.....	42.65
Totals.....	100.00

The Mysteries of Metals.

[Mining and Scientific Press.]

Notwithstanding the wonderful progress that has been made during the last half century in regard to the constitution and working of the useful metals, there is yet a vast deal to be learned. The metals when pure are commonly supposed to be simple elements, yet there are some reasons for supposing that it may yet be proven that at least some of them are compounds. Even the great Faraday gave utterance to the thought that the dreams of the alchemists might yet be realized—that gold and other metals might be found to be compounds and that means might be devised whereby those compounds might be separated, and afterwards so differently re-united that the baser metals might be converted into precious.

The changes which are wrought in iron and steel by converting, annealing and hardening processes are far from being understood by the most advanced metallurgists of the present day. The mysteries of hydrogen gas and its intimate relations with iron are as much a puzzle as they were fifty years ago, and the theory advanced by Graham that hydrogen itself is a metal is still maintained by many chemists.

It is only a few years since that absolutely pure iron became known to scientists; and it is now shown to be a metal almost as "unstable as water," and still found in the laboratory as a great curiosity. What had previously been known as pure iron, was shown by Jacobi to be a compound of iron and hydrogen. He first separated the two so-called elements. During the process the iron increased in volume, changed from a dark to a silver white substance, very ductile and so soft as to be nearly as readily cut as lead. The experiment proved that hydrogen played an important part in hardening and tempering steel—as much so as carbon—but how or why none know to this day.

It is found that much more difficulty is found in rolling, and otherwise manipulating, gold in a factory where much electricity is generated by the action of machinery than in a room where no machinery is in operation, and where, consequently, frictional electricity is absent. The trouble is manifested in a disposition of the edges of the plates of thin bars to crack.

Many other peculiarities, already known, might be mentioned, and there is no doubt that closer observation will still largely increase the number of curious and as yet inexplicable phenomena connected with the working and general characteristics of the metals, both useful and precious.

Quicksilver.

One of the most curious properties of quicksilver is its capability of dissolving or of forming amalgams with other metals. A sheet of gold foil dropped into quicksilver disappears almost as quickly as a snow flake when it drops into water. It has the power of separating or of readily dissolving those refractory metals which are not acted upon by our most powerful acids. The gold and silver miners pour it into their machines, holding the powdered gold-bearing quartz, and although no human eye can detect a trace of the precious substance, so fine are the particles, yet the liquid metal will hunt them out and incorporate them into its mass. By subsequent distillation, it yields them into the hands of the miner in a state of virgin purity. Several years ago, while lecturing before a class of ladies, on chemistry, we had occasion to purify some quicksilver by forcing it through chamois leather. The scrap remained on the table after the lecture, and an old lady, thinking it would be very nice to wrap her gold spectacles in, accordingly appropriated it to this purpose. The next morning she came to us in great alarm, stating that the gold had mysteriously disappeared, and nothing was left in the parcel but the glasses. True enough, the metal remaining in the pores of the leather bag amalgamated with the gold and entirely destroyed the spectacles. It was a mystery which we never could explain to her satisfaction.—[Fireside Science.]

LODES, LEADS AND VEINS.

SILVER HILL.—We have received the prospectus of the Silver Hill Mining Company. The property owned by them is an extension of the well-known Jones' Hill vein, in the town of Garland. The Company is incorporated under the State laws of New Hampshire, with a capital stock of \$500,000 divided into 200,000 shares. The officers are as follows: President, John F. Hudson; Treasurer, Chas. E. Parent; Clerk, Geo. A. Mudge; Directors, John F. Hudson, Geo. A. Goodyear, Chas. E. Parent

and Geo. E. Hodgdon. The office of the Company is at No. 11, Central Street, Room 4, Boston. The stock has recently been listed at the Mining Exchange and sales have been reported during the week at 25c to 28c. It is the intention of the Company to develop their property vigorously, and Mr. Frank Lippitt has been sent to the mine to superintend operations.

SILVER HILL.—Mr. Frank Lippitt, Superintendent of the Silver Hill mine, reports under date of July 13th as follows: "Work is progressing on Silver Hill as fast as possible. Some of our men have gone home to attend haying; as soon as others can be procured work will continue nights. Timbering the shaft has been completed down ten feet, and sinking again resumed. Vein is widening and looking well."

GARLAND HILL.—This is also an extension of the Jones' Hill vein and adjoins the property of the Silver Hill Mining Company. It is owned by prominent gentlemen of Boston and vicinity. A surface crosscut has exposed the vein and a shaft will be commenced as soon as the proper number of men can be procured.

ELIOT.—Mr. N. C. Paul writes us that upon a recent visit to his mining property in Eliot he brought away samples of the out-cropping quartz rock taken some 25 to 40 feet distant from the shaft (of which mention has previously been made), and had them tested by Prof. Holliday, of the Boston Ore Milling Works. The assays gave a result of 6 2-3 dwts. gold, and 15ozs. silver, or about \$24 per ton. These tests lead Mr. Paul to think the richest portion of the ledge lies in that direction. Further explorations are awaited with interest.

NORTH CASTINE.—The water has been removed from the shaft and sinking is in progress. Three shifts of three men each are employed and it is proposed to push the work as vigorously as possible to the 100 foot level. Mr. Frank Leavitt, of this city, is superintending operations, with Chas. Dunton as foreman.

Sullivan.

SULLIVAN.—The annual meeting of the Sullivan Mining Company was held at the mine on Wednesday last. Following is Supt. Cahill's weekly report, dated July 13th:

"We are now driving work vigorously. No. 1 Shaft is going down at the rate of one foot per day in the hardest rock yet encountered in the mine; will be down to the fourth level by the last of this month. The ore vein is looking well, the base metals giving out as we gain depth. When the ore becomes what is known as free milling—and it has every appearance of its becoming so in a short time—it can be treated more economically and worked to a higher per centage of the assay value. Every week shows an improvement in the quantity and quality of the ore. We are running the drift west on the 200 level, on the vein. The ore is of an excellent grade and as we get west the ore vein increases in width. Every day's work shows a perceptible improvement and my faith in the future of the mine grows with the developments. I will commence work in Waukeag shaft in a few days and continue it down to keep pace with No. 1. As soon as the necessary depth is attained will crosscut south to the vein, then drift east to meet them coming west from No. 1 on the 200 level. As soon as the openings are made we will be in good shape to extract ore in sufficient quantities to keep a large mill constantly running on high grade ore. The pumps, compressor and all our machinery are in good order."

PINE TREE.—It is reported that operations at the Pine Tree mine are to be commenced at once and pushed vigorously. The buildings have recently been put in good condition and new and powerful hoisting works will be erected immediately.

Blue Hill.

DOUGLASS.—Everything is moving along smoothly and the smelters are in constant operation.

STEWART.—Vigorous work in both shafts continues; one has attained a depth of about 33 feet and the other 30 feet. Supt. Dunn has thus far been carrying down shafts of large proportions but as they are now well into the solid ledge

the size of the shafts will henceforth be made smaller. The ore continues to be very excellent.

BLUE HILL.—Matters are progressing favorably at the Blue Hill. The mine continues to supply the usual amount of fine ore. One smelting furnace will be started up on Monday next.

GRANGER.—In a recent letter received by us, President Stone writes as follows: "I have sent to Blue Hill to have the 100 tons of roasted ore now on the dump forwarded to the New England Smelting Works at East Boston. Although the Works are not yet fully fitted up, they have a job furnace ready for copper and will at once treat enough ore for the Granger and other companies to make a good show at the New England Manufacturers' and Mechanics' Exhibition, to open in Boston in August, and as soon as they can spare the furnace finish treating our lot of ore for us. I expect 5 tons of ingot, 1100 ozs. of silver and some gold out of the 100 tons of roasted ore."

REVERE.—The Revere stockholders hold a meeting at the Bangor House on Saturday of this week.

British Provinces.

A French Company, with \$10,000,000 of capital, is being formed in Paris to develop the mining resources of Canada.

BRUNSWICK ANTIMONY.—The annual meeting of the Brunswick Antimony Mining Company was held in New Brunswick during the past week. It was reported it had been decided to call for an assessment of \$3 per share to procure machinery and develop the mine. This has been contradicted, however.

Another "bonanza" has been struck at the Haldane phosphate mines, at Wakefield. It is in the same hill in which the large mine and several others were situated and bids fair to rival if not surpass anything yet found on the lot. A force of two men on Tuesday last stripped 40 feet of a vein varying from 2 to 4 feet in width and took out three tons of phosphate. Since then this "show" has been turning out 6 to 8 tons daily. Neither end of the vein has been reached yet.—[St. John Telegraph.

SATEMO.—The Satemo mines (Tangier mining district, Nova Scotia) are developing beyond expectations. The Kent and Nugget lodes are yielding exceedingly rich quartz, and indications of permanency are growing stronger almost daily. The new mill will be finished by the middle of August, and it is expected the mine will earn regular monthly dividends from that time. The Satemo Gold Quartz Company own 3,000 feet in length and 700 feet in width, traversed the whole length by several gold-bearing veins. The Company have ample funds in the treasury to pay for all improvements and development work.

The Saskatchewan coal fields underlie an immense district of country extending from the Rocky Mountains eastward 250 miles, and from the boundary line far northward beyond the Peace River. The seams are noticed in the banks of the rivers and creeks, and are of all thicknesses, from a few inches to eighteen feet, and of many different qualities. It appears likely that Edmonton is near the eastern boundary of the coal deposits, and that further up the river, near the centre, the coal is in thicker seams and of better quality. It is also probable that if shafts were sunk to a considerable depth better coal would be found even here. These coal fields lie on the head waters of the rivers which flow from west to east across the Territory, thereby putting the settlers in the central prairies almost on the same footing as regards fuel as those who live right over them, while their immense extent and the fact that they underlie the finest agricultural county in the Dominion makes their value utterly incalculable.—[Edmonton Bulletin.

We think few of our readers are aware of the magnitude of the gold mining industry of Nova Scotia. So large a proportion of the mines are being worked by private individuals and close corporations that little is heard of them outside of their immediate vicinity. Yet it is a fact, surprising as it may seem, that upwards of 1500 men and thirty stamp mills with a total of nearly 350 stamps are at work upon the gold quartz of that Province. These are divided up among the several districts about as follows: Sherbrooke, 400 men, 3 mills, 40 stamps; Goldenville, 100 men, 1 mill, 10 stamps; Tangier, 100 men, 2 mills, 24 stamps; Salmon River, 50 men, 1 mill, 24 stamps; Montague, 150 men, 4 mills, 42 stamps; Waverley, 100 men, 3 mills, 50 stamps; Renfrew, 50 men, 3 mills, 40 stamps; Uniacke, 150 men, 4 mills, 35 stamps; Oldham, 30 men, 3 mills, 24 stamps; Caribou, 40 men, 2 mills, 20 stamps; Fifteen-mile-stream, 50 men, 1 mill, 8 stamps; Isaac's Harbor, 30 men; Yarmouth, 50

men, 1 mill, 10 stamps; Gay's River, 12 men, 1 mill, 8 stamps. Fully three-fifths of these properties are operated by American companies.

General Mining Notes.

The Stormont mill has started up and bullion valued at \$4,000 was shipped from the mine on Tuesday last.

Extensive preparations for hydraulic mining are being made at the Sam Christian mining property, North Carolina.

One hundred and twenty-four stamps are running at Bodie, and the output and shipments of bullion amount to a quarter of a million a month.

The Charlotte Observer reports the sale of the King's Mountain (North Carolina) gold mine to Mr. George Bull, of Philadelphia, for \$100,000.

The Copper Queen is now opened to the third level. The furnace is running well and 181 tons of copper bullion were produced during the month of June. The second furnace will be ready to start up very soon.

The Onyx mines of Pueblo, the only ones in the world of that nature, are becoming richer and showing a finer quality of stone as the quarries are deepening. A company is about to be formed in Chicago to work them on an extensive scale.

The Empire Mining and Milling Company, of Boston, have been compelled to suspend work at the mine once more on account of an empty treasury. At a recent Directors' meeting a committee of three was appointed with instructions to meet and prepare a statement of the condition of affairs to be presented to the stockholders, and to devise some plans for raising funds. A reorganization of some kind is looked for. Somehow or other the favorite Boston plan of "non-assessable stocks" does not prove as successful as was hoped.

According to a table prepared by the Engineering and Mining Journal, the dividends paid by mining companies during the first half of the year 1881, are divided up among the States and Territories as follows: Arizona, \$940,000; California, \$815,375; Colorado, \$880,000; Dakota, \$595,000; Georgia, \$8,000; Michigan, \$1,410,000; Missouri, \$20,000; Montana, \$240,000; Nevada, \$1,029,710; Utah, \$350,000. This list is necessarily incomplete, as many mines worked as private corporations are giving large returns to their owners, for which there is no public record, and there are probably others which are not here enumerated.

WOOD RIVER, IDAHO.—Major W. A. Rooks has some 25 men at work on the North Star and Ontario mines on Boyle mountain. In the face of his tunnel and 250 feet from the surface he reports having five feet of pay ore. A portion of his crew are now engaged in constructing a wagon road from his mines to connect with the Kelly mines, that he may be prepared to run out his ore to Green's smelter late in the fall. He is also running a tunnel to tap the Black Horse, and reports having struck a big vein containing rich ore. The strike was entirely unexpected but none the less acceptable.—[Wood River News, July 2.

Pine street, which has been wearing a somewhat deserted appearance of late, owing to the holidays, is beginning to assume its wonted air of bustle and business. The cheerful chipper stands on the sidewalk and discusses the chances of an early bonanza on the Comstock, while the playful pointer draws his victim into the dark recesses of Pauper alley and pours into his ear the oft-told tale that "this is on the quiet and dead from the inside, and don't you forget it." The brokers bustle into the Board with their plethoric-looking, but thinly filled, order-books; the messenger boys run and screech and jostle and tread on people's toes, and "the street" is herself again.—[San Francisco Daily Report.

Speaking of the levying of the recent assessments, the San Francisco Post says: "It must be borne in mind that there can be no solid and prolonged rise in prices until good developments are made, and that these developments depend solely upon the payment of assessments. Without the "sinews of war" work cannot be carried on. The Comstock has had a respite from assessments for two months. Within the past few days, several have been levied, and more will follow. Their effect, however, seems to have been already discounted to a large extent in the recent decline of prices. There are several points in the Comstock where good developments are liable to be made at any moment, and many affect to believe that after the vacation when the surroundings are more favorable for business, something of value will be shown."

The annual statement of the Richmond Mining Company has just been published, and the showing must be gratifying to the English stockholders. Compared with the figures of last year,

there has been an increase of 11,184 tons in the quantity of ore smelted, of 3,486 tons in the quantity of bullion refined, of 16,531 ozs. in the quantity of gold produced, 173,501 ozs. of silver, and 3,160 tons of lead; and that on the other hand the working expenses of running have been reduced from \$11.02 to \$9.58 per ton, and the smelting expenses from \$13.16 to \$11.21 per ton, the result of the year's working being that the mining profit shows an increase of £103,655, 12s., and the net profit an increase of £101,530, 15s., 10d. The bullion has realized about 75 3/4 per cent. of the Eureka standard assay value as against 79 1/2 per cent. last year. This decrease is attributable to the slightly lower price of lead. The average assay of the Richmond ore has been higher this year than last—\$68.12 per ton. as against 63.12 last year; the average assay of the purchased ore has been lower—\$56.23 against \$59.50. The yield per ton of ore (Richmond and purchased together) has been \$60.23 against \$55.33.

STARR-GROVE AND EAGLE MINES.—A Battle Mountain, Nev., special says: "The Starr-Grove, the leading mine of Lewis District, is about 2 3/4 miles above the town of Lewis. The claims (two in number) consist of 1,850 feet along the Starr-Grove ledge or vein. The mine is worked through two main tunnels and a crosscut tunnel. No. 1 is 200 feet long, No. 2, 450 feet, and No. 3, 550 feet. No. 3, the crosscut tunnel, strikes the winze from No. 2 at a point 220 feet below the croppings. The lowest workings are down 385 feet below the croppings. All the tunnels, crosscuts and winzes are in good ore, which will average from \$50 to \$60 to the ton. The ledge will run from 3 to 9 feet in width, and averages 5 feet in width all the way through. It is widest at the bottom of the winze, 385 feet from the surface. About 30 tons of ore are sent from the mills daily. The amount of ore in sight is simply immense, and the only trouble is a lack of milling capacity. The company has two mills (15 stamps each) running day and night on ore from this mine, and is shipping bullion regularly. The Chloride mine is opened by two tunnels and a winze. The upper tunnel is 300 feet long and runs along vein matter all the way. A winze is down 50 feet and is following the ledge which dips southwest. The lower tunnel is now in to a distance of 70 feet. This will be connected by winze with the upper tunnel. The ledge is well defined and averages 4 feet in width. Assays run as high as \$250 to the ton. This mine is owned by the Eagle Company, and is one of the finest claims in the district. The Eagle mine consists of 3,500 feet on the Starr-Grove ledge and 1,500 feet on the Chloride. It is being put in shape for working, and will undoubtedly show up well, as some of the richest ore in the district has been taken out of the mine."

Nuggets.

—We have been shown some fine specimens of ore from the Dodge and Jones properties in Brooksville. Recent prospecting has disclosed two fine veins which give great promise of proving bonanzas.

—The advisability of changing the Boston Mining and Stock Exchange from a corporation to an association is being discussed. A special meeting of the stockholders will be held on Thursday next to consider the proposition.

—The Leadville, Col., correspondent of the Oxford Democrat, writes: "I learned, yesterday, of a gentleman, from Minot, Maine,—Mr. Fred Strout—who made a stake of \$40,000, within twenty rods of the house I board in, on Fryer Hill."

—The first train over the Old Orchard Junction Railroad was run on Monday evening of this week, amid fireworks and rejoicings. It is two and a half miles long, and runs from near the Old Orchard House to connect with the Eastern Railroad two and a half miles below Saco.

—The Boston Commercial Bulletin says: "The Cobb Lime Co. is the only corporation which carries on the business of manufacturing lime and cement in Rockland. Business is decidedly better this season than for several years. Last year the company made 100,000 casks more than the year previous and this year their manufacture will be 100,000 greater than last. They will double the capacity of their cement works this season, and are now running day and night in the endeavor to supply the demand for their famous cement."

—J. A. Locke & Son, 40 Courtland St., New York, are meeting with great success in the introduction of Reed's non-con-

ducting covering, having sold over 150,000 feet last year and their sales are constantly increasing. This covering is for steam pipes, boilers and water pipes. It is formed of compact felt, and is made in sections to fit any sized pipe and in sheets for boilers, steam drums, etc. It is extremely light and very desirable for it can be put on and taken off any number of times without injury to the covering. It can be put on while the pipes are either hot or cold and anyone can apply it. This advantage is highly appreciated by customers away from the cities. Its wonderful powers as a non-conductor are unsurpassed by that of any other covering. Applied to gas and water pipes, their contents are preserved without freezing, while applied to boiler pipes the temperature of the room is rendered cool and comfortable. The advantages of using this covering are so great that we trust it will come into very general use in this section. Send to J. A. Locke and Son for testimonials and circulars.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Consolidated Nevada Mining Co.,	Portland,	June 8,	\$150,000.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, JULY 13, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Atmorez	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Atlantic L. S.	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Atlas	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Aztec	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Blue Hill Copper	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Brunswick	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Calumet & Hecla	23 1/2	23 3/4	23 1/2	23 3/4	23 1/2	23 3/4	23 1/2	23 3/4	23 1/2	23 3/4	23 1/2	23 3/4
Catalpa	1 1/8	1 3/8	1 1/8	1 3/8	1 1/8	1 3/8	1 1/8	1 3/8	1 1/8	1 3/8	1 1/8	1 3/8
Central	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Copper Falls	6	7	6	7	6	7	6	7	6	7	6	7
Contentment	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Dana	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Douglass	2	2 1/2	2	2 1/2	2	2 1/2	2	2 1/2	2	2 1/2	2	2 1/2
Duncan Silver	2 1/2	2 3/4	2 1/2	2 3/4	2 1/2	2 3/4	2 1/2	2 3/4	2 1/2	2 3/4	2 1/2	2 3/4
Empire	45c	50c	45c	50c	45c	50c	45c	50c	45c	50c	45c	50c
Franklin	11 1/8	12 1/8	11 1/8	12 1/8	11 1/8	12 1/8	11 1/8	12 1/8	11 1/8	12 1/8	11 1/8	12 1/8
Hanover	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8
Harshaw	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8	7 1/8	8 1/8
Humboldt	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Huron	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
International	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
National	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Osceola	31	32	30	32	30	32	30	32	30	32	30	32
Pewabic	12 1/8	12 3/8	12 1/8	12 3/8	12 1/8	12 3/8	12 1/8	12 3/8	12 1/8	12 3/8	12 1/8	12 3/8
Phoenix	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Pontiac	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	9/8	10/8	11/8	12/8
Quincy	35 1/8	37 1/8	33	37	35	37	35	37	35	37	35	37
Ridge	4	4 1/2	4	4 1/2	4	4 1/2	4	4 1/2	4	4 1/2	4	4 1/2
Silver Islet	42	44	40	43	42	44	42	44	42	44	42	44
SEAR	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8
Sullivan	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8	3 1/8	4 1/8

Copperopolis Mining Company.

OFFICE, 4 SEARS' BUILDING, BOSTON, MASS.

Capital, \$500,000. Par Value of Shares, \$2.50. Unassessable.

GEO. E. HARRINGTON, President. S. L. SYMONDS, Treasurer.
W. OSCAR ARNOLD, Secretary.

Directors—GEO. E. HARRINGTON, GEO. WEST, FRANCIS TUCKERMAN of Salem, Mass.; P. MULLAN, L. W. HODGKINS of Ellsworth, Me.

JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$5.00. Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, Jr., Treasurer.
W. OSCAR ARNOLD, Secretary.

Directors—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, Jr., of New York.

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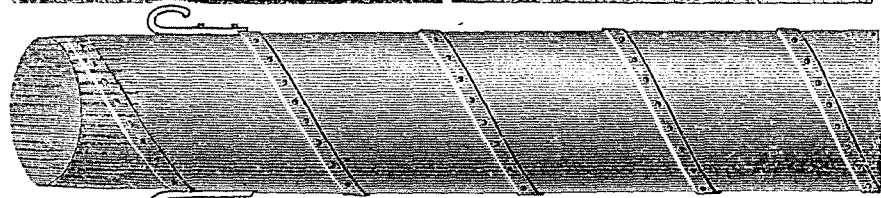
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It is cheap, durable, and the best non-conductor of heat of any covering made. It can be taken off and re-placed on the pipes any number of times without injury to the covering. Any person can put it on the pipes. SEND FOR A CIRCULAR.

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**Root's Patent Heavy Sheet Iron Hydraulic Pipe,
WITH RIVETED SPIRAL SEAM.**

of all Diameters; Strength or Thickness according to pressure required, for MILLS, MINES, and WATER WORKS, made of galvanized or black iron and dipped in coal-tar and asphalt. Furnished with slip joint, sleeve and nipple, or flange connections. In lengths of from 5 to 25 feet, each tested to required margin of safety.

BURSTING PRESSURE 300 TO 1000 LBS. PER SQUARE INCH, according to diameter and weight of pipe.

AVERAGE FIRST COST FROM 10 TO 60 PER CENT LESS than other tubing; the greatest difference being in the larger diameters.

AVERAGE WEIGHT 50 TO 75 PER CENT less than wrought or cast iron tubing.

AVERAGE SAVING IN COST OF TRANSPORTATION 50 TO 75 PER CENT. The advantage of the spiral over the straight or longitudinal seam is that the Spiral Seam is the strongest while the straight seam is the weakest part of the pipe by about one half.

Where it is found inconvenient or undesirable to ship tubing already formed up we can supply punched and formed sheets nested and packed for shipment (which can be riveted into pipe at destination) in packages of any desired weight.

Estimates and Price list furnished on application. A full stock always on hand.
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Rock Drills and Compressors.

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Ores Crushed, Sampled and Tested.

PRACTICAL MILL RUNS 500 POUNDS AND UPWARDS.

Assays of Ores and Metals.

Refractory Ores Treated by a New Process

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Construction of Works and Supplies Furnished.

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APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shephard, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

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Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
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Office at Oldtown, Me.

FAVORITE COPPER MINING CO.
Bluehill, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares \$5 each.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., '880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Lattan, Jeremiah Wooster.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb. 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me. A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec. 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding. Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Rodhif, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

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MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

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Lawson, Colorado. Organized under the laws of the State of Maine.
Capital, \$500,000. Shares, \$5 each, unassessable; 40,000 shares in the Treasury.
President, E. C. Nichols, of Bangor; Treasurer, C. T. Plympton, of Boston; Secretary, S. P. Johnson, of Bangor. Directors—E. C. Nichols, S. P. Johnson, Dr. W. K. Knowles and John R. Mason, Bangor; C. T. Plympton, Henry A. Piper and Geo. W. May, Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 383,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
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100,000 Shares. Par Value, \$5.00.
Treasury Fund, 30,000 Shares.
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Mining and Smelting
COMPANY.

Office at Bangor, Me. Mines at Blue Hill, Me.
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100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.

President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

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Bucksport and Bangor R. R.

CHANGE OF TIME, June 27, 1881.

	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	6.00	10.00		5.03
Arrive Bangor,	7.03	11.15		6.00
Leave Bangor,		7.35	2.00	7.00
Arrive Bucksport,		8.40	3.15	5.07

The 6.00 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
STAGE CONNECTIONS.—At Bucksport, daily, for Castine, Penobscot, Blue Hill, Ellsworth, Sullivan and Mt. Desert.
L. L. LINCOLN, Supt.

Portland & Boston Steamers.

One of the first-class side-wheel steamers of this line will leave India Wharf, Boston, and Franklin Wharf, Portland, at 7 P. M., daily, (Sundays excepted.)
CONNECTIONS are made at Portland with GRAND TRUNK, PORTLAND & OGDENSBURG, MAINE CENTRAL, KNOX & LINCOLN Railroads, and with Steamers of the BANGOR & MACHIAS LINE; and at Boston with all lines for points South and West.
Tourists will find this one of the finest OCEAN TRIPS on the New England coast.
WM. WEEKS, J. B. COYLE, Jr.,
Agent, Boston. Gen. Ag't, Portland

Bar Harbor Stage Line.

Stages leave the Bangor House every morning (Sundays excepted) at 7.40 A. M. Every evening (Sundays excepted) at 7.45 P. M. Leave the Penobscot Exchange at 7.45 A. M., and 7.50 P. M.
Fare from Bangor to Ellsworth, - - - \$1.50
" " " Bar Harbor, - - - 3.00
F. O. BEAL, Prop.

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Central Bridge, Bangor, Me.
LEMUEL NICHOLS.....PROPRIETOR



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The proprietor will give his personal attention to the Livery and Boarding of Horses.
All orders left at the Stable Office.
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Connection made with Steamer Lewiston at Sedgwick for Blue Hill and Brooklin. Leave Sedgwick for Blue Hill on arrival of Steamer Wednesdays and Saturdays. Leave Blue Hill for Sedgwick Mondays and Thursdays.

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CIVIL AND TOPOGRAPHICAL ENGINEER,
BLUE HILL, MAINE.

**FOR
FORT POINT
— AND —
NORTHPORT**

The steamer RALPH ROSS or HOWELL will commence their regular season trips to FORT POINT and NORTHPORT, on SATURDAY, July 2nd, leaving Steamboat wharf at 4 P. M., touching at all the landings on the river, and every Saturday thereafter during the pleasure season. Returning will leave Northport every Monday at 6 A. M.

**BANCOR AND BAR HARBOR
STEAMBOAT CO.**

TWO TRIPS PER WEEK.

The New and Commodious Steamer
CITY of BANGOR,

CAPT. S. H. BARBOUR,



Leaves Bangor for Bar Harbor every WEDNESDAY and SATURDAY, at 8:00 A. M., touching Hampden; Winterport, at 9:15; Bucksport, 9:45; Fort Point, 10:15; Castine, 11:30; Islesboro, 12:30; Deer Isle, 2:00; Sedgwick, 2:30; S. W. Harbor, 3:00; Bar Harbor 6:00 P. M.

RETURNING;

Leaves Bar Harbor every MONDAY and THURSDAY at 6:30 A. M., touching S. W. Harbor at 8:00; Sedgwick, 10:00; Deer Isle, 10:30; Islesboro, 11:30; Castine, 12:00 M.; Fort Point, 1:00; Sandy Point; Bucksport, 2:00; Winterport and Hampden, arriving at Bangor at 4:30 P. M.
Meals served on board.

FRANK D. PULLEN,

General Agent, Bangor.

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STEAMBOAT CO.**

Rockland, Mt. Desert, Milbridge and Machias.

Summer Arrangement, Commencing June 14

FIVE TRIPS PER WEEK.

The Steamer LEWISTON, Chas. Deering, Master, will leave Railroad Wharf, Portland, every Tuesday and Friday Evenings, at 11:15 o'clock, or on arrival of Pullman Express Train from Boston, for Rockland, Castine, Deer Isle, Sedgwick, South West and Bar Harbors, (Mt. Desert,) Milbridge, Jonesport and Machiasport.

Returning, will leave Machiasport every Monday and Thursday morning at 4:30 o'clock, touching as above, arriving in Portland same evening, connecting with Pullman Night Train for Boston.

The fast Steamer CITY OF RICHMOND, Capt. Wm. E. Dennison, leaves Portland every Monday, Wednesday and Saturday evenings at 11:15 o'clock (commencing June 15th) or on arrival of Steamboat Express Train for Mt. Desert, (Southwest and Bar Harbors,) touching at Rockland only, and arriving at Bar Harbor at about 10:30 next day.

Returning, leaves Bar Harbor about 7 A. M., Mondays, Wednesdays and Fridays, touching at Southwest Harbor and Rockland, arriving in Portland about 5 P. M.

COMMENCING JUNE 17th,

Connects at Rockland with Sanford S. S. Co. steamers each trip for Belfast, Bangor and River Landings; also with steamer for Green's Landing, Bluehill and Ellsworth. At Bar Harbor with steamer for Lamorne and Sullivan. At Sedgwick with stage for Bluehill.

COMING WEST.

At Rockland, Mondays and Thursdays with Sanford S. S. Co. from Bangor and River Landings for Portland.

All communications by mail or telegraph for rooms should be addressed to
GEORGE L. DAY, Gen. Ticket Agent, Portland.
E. CUSHING, General Manager.

Portland, June 14, 1881.

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Katahdin Iron Works, Me.

This well known resort of the sportsman, invalid and tourist, has been thoroughly renovated, repainted, repapered and refurnished throughout, and is now open for the season.

Every effort will be made to attend to the comfort and pleasure of guests.

Water from the far-famed "Katahdin" Spring always on draught.

Morning train over E. & N. A. R. connects at Milo daily for stage to Iron Works.

A special stage will connect at Milo with the 2 P. M. train from Bangor every Saturday.

J. E. HARRIMAN, Manager,
Katahdin Iron Works.

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Blue Hill, Me.

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J. F. MOSES, - Prop.

DAVID BUGBEE & CO.

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- Bangor News Co's, Bangor.
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- James Nichols & Co's, Calais.
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- Harry B. Parker's, Blue Hill.

Price Six Cents.

NOTICE OF DISSOLUTION.

The law partnership heretofore existing under the firm name of PLAISTED & SMITH is this day dissolved by mutual consent. The business will be continued by Bertram L. Smith, in the same office recently occupied by the firm.

H. M. PLAISTED,
BERTRAM L. SMITH.

Bangor, June 22, 1881.

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4.—3.—82.

BANGOR, MAINE, JULY 22, 1881.

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W. FRANK STEWART,
Practical Geologist and Mining Engineer.

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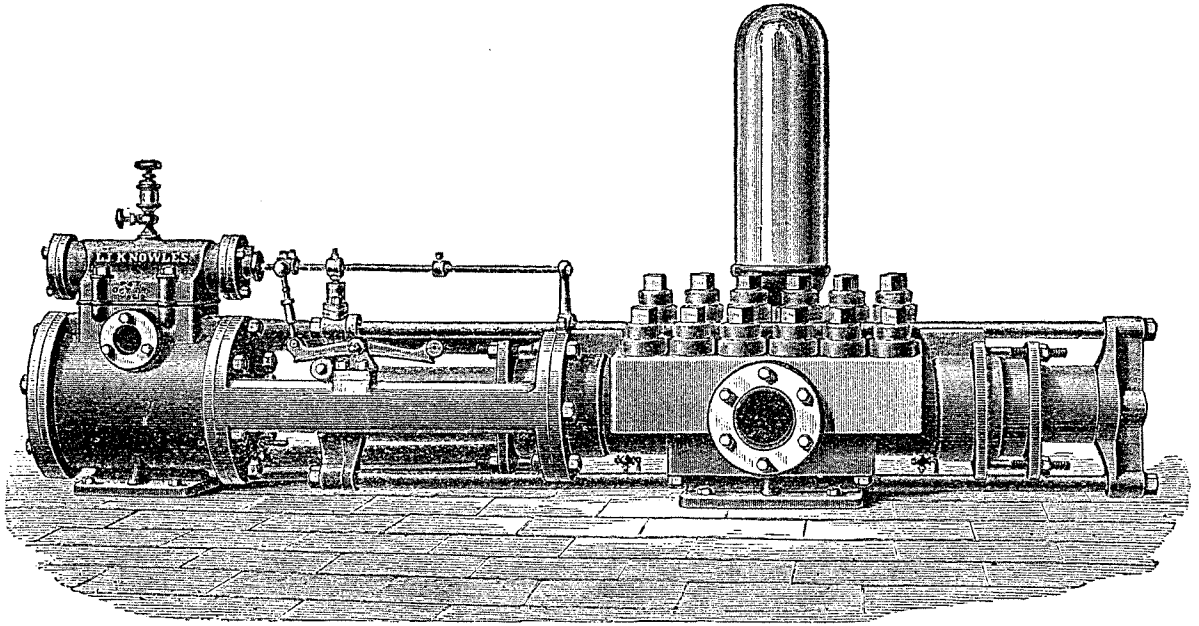
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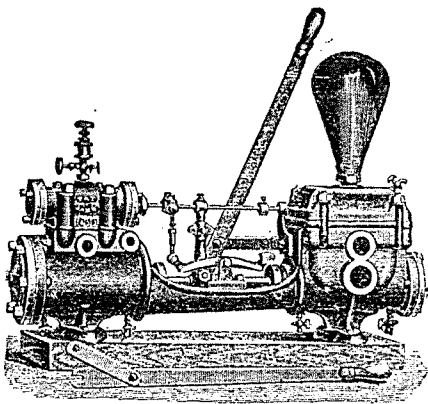
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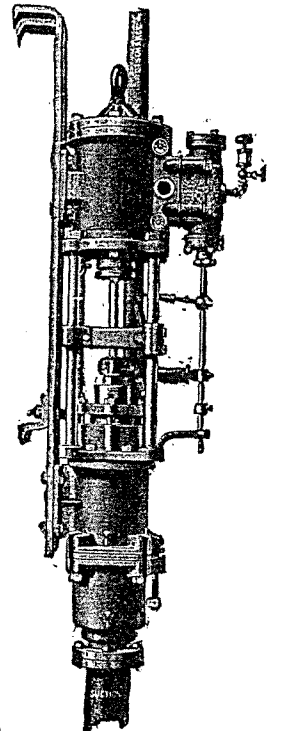


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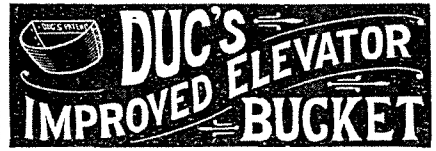
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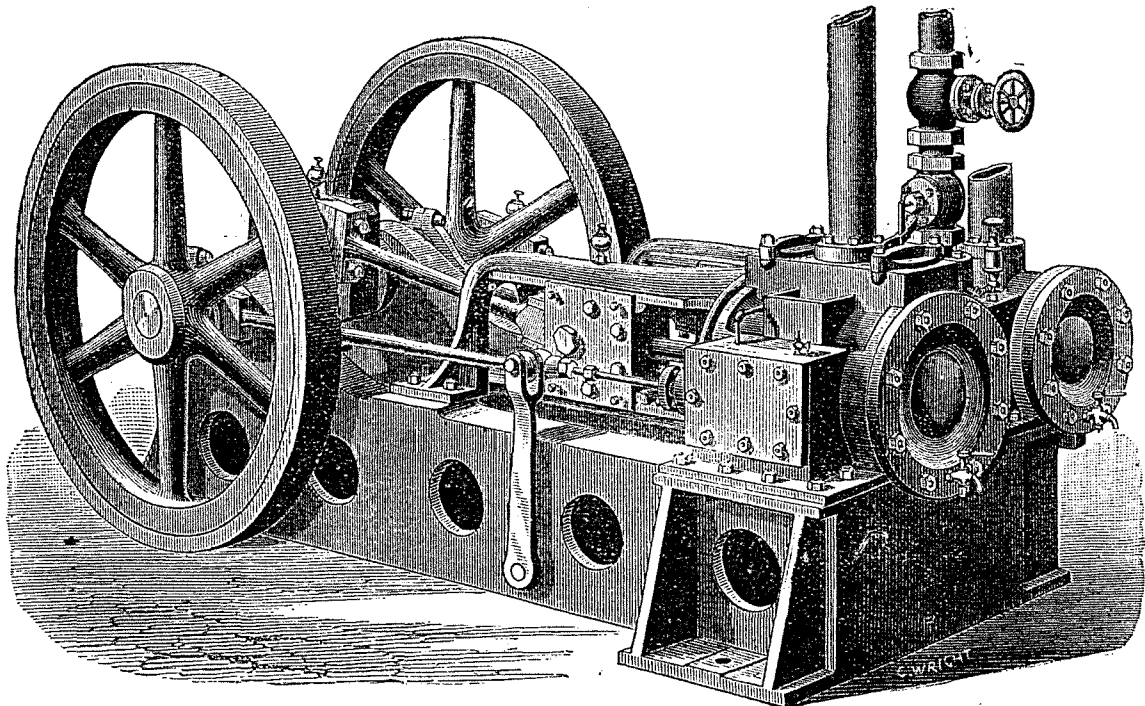
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E. M. BLANDING, } EDITORS.
W. F. BLANDING, }

E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, JULY 22, 1881.

The proposition is being considered by some of our prominent mining men of organizing a Mining and Development Company with a large paid in capital. The idea is a good one and if consummated cannot fail to have a beneficial effect upon our mining interests. The project is in the hands of the right parties to make it a success.

Surprise has often been expressed at the repeated failures of smelting and refining works. Bad management may be attributed as the cause in many cases. This week some workmen in tearing up the flooring of the old 42nd street refinery, now used as a plow-factory, unearthed a veritable bonanza in the shape of over three tons of silver bullion, which had been allowed to run to waste. It was only worth five or six thousand dollars, and, of course, was never missed.—[Chicago Mining Review.]

Summer tourists to Maine should not fail to visit the mining districts of Blue Hill and Sullivan. Both are easy of access, either by land or water, have excellent hotel accommodations, and possess as many natural attractions and as much fine scenery as any of the more noted resorts. The mining operations at present being conducted will surprise the stranger by their magnitude, and an examination of the numerous mining works with their extensive buildings and elaborate machinery cannot fail to be both interesting and profitable.

The mining share market has not been as active during the week as was hoped; yet a fair business has been done at the Exchanges in Boston, at prices generally in advance

of those of last week. At the Mining Exchange, Copperopolis continues to go higher and closed on Wednesday last at \$1.94; Milton advanced to \$1.62 and declined to \$1.45; Pine Tree sold at \$3.50 and later at \$3.37 1-2; Silver Hill advanced from 28c to 39c; Douglass has reached \$3 with very little offered at that figure; Granger and Young Hecla sold at 45c; Empire declined to 37c and recovered to 44c. On the Old Board, Sullivan is held firm at \$4, Douglass at 3 1-8, and Blue Hill at \$4.50. It will be seen that the general tendency of almost the entire list of Maine stocks is upward.

THE SITUATION.

The mining industry of Maine is still in a healthful condition and is beginning to be generally recognized, at least outside of the State, as an established and permanent institution. The situation may be briefly summarized as follows:

At Blue Hill, the Mammoth Mining Company have commenced work upon their property, to which reference is made in another column. At the Douglass the smelters are now in full operation and the refinery is about to be started, with some seventy-five tons of matte mostly of high grade already on hand. The Stewart is pushing two shafts down as rapidly as possible, in good ore. The Blue Hill smelter started up the first of the present week with every prospect of a prolonged and successful run. The Twin Lead is driving the southerly crosscut with all possible speed, with indications of a near approach to the ore body; the smelter, at present writing, is running satisfactorily upon Twin Lead ore. The Granger is taking out ore from both drift and winze, and one hundred tons of roasted ore are in readiness to be shipped to the New England Smelting Works.

In the Bagaduce district, several important sales of mining property are on the tapis, and there is every prospect that a number of strong companies will be operating upon an extensive scale within a short time. Several important "strikes" have been made recently by E. C. Smart, E. B. Smith and others, and properties which have made such astonishing showings as the Dodge, Jones, Colton, Hercules, Mermaid, Tapley, etc., are too valuable to long remain idle. The Castine Copper and Silver Mining Company are driving a tunnel into the bluff, on the vein, and have quite a large amount of excellent ore on the dump. The North Castine is working three shifts of men and sinking the shaft for the 100 level. The Cape Rosier is working a large force of men and taking out large quantities of ore. Also in this vicinity, but scarcely in this district, the Edgemoggin and Deer Isle mines are being vigorously developed and making a showing of ore second to none in the State.

At Sullivan, the Pine Tree is preparing for extensive developments, the Sullivan has nearly reached the 300 level and is showing the finest ore yet found in Maine, and the Milton is actively engaged in underground explorations from both shafts, and finding some very good quartz; an important strike may be expected here at any moment if, indeed, it has not been made already. But a few miles distant, the Copperopolis has nearly completed a magnificent boarding-house for workmen, miners are being secured as rapidly as possible and a systematic development of the property has been

commenced in the shape of two incline shafts following the dip of the ore-channels.

Farther east, at Gouldsboro, Cherryfield, Gardner's Lake, Jonesport and other localities, the mines are showing well; companies which are unable to carry on very extensive operations are developing their properties in a quiet and economical manner, patiently waiting and hopefully looking for "better times," which will not be long in coming.

In other portions of the State, notably at Jones' Hill and Exeter in Penobscot County, vigorous mining work is progressing under favorable conditions, while there are hosts of properties in widely scattered localities which are being worked in a small way by private parties who mean to ascertain whether they possess any merit or not before giving the public an opportunity to invest. Varying success is attending these efforts, but, our word for it, some of these obscure, embryo mines are destined ere long to astonish the natives.

Personals.

SUPT. PEARSON was in the city on Tuesday. His headquarters are now at Castine.

WM. M. JEWETT, ESQ., Treasurer of the Blue Hill C. M. & S. Co., visited Blue Hill last week.

COL. BROWNELL GRANGER, Supt. of the Granger, has been in Boston during a portion of the past week.

JOHN S. JENNESS, ESQ., of this city, has returned from a trip to New Brunswick where he has been having fine salmon fishing in Provincial rivers.

SUPT. CAHILL, of the Sullivan, was in the city on Saturday last and visited the MINING JOURNAL. He brings very encouraging reports from the Sullivan mine.

GEN. JOHN M. CORSE, President of the Pine Tree Silver Mining Company, is in St. Louis negotiating for terminal facilities for the new Toledo, Cincinnati and St. Louis line.

CYRUS GILDERSLEEVE, the Charlotte, Vermont, botanist who is doing botanical work for the government in the South and West, is said to have discovered a valuable silver mine in Arizona.

MR. E. H. GOFF, President of the Boston Gold and Silver Mining Company, will open an office in Denver, and give the business affairs of all the companies with which he is concerned his personal attention.

PROFESSOR W. F. STEWART left Denver on the 16th inst. to make an examination of the celebrated Dolly Varden mine, the property of the Boston Gold and Silver Mining Company. He was accompanied on the trip by Professor Alden Smith, State Geologist of Colorado, and General Frank Hall, Mining Engineer and Expert, under whose supervision the engineers in charge of the mine will conduct operations.

—Messrs. Prescott and Hersey, the well known brokerage firm, are doing a large business at their new establishment, 83 Devonshire Street, Boston. Mr. Hersey is an enterprising capitalist and active mine promoter and Mr. Prescott has been long and favorably known in financial circles and until his recent resignation was chairman of the Boston Mining and Stock Exchange. Messrs. Prescott and Hersey deal in stocks and bonds of every description and buy and sell on the Boston and New York boards. They have exceptional facilities for attending to the wants of customers and orders given them will receive prompt attention.

Dips, Spurs and Angles.

—The Colossus of Roads—Jay Gould.

—Noughty, but nice—\$1,000,000.—[Cambridge Tribune.

—"Toeing the golden scratch" is the way a Chicago journal refers to death.

—Mrs. Harriet Beecher Stowe is frequently seen on the street in Saco; it must not, however, be inferred that there is a rent in her shoe.

—Remark by Platt: "Hum! a bull-dog pistol is no doubt dangerous, but a man shot with a step ladder never recovers." —[Atlanta Constitution.

—Gold ore and a deposit in the savings bank are very much the same, inasmuch as they are both money in accrued state.—[Jacob Strauss.

—Mrs. O. Leo Margarine has a wide circle of friends who consider her the *creme de la creme*; butter enemies think differently.—[Southern Utah Times.

—"Constant subscriber" is informed that we believe he would be acquitted by any jury should he, as he says, shoot down on the spot any man attempting to give him a point on stocks.—[S. F. Daily Report.

—Uncle Rufus Hatch, the prince of garrulity, thinks that Jay Gould will buy the Great Eastern. "She requires," says the veteran speculator, "a great deal of water, and that's just in his line. He can float anything. He could float the biggest iron anchor in existence."

—The Call's editorial about the superiority of the electric light, and the approaching abandonment of gas, sent San Francisco Gas Stock up \$1.75. One of the keenest disappointments in an editor's life is when he watches the effect upon the public of a powerful editorial and finds it exactly the opposite of that which he had intended to produce.—[San Francisco Daily Report.

—The editor of the Waldron (Ark.) Reporter makes the following announcement: "We have hired us a printer, and expect to call on our friends in different portions of the county, soon. If you see a man riding on a sway-backed, three-legged, knocked-kneed horse, that is us. Take us in, treat us kindly, subscribe for our paper, and make yourself, and especially us, happy. Look out for us."

—A party named Edison is missing. When last seen he was in company with one Menlo Park, who is known to have been very extravagant and full of peculiar notions. Poly Form could doubtless give some information if she would, as could also Phon O. Graph, were he alive, but as he died recently and as Mike R. O'Phone has returned to Ireland, the search will doubtless be abandoned.—[Boston Globe.

—She was a Boston lady of the ultra sort, proud of Boston and of everything connected with it. It isn't necessary to give her name, but it was one of the oldest, with a very decided Beacon-Hill flavor to it. The story goes that when she died and went to Heaven—where else could a Beacon-Hill lady go?—she held communication with her friends still in the flesh, and—fortunate beings—still in Boston. She was asked how she liked her new abode. "Oh!" answered her spirit, "it isn't bad, but it isn't Boston, you know."

—The Idaho Messenger, published at Challis, in noting the fact that a certain minister was going to visit the towns of Custer and Bouanza, in the Yankee Fork country, speaks of that visit thus: "He says he intends to assay the people up there and see what they are made of. An old Yankee Forker is of the opinion that by the time he pulverizes them in the mortar of mortality, fluxes them in the litharge of hope, faith and charity, melts them in the crucible of the

gospel and refines them in their cupel of piety, he will not have righteous metal enough to receive the imprint of the smallest stamp in the mint of the church."

—"Paul," exclaimed the fair daughter of a California bonanza king, addressing one of her suitors, "paw has settled \$500,000 on me, and I thought there'd be no harm in telling you." "Florinde," he said, nervously fingering a few nickels in his waistcoat pocket and striving to hide the evidence of the profound interest which the communication excited; "Florinde, do you think I'm so sordid as to let such a consideration affect me?" "No," she added, nonchalantly, "I didn't suppose you'd care much, so I engaged myself to Mr. Slaker, last night!" It was a ten strike and he flopped, but she was a cool girl, and, summoning a servant, told him to set the sufferer out on the back stoop until he felt better.

—Last Monday evening, while passing in front of the grocery store of Kraus Bros. with a basket of clothes on his shoulder, a Chinaman was seen to suddenly turn a flip-flop and alight in a sitting position in the bottom of his basket, the contents of which had escaped in the tumble. Regaining his feet, the angry Celestial opened upon an innocent bystander as follows: "You allee same San Flancisco hoodlum. You knockee poor Chinaman down when he no hurtee you. Me habee you arrested sure, sabee!" While refilling his basket he found that about \$20 worth of linen had been pierced by the stick of a large skyrocket, which must have been fired into the air from the adjoining hill. He then suddenly remembered that it was the evening of the Fourth.—[Ruby Hill (Nev.) Mining News.]

—A young fellow from the country showed us a curious specimen of rock the other day, and claimed that it was very rich ore, and desired our opinion in regard to its mineralogical name, also its value, etc. After examining it carefully, we told him that it had a very strong resemblance to subcarbonate of conglomerated oleomargarine of high grade and fine texture. He seemed delighted with the lucid information, and he told us (sub rosa) that he was a little tender on a widow with five children who had eighty acres of land covered with that kind of metal, and insinuated that he'd marry her and the children if he were only certain that the croppings would lead to a mine that would pan out big. We suggested that probably the widow was a fortune of herself, and with the fine start toward an interesting family that he would have by marrying her, he could get along comfortably without a mine. He left us sanguine and cheerful.—[Arkansas Mining Journal.]

—A rural visitor to New York, who had heard that horse-car fares in the city were only five cents, happened to get into a Fourth Avenue car immediately upon his arrival. Upon being accosted by the conductor, he tendered a five-cent nickel, which the conductor accepted, and demanded one cent more. The countryman, recalling the many stories he had heard of metropolitan imposition upon provincial unsophistication, debated the request, and only after a long argument paid the extra coin. Next day he happened to ride in a car of the Broadway line, upon which the now famous and well-known bell-punch had just been put in use. Being accosted again for his fare, he tendered a five-cent piece boldly, yet apprehensively, and nerved himself to resist the demand of the conductor for an extra penny. But the conductor, with his usual deliberation, caught the suspended card with one hand, and reached down with the other for the bell-punch. "Suddenly the alarmed countryman, to whom the instrument loomed up in the proportions of a silver-mounted navy revolver, shouted out, 'Hold on, mister, don't shoot! Here's the other cent. I was only tryin' of you.'"

—Mention was made last week of a Montana miner through whose body a two-foot drill took an excursion, while

he was attempting to drill out a hole in which the charge had failed to explode. The Butte Inter-Mountain of July 2nd gives the following additional information: "Patrick Mulligan, who has been in the hospital for about three weeks, was yesterday sufficiently recovered from his injuries to appear on the street, and is confident that within a few days he will be able to resume work in the mine. No other man in Montana can say that an eight-pound, two-foot, inch drill ever passed through his body. No one man in a million could experience the sensation and live to tell about it. Mr. Mulligan sets a great value upon the drill, and proposes to keep it as a memento. Soon after the accident occurred, and when he first knew there was a possibility of saving his life, he expressed the somewhat superstitious belief that if the drill were polished and preserved he would ultimately recover. To gratify the humor, the boys at the mine have every day devoted a little time to the polishing of the drill, and it is now as bright and glistening as a new silver dollar, and Mulligan is well."

—Lady Baker, whose name is not unknown in literature, was sometime since appointed a manager in the National School of Cookery, in London, which was the occasion for the following remarks by the Pall Mall Gazette: "Her thoughts in the kitchen range perpetually, we should imagine, over a wide, various and fruitful field. While her pupils are busily engaged around her, the midday dripping reminds her of the midnight oil, and she pauses to recall the verses of Eliza Cook or the labors of Mrs. Fry, or the poems of Mrs. Browning, perchance. Then, too, the very grate will suggest Hobbes, the saucepan Handel, the salamander Burns, the scollops Shelley, the frying-pan the inductive philosophy of Bacon, and the stew-pan the physical experiments of Boyle. What more natural than to dwell on the sad fate of Sir Cloudesley Shovel or the successful expedition of Sir Samuel Baker; the delightful humor of Charles Lamb or the pacific policy of Mr. Pease; the 'Euclid' of Potts, the worship of Pan, or Mr. Rupert Kettel's attempt at arbitration; M. Grevy's Presidency of the French Assembly or the recent embroilment of the Duc de Broglie; Mr. Fowle's Broad Church views or Mr. Partidge's democratic theories; Mr. Spring Rice's speeches in the House of Commons, or Sir Frederick Currie's operations in India."

The Meat Mines of Siberia.

It has often been stated that the inhabitants of Polar Siberia feed their dogs on Mammoth meat, preserved in nature's ice house, and sliced off at the convenience of the dogs. How these tropical animals came to be so near the Pole is an unsolved problem of the earth's history. There are various theories intended to explain the conditions, but none of them are quite convincing. The most reasonable one is that ages ago there must have been a sudden change of temperature at the Poles from torrid to frigid. The animals were caught out of their latitude, frozen and buried in ice.

A recent traveller in Siberia relates that, happening to drive in a sledge along the base of one of the monstrous ice-cliffs that overhang the estuary of the river Lena, he came upon a pack of wolves devouring the frozen flesh of a mammoth. The breaking away of a portion of the cliff had exposed the monster pile of preserved meat, and at the hands of nature the wolves were helping themselves. So nature brings recompense for her freaks, and takes care of her own. The meat mines of Siberia have not been developed, and no one knows what riches they may contain, or how they may yet be utilized in the economy of the world. The search may discover the *flet de mammoth*, warranted fresh from Siberia.

—The Central Railroad of New Jersey have just issued an illustrated Tourists' Guide, for the information of travelers and tourists. It is a work of seventy-five pages and describes briefly the leading attractions of nearly fifty summer resorts, including Atlantic City, Vineland and Long Branch, reached by this road and its branches. It also gives a list of the hotels along the line, with prices, etc. Parties desiring this guide can obtain one free by addressing the General Passenger Agent of the road, H. P. Baldwin, 119 Liberty St., New York.

The Useful Minerals of New Brunswick.

From a paper read by G. F. Mathew, Esq., A. M., before the Educational Institute of St. John, New Brunswick, at their meeting last week, we make the following extract as reported in the Daily Sun:

In describing the useful minerals Mr. Mathew did not purpose to confine himself to the simple minerals, but to describe as well the various compound and impure substances of mineral origin, or composition, which are available for economical purposes. In this connexion various earthy deposits and rocks which have a homogeneous structure will be noticed. There are a number of these mineral species, which from their occurrence in large masses, or as being more valuable than others, are worthy of a place among the economic minerals; and among these the ores of metals hold a prominent place. Our knowledge of metals has grown up of late years, our ancestors knowing nothing of them. The occurrence of these metals in New Brunswick would be still unknown were it not for the researches which have given to modern chemistry the power to analyze and pick them out from their combinations.

Prominent among the metals of vital importance to the community is iron. Ores of this metal are known to exist at several localities in New Brunswick, but only those of Woodstock have been largely mined and smelted. The Woodstock ore is chiefly of the hematite species, and extends from Aroostook County in Maine to and across the St. John River into Peel Parish in Carleton County. About 40,000 tons are said to be smelted in Woodstock Iron Works. Some of the iron ore beds of this district contain a large percentage of manganese. Similar manganese iron ores are found at Markhamville, King's County, and at West Beach, St. John County. A kind of iron ore which is a secondary product, resulting from the decomposition of other iron ores, is called bog iron. This ore is found in thick beds, especially in the carboniferous districts of York, Queens and Sunbury. Magnetic or black oxide of iron is a third ore of this metal, while a fourth one is the carbonate. Beds of this latter ore have been found in the coal measures of Queens County and elsewhere. The fifth ore, which occurs in many places but usually in small quantities, is the sulphuret of iron. At Moore's mills, Charlotte County, it is quite extensively found. The pyrites at this place is intimately mingled with calcite and the deposit extends in an east and west direction for several miles.

Another metal occurring in large quantities in New Brunswick is manganese, which is extensively found at Markhamville, King's County. Manganese ore is found in three other places—at Quaco, Shepody mines, and near Bathurst. The copper ores of New Brunswick are mostly sulphurets, but for some reason this mining industry has not had a healthy or continued growth. Adams' and Simpson's Islands and La Tete peninsula in Charlotte Co. and Salmon River in Albert Co. are the most promising places for copper-mining. Galena or the sulphuret of lead is the only metal of this kind in New Brunswick that is worthy of mention. It is an ore that in this region silver is often associated with. Zinc ore is not common in this Province but has been found in small quantities—at Campobello and La Tete in Charlotte Co. Antimony, a rare metal in most countries, is not uncommon in this. It is known to exist in at least four places, among which Lake George in York Co. is best known, where operations have been carried on since 1862. Much of the ore is reduced at the mine and converted into metallic antimony.

Among the minerals that occur in large quantities are gypsum and limestone. One of the most extensive quarries of gypsum is at Hillsboro. Some of the rocks are as white as snow. At Petitcodiac there are also large beds of gypsum, where it has a breadth of 40 feet, and is laid bare for a mile. Limestone and marble occur at many places in New Brunswick. Pure white crystalline marble and verd-antique marble are found in Portland, St. John County, and variegated red marble at Gagetown, Queen's County.

Of combustible minerals, four kinds in this Province are worthy of notice. Bituminous coal has been discovered at various places, and has been mined at Quaco, Richibucto, Clones and Grand Lake, and it has been extensively carried on at the latter place. The beds of Newcastle are nearly horizontal, and nearly on the surface, and can be cheaply worked. The annual production is nearly 3,000 chaldron. Albertite is a rare mineral. It differs from common coal in being homogeneous throughout its mass, in having no layers of vegetable remains, and in being found in a vein and not in a bed parallel to the layers of the containing rock, as coal is. The mine at Hillsboro was very profitable for several years. In 12 years 155,000 tons of albertite were exported from Hillsboro, and was worth about \$20 per ton. It is capable of yielding 100 gallons of oil to the ton. Bituminous shales form masses of rocks of considerable thickness in Albert and Westmoreland, extending into Kings.

There are two beds of these shales that traverse these counties for fifty miles. The richest beds in Baltimore, Albert County, yield 63 gallons oil per ton, or 7,500 cubic feet of gas. Bog peat is the fourth combustible mineral to which he referred. In Europe it is extensively used for fuel and can be put in condition to be used for all heating purposes.

Another class of mineral products of a compound nature are building stones. Among those the compound nature of granite is patent to every one examining it with attention. This rock is very common in New Brunswick. At Hampstead is a granite quarry that has been in operation for many years. It is of gray color, and contains the three minerals, feldspar, quartz and mica in the usual proportions. This, however, is not the case with the granite of St. George, in which scaly mica is very scarce. The two minerals of which it is composed are capable of receiving a fine polish and for that reason it is valuable for ornamental purposes. Sandstones are quarried at several places. There has been a demand for the freestone from the Albert Co. quarries which is exported to Boston where it is highly prized.

Beds of clay for making brick are to be found in most of the valleys in the Province. Beds of fire clay exist in the coal measures of Grand Lake and other places. It is brought to St. John to make terra cotta pipes, etc. Phosphate of lime, as is well known, is a valuable product of the Laurentian rocks of the Upper Provinces, but although it is not found in New Brunswick, there are indications of it. Marsh peat consists of the finer parts of the alluvial deposits on the banks of the St. John and other rivers, and is a valuable fertilizer. It has been used with barn manure and is of equal fertilizing power. Diatomaceous earth has been found at the bottom of several lakes in St. John, Kings and Charlotte Counties.

Lastly Mr. Mathew mentioned the mineral graphite, which though now hard and stone-like, is believed to be a product of the decay and change of plants. In Portland several beds are found, and a mine was opened many years ago near the Falls and has been worked at intervals since. Its product has been employed chiefly as stove lead and as a coarse lubricator.

LODES, LEADS AND VEINS.

KATAHDIN IRON WORKS.—During the past few weeks, the injuries to the Works from the recent fire have been thoroughly repaired. Mr. O. W. Davis, Jr., has also inaugurated numerous improvements in the machinery and arrangements which will increase the output of pig iron to twenty tons per day. The Works will at once start up for a prolonged run.

NATIONAL MINING AND INVESTMENT COMPANY.—In our issue of June 3d, we stated that through the efforts of B. Barnes, Jr., of Portland, a company under the above name was about to be organized for the purchase and development of several valuable properties upon the Acton lode. The organization was recently perfected and the following officers chosen: President, M. G. Palmer; Treasurer, M. E. Moore; Secretary, B. Barnes, Jr.; Directors, M. G. Palmer, B. Barnes, Jr., M. E. Moore, J. A. Strout and E. D. Eastman. The property to be purchased consists of the so-called Androscoggin-Acton and Deering-Acton lots to which are to be added two lots adjoining the latter on the north, in all comprising about 2,400 linear feet of the lode. The capital stock of the Company is \$500,000, divided into 100,000 shares of \$5 each. The basis of exchange is one share of the new company's stock for three shares of either the Androscoggin or Deering-Acton, and after payment for the two additional lots 42,084 shares will remain in the treasury. A limited amount of treasury stock will be offered for sale at once and it is proposed to immediately commence operations and ship a quantity of ore to the Portland Smelting and Reduction Works as soon as possible. The Company are not necessarily confined to Maine in their operations. As organized, they are permitted to buy, sell or operate mines whenever and wherever they may see fit. The properties mentioned above are, however, worthy of extensive development. The following report by Col. R. W. Thyng, the well-known Colorado mine manager, himself a native of York County, will be of interest to our readers:

202 WASHINGTON STREET, BOSTON, }
April 18, 1881. }

B. Barnes, Jr., Portland, Me. :

DEAR SIR:—In reply to yours of the 15th inst., we have to say that the Acton vein as judged by our Colorado experience in veins of similar character, presents a prospect for a paying mine that ought not to be abandoned for want of means to prosecute its development.

We believe the proper place for a working shaft to be near the junction of the veins, and advise that it be sunk on the vein following the incline or dip, as it will cost less to sink there than in the country rock. When a depth of 100 feet is gained run drifts or levels both north and south, and on both veins from the junction, in order to find the ore chutes or chimneys in which will be found the only pay ore in the vein. In all fissure veins the ore lies in chutes usually inclining at varying angles, and where these chutes can not be found at the surface it is necessary to drift along the vein until the paying ore is found. The shaft should go down at least 200 feet and another set of levels run several

hundred feet each way before such a vein should be abandoned as worthless. With this development we should expect to have a first-class paying mine.

As regards the organization of the company, we suggest that a new company be organized and all interests, to be consolidated, decided to the new company. The entire stock to be placed in escrow or trust from which to sell so much as will be needed for development work, and only as fast as actually decided, until the mine is placed on a paying basis. When this is accomplished then the balance of the stock might be divided pro rata as previously agreed.

The only persons who ought to invest any money in payment for accrued interests on any of this property are those who have made money by selling their individual stocks in the various companies formed on the Acton lode. It cannot be expected that under present circumstances outside parties can be found to step in and buy up claims and develop a vein at a large expense, while others with larger interests sit quietly by, and if success is obtained reap the larger harvest.

We feel much interested to see the mining industry of Maine established, believing the mineral to be there, and would take pleasure in personally superintending a portion of the work had we the time to spare. But having already all that we can possibly manage in the West, we can only assist by advice and encouragement to those who have the matter in hand, and offer it gratuitously to to any and all honest efforts in development of the mineral resources of the old Pine Tree State.

Respectfully,

R. W. THYNG, M. E.
D. L. RARICK, Prospector.

SUNBURST.—A letter received by us from M. Donelan, Secretary of the Sunburst Copper and Silver Mining Company, states that the mine improves with every foot gained in depth. The shares of the company are selling well in England.

COPPEROPOLIS.—The numerous excavations and prospecting pits which have hitherto comprised the mining work upon this property having satisfactorily demonstrated the general strike and trend of the various ore-channels within the limits of the mineral belt, two inclined shafts are to be started immediately and pushed as rapidly as possible to the first level. The large boarding house, known as the Copperopolis House, is nearing completion and will be opened shortly.

Sullivan.

SULLIVAN.—As stated in our last issue, the annual meeting of the Sullivan Mining Company was held at Sullivan on Wednesday, July 13. The election of officers for the ensuing year resulted in the choice of the following: Directors, George B. Brown, Benjamin S. Grant, Joseph G. Russell, Charles F. Farrington, Dudley R. Child, E. A. Birchard, Frederic R. Nourse; Treasurer, Frederic R. Nourse; Secretary, Charles L. Perrin. No other business was transacted.

FANEUIL HALL & SULLIVAN.—Supt. Hayward's weekly report, dated July 20, is as follows: "Since my last letter the crosscut has been advanced nine feet. Work has been suspended in the face for a few days in order to cut a new pump station for the large pump. Cut another fine stringer last week which looks very promising. The company hold their annual meeting the fourth of Aug. at their office in Sullivan. Our machinery and all branches of the mine are working well and are in an excellent condition."

PINE TREE.—Supt. Messer has been in Boston the past week purchasing new machinery for the mine. A complete set of new hoisting works, comprising all that will be required for the next five or six hundred feet, will be put in, and as soon as placed in position the work of opening up the mine on an extensive scale will be pushed vigorously. It will be remembered that the Pine Tree has already cut the vein at a depth of 126 feet, and drifts run for a short distance in either direction have shown it to be of good width and carrying ore of fine grade. Under the systematic development now proposed the Pine Tree will shortly come to the front.

MILTON.—The Bulletin of July 16th. says: "The new sump in the 180 foot level north of shaft No. 2 is nearly completed, and a new level to run south, will be commenced immediately. Work in the southerly cross-cut and drift from the 160 foot station of shaft No. 1 continues as usual. The property is now making an excellent showing, and the outlook for the future has never been more promising."

GOLDEN CIRCLE.—The Golden Circle Mining and Milling Company find themselves in the predicament which is a common experience with non-assessable companies. Their property has been fully proven to be one of great value; but funds are needed for development, and although there is an abundance of stock in the treasury it cannot be sold, in the present condition of the market, at a price approaching its real value. To meet this difficulty it is proposed to issue first mortgage bonds to the amount of \$20,000, drawing eight per cent. interest per annum. It is thought that these bonds are a desirable investment and will be readily taken up.

Blue Hill.

Blue Hill is in a prosperous condition and the mines of this well known district are really making a better showing than ever before in the history of mining operations in the State of Maine. A visit to these mines has a very inspiring effect, and

even the most conservative of men cannot devote any time to the examination of the properties without becoming enthusiastic in regard to the prospects. The mines themselves are constantly showing an improvement in both the quality and quantity of the ore, the mining developments are being pushed energetically and very excellent work is being accomplished and the smelting operations of the Douglass, Blue Hill and Twin Lead have already determined conclusively that the ores of Blue Hill can be treated to good advantage. Additional impetus has been given to mining matters in the district by the commencement during the past week of work upon a large scale on the Mammoth property.

MAMMOTH.—The Mammoth Copper Mining Company was organized under the laws of Maine in the town of Kittery on Saturday last. This new incorporation comprises leading citizens of Bangor and Boston who intend to develop the Mammoth property, across the pond from the Douglass mine at Blue Hill. This property has previously been described in these columns and during the present week has been again visited by one of our staff. The property is one of large size on the south shore of Douglass Lake, and a ledge has been uncovered some distance in either direction and a great amount of very handsome sulphurets of copper is exposed to view. The extent of the discovery is of course unknown as the amount of prospecting done has been limited, but the great magnitude of the ore body is already satisfactorily determined. Operations have been commenced on a large scale at the Mammoth and the work will be pushed with vigor. Supt. Duff, of the Twin Lead, has charge of the developments and under his energetic management quick results may be expected. A crew of men are now at work removing the soil from the top of the ledge. Carpenters under the charge of James Davis are erecting a blacksmith shop. A landing has been completed on the east side of the pond and another landing is being constructed directly in front of the developments on the Mammoth. The large scow recently hauled to the pond is being used in transporting ore across the pond from the Mammoth. Two scowloads—in all about 50 tons—of very excellent ore have been taken from the Mammoth property within the past week and carried to the Twin Lead where it will be roasted in a kiln now building and then turned into matte at the Hersey Smelting Works. In this way the ore will be quickly turned into a marketable product and the large amount of ore already in sight will enable the Mammoth Company to make a splendid exhibit in a brief time. The ore is of very high grade and two recent assays by Mr. Barclay averaged 12 1-2 per cent. copper. The surface showing is one of the most remarkable yet made in the State and as the Mammoth has a live and energetic Management important developments may be expected. Supt. Duff expects matte from the Mammoth ore will be coming out of the smelter by August 1st.

DOUGLASS.—Operations continue on a large scale at the Douglass. The underground developments are progressing steadily and large quantities of high grade ore are daily taken out. The elaborate smelting works of the company at the present time attract great attention. The Douglass now have six furnaces, as follows: two cupolas, two reverberatories, one black cupola and one refinery. The black cupola furnace was completed early this week; the pipe connections were made on Tuesday and it is probably now in operation. This furnace will take the matte from the cupolas and convert it into black copper of 95 to 96 per cent. and regulus of 80 to 90 per cent. The product from this furnace will be converted into blister copper in the reverberatories and will then pass through the refinery and come out as refined copper. In the reverberatory building there is quite a quantity of blister copper of over 95 per cent. which has been taken from the reverberatory furnaces. As a result of the recent workings of the Douglass furnaces, some 75 tons of copper matte running from 20 to 97 per cent. are to be seen. Some delay has been occasioned in running the reverberatories by the non-arrival of coal ordered several weeks ago. Supt. Maliphant is much pleased with the result of the smelting operations and is very enthusiastic in regard to what will be accomplished.

STEWART.—The Stewart is making a very satisfactory showing and the stockholders are to be congratulated on the interesting developments now in progress. It was highly fortunate for the Stewart Company when they secured as Superintendent a gentleman so thoroughly versed in mining as Capt. Daniel Dunn. Under his energetic charge, mining work is progressing vigorously and a large amount is being accomplished. After a most thorough prospecting of the large property of the company, Supt. Dunn located two shafts and these are now being sunk rapidly by miners who do the work under contract. These shafts are located on the high ground to the north of the road and are about 300 feet distant from each other. One of these is now down 35 feet and the other 37 feet and both show a plentiful amount of good copper ore.

BLUE HILL.—The Blue Hill mine has now reached a very interesting stage of development. For a long time the mine has been making a wonderful display of high grade copper ore and large quantities of this ore have been raised to the surface from the shaft and levels, but now the most interesting portion of the operations has commenced and the smelting furnaces of the company are in full blast. The Blue Hill mine has for the past year made a very superior showing but it is now making a much better exhibit than ever before in its history. The incline shaft of the mine is at present down 140 feet and is being pushed to greater depth at a rapid rate. A drift at the 110 level has been extended to the eastward a long distance in ore of very fine quality and a winze is now being run down on the vein from the level. The ore encountered has been massive copper sulphurets of high grade and as fine as has yet been found in the district. The shaft, drift and winze show the same excellent ore. The large pump works very perfectly and takes care of the water in the mine with great ease. A very large quantity of handsome ore is seen in piles around the buildings and in the ore house. In the mill building are several hand jigs which are employed in concentrating some of the ore. The smelting operations now attract special attention. The smelting building is of large proportions and is a fine looking structure. The cupola furnace is splendidly constructed and has a chimney 50 feet in height. On Monday last this smelter was fired and the results were in every way highly successful. The smelter worked to a charm, the molten liquid running very freely and during the day a large quantity of high grade matte was collected. The smelting is in charge of an experienced workman from the Vershire mine. It is highly gratifying to witness the complete success of the Blue Hill smelting operations and we congratulate Capt. Moyle, the accomplished Superintendent, upon the splendid success attained. Capt. Moyle has been untiring in his efforts to open, develop and place the Blue Hill mine on a substantial basis and the foremost position now occupied by the Blue Hill is due almost entirely to the skill, energy and ability with which he has conducted the management.

TWIN LEAD.—Everything is moving along systematically under the direction of Supt. Duff. The work in the south crosscut is progressing very satisfactorily. The crosscut is now in 77 feet and it is believed that the main vein is not far distant. Several stringers charged with high grade copper sulphurets have recently been cut through and appearances indicate the near proximity of a good ore body. The smelter runs a portion of the time under the charge of Supt. Barclay and does good work. It is understood that some of the matte will soon be shipped. A kiln is being built on the Twin Lead property to treat ore from the Mammoth. The plant of the Twin Lead is one of the best in Blue Hill and the machinery runs as perfectly as could be desired.

GRANGER.—Numerous improvements have recently been inaugurated at this well known mine. Col. Granger, the active Superintendent, has had the various mining buildings of the Company painted a light color with trimmings of bright red and, with a flag-staff on the shaft house from which the American flag is constantly flying, and the trees which were formerly in front now cut down and removed, the Granger Works make a very prominent display from the village and bay. The mine continues to make a very excellent showing and work is being prosecuted with energy. The incline winze is now down 70 feet below the 100 level and the same good showing of ore is noticeable. The drift to the eastward along the vein on the 100 level is now in 40 feet and the vein presents the same characteristics as in the other openings. Col. Granger is pushing vigorously ahead in his incline and proposes to be in advance of the other mines of the district in opening the 200 level. The large lot of ore recently desulphurized by roasting is ready for shipment to the New England Smelting Works.

REVERE.—A meeting of the stockholders of the Revere Silver Mining Company was held on Saturday last at the Bangor House. A majority of stock was represented and numerous measures were discussed. No final action was taken and an adjournment was made till to-day (Friday.)

Bagaduce.

NORTH CASTINE.—Work is now progressing well at the North Castine mine. The shaft is down about 42 feet and is being driven downward by three shifts of men.

MERMAID.—Supt. Pearson, with a crew of men, has blasted the ledge on the Mermaid property and has obtained a level surface upon which a coffer dam can be built.

DODGE AND JONES.—Prospecting is being continued on the Dodge and Jones properties in Brooksville with highly satisfactory results. We have seen handsome samples of ore brought from these prospects during the present week.

British Provinces.

Prof. John S. C. Randolph, of the American Mining Engineers' Association, New York, has just concluded an inspecting tour through the various mining properties on Thunder Bay. He expresses himself as being well pleased with the prospects on McKellar and Spar Islands.—[Fort William Herald.]

SATEMO.—The Superintendent of the Satemo reports under date of July 10, as follows: "Several new finds have been made recently. The Kent continues to improve and this week we shall start a drift upon her east and west. She makes a fearful pile of quartz. I send herewith some samples. Notice particularly the fine gold in arsenical pyrites. I regard it as of much more importance than the large nuggets such as you see in other samples herewith."

A Provincial exchange says: "Ore of rich description was recently discovered at Hopewell, Pictou Co., by Messrs. J. Monroe and D. C. Robertson. On testing, the ore has proved to be of high quality, and existing in great quantity. Silver has been discovered in it to some extent. The discoverers have mined some tons of the valuable ore and have made arrangements for its smelting by Mr. F. L. Bartlett, of Portland, Me. Already capitalists have offered to purchase the property, we understand, and it is very probable that the discoverers and proprietors will dispose of the property at an early date for a good round sum."

BRUNSWICK ANTIMONY.—The report of an assessment upon the stockholders of this company was quite unauthorized, and the new members upon the board of direction are as yet sanguine that no such step is needed. But they are busy informing themselves as to the true condition and real wants of the company, and their forthcoming report will give the stockholders such information as will be satisfactory and conclusive, and any recommendation they may then offer can be relied upon. The mine, they are satisfied, is in splendid condition, and the work done there thus far, under the management of Captain A. G. Adams, has been first class, and with the new machinery called for, can readily produce its fifty tons of ore daily with a ready market for every pound of its product.—[Sunday Globe.]

The Hopewell Manganese Company has been organized under the laws of Maine, with 40,000 shares, of the par value each of five dollars. The directors are Stoddard W. Pollard, (President;) F. W. Prescott, (Secretary;) E. H. Hastings, Ambrose Leed, of New York, Edward F. Dole, E. H. Peck and Wm. A. Travis—all of Massachusetts, except Mr. Lee. The property embraces some 250 acres in the parish of Harvey, Albert county, New Brunswick, held under a lease of twenty-one years, with privilege of renewal for like term, and mines are only one mile and a half from railroad, and two miles from water transportation, and within thirty hours by land or water from Boston. Manganese has been found cropping out in several places, and some years ago was extracted to the amount of seventy tons. All the indications are that the mineral will be found in large deposits, of a very high percentage, a compact black oxide going as high as ninety per cent.—[Mining Record.]

Items from the Halifax New Era:—From Montague we learn that Messrs. Foster & Son are actively engaged in prospecting. Quartz taken from the Rose Lode looks better. A new shaft is being sunk on property of Symonds & Kaye.—A correspondent from Moose Head mine, at Shear's Point, reports the lead good, and believes the mine to be one of the foremost in the Province. It is owned by Dr. Campbell of Sherbrooke and others.—The most flattering reports of the prospects of the silver mine discovered at Antigonish reach us from day to day.—We were shown a fine bar of gold taken from the mines of Mr. T. Foster, Mount Uniacke.—Mr. Anderson has been offered fifty thousand dollars for his share in the Chezzetcook gold mines.—Mr. Mosely, of Dartmouth, has sent to the gold fields of Chezzetcook a crusher which will be at once put in operation.—Messrs. Hall and Anderson have opened two fine leads of gold bearing quartz on their already valuable claims at Fifteen Mile Stream.—Mr. G. W. Cole brought to town yesterday, from his lead at Mooseland, a fine brick of gold, weighing nearly forty ounces and worth about \$700.—If we can judge from the appearance of the gold-bearing quartz brought to town from Mount Uniacke, that locality promises to become one of the best gold mining localities in the Province.—Hon. Mr. Lynch, of the Quebec Government, is inspecting the mineral fields of the Ottawa Valley, with a view it is said, to investing in mining property.—We were shown last Thursday, from Cape Breton, the finest specimens of copper ore we have ever examined; in fact one small specimen is nearly all copper. These specimens were broken off at the surface by Mr. Rufus Foster, who will delay no time in securing the property.—An injunction having been placed on a certain portion of the Salmon River gold claims now in dis-

pute, the present occupant moved some 1,500 feet farther east struck a rich lead. Another disputant also removed 3,500 ft. and farther in the same direction, and had his pluck rewarded by a rich discovery.—The agent of a mining company in Maine spent a portion of last week prospecting along the Sissibo River. Judging from reports, the indications of nature's hidden treasures were sufficiently favorable to justify the company in commencing operations before long. It is said a silver mine will be opened within a few miles of Weymouth bridge, and a gold mine in the village of Mistake, which is situated near the Sissiboo Falls, about seven miles from Weymouth.

General Mining Notes.

The Forman (Comstock) shaft is 2,000 feet deep; 4,000 feet remain to be sunk before it reaches its proposed depth.

The Alta (Comstock) shaft is down 2,120 feet and is within 30 feet of its required depth before drifting for the supposed ore body will be commenced.

The gold yield of California since its discovery in 1849 can never be fully ascertained, but it is a matter of record that the amount which has actually been deposited in the mint up to 1880 was over \$900,000,000.

From a 30-stamp mill in 1877, the Homestake (Black Hills) is now running 440 stamps. It now controls the claims known as the Homestake, Father de Smet, Golden Terra, Giant, Old Abe, Deadwood and Highland.

The gold excitement still rages at Westford, Connecticut, and the miners say the ore grows richer as they dig deeper. New York parties are going to look over the ground and arrange for a crushing mill. There are also deposits of iron and lead at Westford.

Copper Queen shipped 238,972 pounds of copper during the first 19 days of June. This at 19 cents per pound would represent \$45,404. If the smelter did as well for the remaining 11 days the output for the month would be \$68,000, fully one-half of which would be clear profit.—[Tombstone Epitaph.

It is stated that the long talked of combination of the Missouri iron interests has finally been effected. The new consolidated company will be known as the Missouri Iron Company, will have a capital of \$10,000,000, and will control 90 per cent. of the iron product of the State and 75 per cent. of the manufacturing.

A Battle Mountain, Nevada, special says that operations have just been commenced on the new large incline shaft at the end of the tunnel of the Starr Grove mine. Extra machinery is being put in for the purpose of sinking to the depth of at least 500 feet. The shaft will follow the dip of the ledge, and will open out immense ore reserves below the tunnel level.

The revival of activity in the Anthracite trade, which set in three weeks ago, still continues, and its constantly improving character justifies the belief previously expressed, that the dull season for this year is passed, and that for the remainder of the year the resources of the operators will be taxed to their full capacity in order to furnish the coal needed for the fall and winter supply.—[Pottsville (Pa.) Miners' Journal.

As illustrating the cheapness with which ores may be worked under specially advantageous circumstances, we may remark that a company running a gold mine in Amador County is putting up about a 100-stamp mill with which they expect to work ore at \$2 per ton. In another issue we hope to give some further particulars of the enterprise. The property is owned by pioneer capitalists and mining men.—[S. F. Daily Report.

Four young men, prospectors, were rewarded by the discovery of a valuable mine near Hailey, Idaho. One of the young men had a lady friend, and it was decided to name the mine after her, and so fix the title that in case of their death it should be hers. Last winter the whole party was buried beneath a snowslide, and now the young lady is planning what good she will do with the \$65,000 that has been offered her for the mine.—[Salt Lake Tribune.

The Nevada Transcript says that the San Francisco Copper Mining Company at Spenceville, is running to its full capacity. An average of 90 tons of ore per day is being extracted, but as the reducing facilities are limited the product of copper for last month was only 32 tons, worth \$250 a ton. The Company propose putting in forty more leaching tubs soon and otherwise increasing the milling facilities. The management think that dividends will be in order before long.

Notwithstanding the falling off in the production of the Comstock, mining in Nevada is by no means played out. Eureka,

Candelaria, Austin and Lewis districts are fruitful mining points and turn out large quantities of bullion, while many of the lesser camps are holding their own and furnishing small amounts of metal, which help to swell the grand aggregate. Aside from the Comstock, gold and silver mining operations are yet in their infancy in Nevada.—[S. F. Daily Report.

Assessments to fall delinquent in July amount to \$570,000, of which Nevada mines call for \$227,500; California, \$318,400; Utah \$15,000 and Arizona, \$10,000. In July, 1880, the delinquent assessments amounted to \$961,000. Thus far, this year, Nevada mines have called for \$3,473,460 to keep the ball rolling, of which Storey county wants \$2,675,150. During the first seven months of 1881, the assessments have amounted to \$5,157,260, against \$7,958,500 during the same time in 1880, and \$8,714,300 in 1879.

Savage stockholders will be pleased to learn that Capt. John Kelley, the distinguished developer of the great Lady Bryan bonanza, which yielded \$000,000,000,000 in gold and \$000,000,000,000 in silver, and the balance in salt, has formed a combination with the generous Gen. Tom Williams to secure the control of the Savage, with the understanding that Capt. John, late of the Lady Bryan, as before said, is to be the "silent" Superintendent. The outlook for Savage stockholders, with Captain John for Superintendent, is decidedly encouraging—for assessments.—[S. F. Daily Report.

Hermosillo, Mexico, is a very attractive city. For twelve miles there is almost one continuous orchard of orange, lemon, date and fig trees, all of which bear prolific crops of fruit. The city is shaded, and well watered, streams running in all the principal streets. Some of the streets are paved with stone from an adjacent mountain. Many Americans are now in Hermosillo, and several important mining sales have recently been made there and the money paid. The officials and people of Mexico treat Americans with the utmost consideration and respect. Governor Torres is particularly friendly towards them and freely offers all possible assistance they may need and encourages American enterprise and capital.

The salt industry of Michigan has risen to a leading place in the saline production of the world. Works that used to produce 10,000 to 20,000 barrels, now produce 40,000 to 60,000, by reason of improvements, and the cost of manufacture has been reduced from \$1.50 per barrel to forty-five and sixty cents. The evaporation by the steam process is now producing the larger proportion of salt made in Michigan. A comparison of the Saginaw product with that of Onondaga shows that for several years past, the former place has largely led the other as a salt producing point. In 1880, the salt product of Onondaga amounted to 8,000,000 bushels, and that of Saginaw to 13,000,000 bushels. Saginaw is now the largest salt producing district in the United States. The bulk of this product is consumed in the Western States.—[Mechanical News.

The Eureka Sentinel of July 22d says: There are no less than twelve promising Eureka mining properties under bond to Eastern and European parties. A number of these sales will be consummated within the next two or three months. Several San Francisco capitalists are anxious to secure properties in Eureka, and agents will shortly visit our district to see what can be had. Altogether we ought to have something of a mining boom here before snow flies. The steady dividends of the Eureka Con. and Richmond are attracting wide attention to our district and creating an impression that cannot fail of beneficial results in the end. No mining camp in America can today boast of two such productive mines as the Eureka Con. and the Richmond. If the Albion shall be added as a third dividend-payer, which is not at all improbable, the general prosperity would be greatly enhanced. The Geddes & Bertrand also promises to take a leading rank as a bullion-producer during the fall months. Eureka's outlook is as bright at this writing as at any time in its history.

The Virginia Footlight is responsible for the following: "John Mackay, before his departure from here, gave away all his household furniture down in the Gould & Curry office. He stated, as he would never come back here again except on a visit, he would not need accommodations such as he had here in the past. The bonanza firm have been bearing the stock market for some time in every possible manner. They are casting their withering influence now upon the mines and the prospects—business and otherwise—in this city, and are, without doubt, engaged in a genuine 'freeze-out game.' Mackay's furniture clean-up and departure from here is but a move in the game. It has been done for effect, and that effect to be created was one of depression. Mackay, it is true, has left here. But it is not with the intention of going to Europe. He will go to New York. Before long the following conjunction of the planets will be observed: Flood will be found in San

Francisco; our wily Senator, Fair, will be here in Virginia with his best beloved children, and the redoubtable Mackay will occupy the third corner of the triangle at New York. Mark our words that when these three planets assume the above positions there will be some wonderful convulsions in the stock arena."

RUBY HILL, NEVADA.—Our mines as a whole never looked better. Eureka Consolidated is reimbursing its fortunate stockholders every month, with enough ore in sight to continue the same for an indefinite period. At the same time it is sinking a three-compartment shaft and will soon erect over the same machinery second to none on the Coast. Notwithstanding the law suits now pending between the Richmond and Albion Companies and the points the former company has recently gained, people seem to have confidence in the Albion mine. At any rate all know that a bonanza exists in the disputed ground, and that it cannot be long left undisturbed is an undeniable fact. Whichever company secures it the wealth it will yield is sure to materially enrich this camp. During the present week the mammoth furnaces of the Richmond will again be in operation, and soon after extensive ore extraction will be commenced throughout the mine. The average assay of ore from this property during the past year was \$68.12. The net profit for the year ending February 28, 1881, was \$1,142,000, or \$7 1-2 per cent. of the entire capital of the company. Out of this sum five dividends have been paid, amounting to \$635,000. The cost of mining and handling, and all other working and general expenses, at Eureka for the year was \$1,500,000. In weight the total output for the year was 114 tons of gold, 48 tons of silver and 135.96 tons of lead. The Dunderberg is shipping ore regularly. About 80 men are now employed at this mine.— [Ruby Hill Mining News.

Nuggets.

—A telephone will soon connect the Fort Point House with Stockton.

—The new steam ferryboat "Transit" has made its trial trip at the Sullivan ferry.

—The Farmington Chronicle says that Mr. William Norton has opened a vein of zinc ore on his Mount Day farm at Strong. A Strong vein, we should call it.

—The steamer Henry Morrison landed at the new wharf in Blue Hill, for the first time, on Monday last. The officers of the boat are said to be highly pleased with the new landing.

—Another mine has suspended operations until after "hay-ing." The St. George (Knox County) correspondent of the Rockland Free Press says: "Work is suspended on the mine at Clark's Head while the men are getting their hay."

—Parties have secured a contract to furnish New Yorkers with 80,000 paving stones and are now obtaining them at the Worcester quarry in the town of Penobscot. The Collins Granite Company of East Blue Hill have received an order for 60,000 more.

—An interesting occasion in Blue Hill was the recent hauling under the direction of Supt. Duff of a very large scow from the Bay to Douglass Lake, where it is being used by the Mammoth Mining Company. Thirteen yoke of oxen were required to transport the scow that distance.

—Mr. James Mitchell, of Belfast, and Mr. Wm. Bright, of this city, have been awarded the contract for grading and building the road-bed of the Bangor & Katahdin Iron Works R. R. Work will be commenced next week and pushed as rapidly as possible. The road is to be of standard gauge.

—The Railway Herald and Purchasing Agent is the name of a monthly publication which has recently put in an appearance. It is printed at 18 Post Office Square, Boston, and is devoted to railway, steamship, telegraph, engineering, manufacturing, mining and financial news. It is a neat publication and is worthy of patronage.

—We have received with the compliments of F. O. Beal, Esq., of the Bangor House, an attractive and interesting pamphlet descriptive of "Way Down East." It is finely illustrated and contains much valuable information concerning the summer resorts, hotels, steamer and railway lines, etc. of Maine, New Hampshire, Vermont and the Canadas.

—The wharf built at Peters' Point, Blue Hill, by Supt. Duff is now completed and proves a great convenience to the public. It is very neatly and substantially constructed, is easy of access from the village and is an excellent landing place for steamers and vessels. It is known as the Blue Hill Steamboat

Wharf and is owned by Chas. Duff, of Blue Hill, and E. M. Hersey, of this city. The steamers all land at this wharf now.

—Professor Swift, Director of the Warner Observatory, Rochester, N. Y., has just verified the discovery of another comet in the Constellation of Auriga, made July 14th, by Prof. J. M. Schaeberle, of Ann Arbor, Mich. The new comet is apparently coming directly toward the earth, and, for a telescopic comet, is very bright; indeed, it can readily be seen with a good opera glass. It is quite remarkable that it should be in just the spot where the present large comet was first seen by the naked eye in this latitude, and it shows that the two bodies must have crossed each other's paths. This makes the fourth comet discovered within ten weeks, a circumstance heretofore unknown in history. Prof. Schaeberle has duly filed his application for the Warner prize of \$200, and as yet he is the only claimant.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Gila County Mining Company,	Portland,	July 14,	\$300,000.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, JULY 20, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Anouez.....	2½	3	2½	3	2½	3	2½	3	2½	3	2½	3
Atlantic L. S.....	10	11	10	11	10	11	10	11	10	11	10	11
Atlas.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper..	3¼	4	3¼	4	3¼	4	3¼	4	3¼	4	3¼	4
Brunswick.....	13	14	13	14	13	14	13	14	13	14	13	14
Calumet & Hecla.	22½	23	22½	23	22½	23	22½	23	22½	23	22½	23
Catalpa.....	1½	1¾	1½	1¾	1½	1¾	1½	1¾	1½	1¾	1½	1¾
Central.....	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls.....	6	7	6	7	6	7	6	7	6	7	6	7
Contentment.....	...	...	2	...	2	...	2	...	2	...	2	...
Dana.....	...	...	...	...	...	...	...	...	...	...	...	...
Douglass.....	2½	3	2½	3	2½	3	2½	3	2½	3	2½	3
Duncan Silver.....	...	1	1½	...	...	...	...	...	...	...	...	...
Empire.....	...	37½	43c	...	49c	50c	35c	50c	37c	45c	...	...
Franklin.....	11	11½	11	11½	11	11½	11	11½	11	11½	11	11½
Hanover.....	...	8	8	...	...	...	...	...	...	...	...	...
Harshaw.....	7½	8	7½	8	7½	8	7½	8	7½	8	7½	8
Humboldt.....	...	...	2	3½	...	...	...	...	...	...	...	...
Huron.....	...	...	2	3½	...	...	...	...	...	...	...	...
International.....	...	...	...	...	...	...	...	...	...	...	...	...
National.....	...	...	...	...	...	...	...	...	...	...	...	...
Osceola.....	30	37	31	32	...	...	31	...	...	...	31	...
Pewabic.....	12	12½	12	13	...	...	11	12½	12	12½	10½	12
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	35	36	34½	36	...	...	36	37	36½	37	35	36
Ridge.....	...	3½	3	3½	...	...	3	...	...	...	4	4
Silver Islet.....	42	43	41	42	...	...	41	...	40	41	40	41½
Star.....	...	...	2	...	...	...	...	...	...	...	...	...
Sullivan.....	3½	...	3½	4	...	...	3½	4	3½	4	...	4

Copperopolis Mining Company.

OFFICE, 4 SEARS' BUILDING, BOSTON, MASS.

Capital, \$500,000. Par Value of Shares, \$2.50.

Unassessable.

GEO. E. HARRINGTON, President. S. L. SYMONDS, Treasurer.
W. OSCAR ARNOLD, Secretary.

Directors—GEO. E. HARRINGTON, GEO. WEST, FRANCIS TUCKERMAN of Salem, Mass.; P. MULLAN, L. W. HODGKINS of Ellsworth, Me.

JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$3.00.

Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, Jr., Treasurer.
W. OSCAR ARNOLD, Secretary.

Directors—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, Jr., of New York.

Silver Hill Mining Company.

Office, 11 CENTRAL STREET,

Room 4, - - - Boston.

Mines at Garland, Me.

Capital, \$500,000. 200,000 Shares. Par value, \$1 50.
25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.

Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

CHAPPARAL GOLD MINING CO.

Location of Mill and Mines:

KELSEY MINING DISTRICT, EL DORADO COUNTY, CAL.
CAPITAL, \$2,000,000.—PAR VALUE, \$10.

Stock full paid and unassessable.

Registrars of Transfers, Farmers' Loan and Trust Co.
Office, 61 Broadway, Rooms 7 and 8, N. Y.

COLD and SILVER!

R. LONGMAN'S SONS,

Refiners and Smelters of Gold and Silver.

Bullion Purchased. Assays of Ore a Specialty.

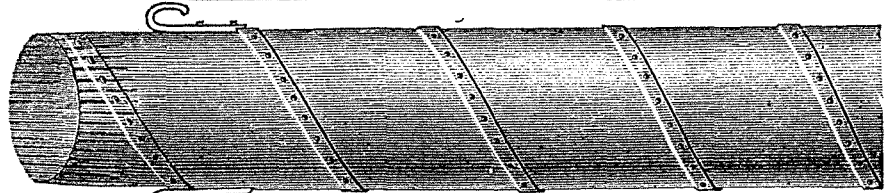
Office, 9 John St., - NEW YORK.
Works, 25 to 31 North Portland Ave., Brooklyn.

Reed's Sectional Covering,

For Boilers, Steam and Water Pipes.

It is cheap, durable, and the best non-conductor of heat of any covering made. It can be taken off and replaced on the pipes any number of times without injury to the covering. Any person can put it on the pipes. SEND FOR A CIRCULAR.

J. A. LOCKE & SON, 40 Courtlandt Street, New York.



Root's Patent Heavy Sheet Iron Hydraulic Pipe,
WITH RIVETED SPIRAL SEAM.

of all Diameters; Strength or Thickness according to pressure required, for MILLS, MINES, and WATER WORKS, made of galvanized or black iron and dipped in coal-tar and asphalt. Furnished with slip joint, sleeve and nipple, or flange connections. In lengths of from 5 to 25 feet, each tested to required margin of safety.

BURSTING PRESSURE 300 TO 1000 LBS. PER SQUARE INCH, according to diameter and weight of pipe.

AVERAGE FIRST COST FROM 10 TO 60 PER CENT LESS than other tubing; the greatest difference being in the larger diameters.

AVERAGE WEIGHT 50 TO 75 PER CENT less than wrought or cast iron tubing.

AVERAGE SAVING IN COST OF TRANSPORTATION 50 TO 75 PER CENT.

The advantage of the spiral over the straight or longitudinal seam is that the Spiral Seam is the strongest while the straight seam is the weakest part of the pipe by about one half.

Where it is found inconvenient or undesirable to ship tubing already formed up we can supply punched and formed sheets nested and packed for shipment (which can be riveted into pipe at destination) in packages of any desired weight.

Estimates and Price list furnished on application. A full stock always on hand.

ABENDROTH & ROOT MFG CO, 28 Cliff St., N. Y.

RAND DRILL CO.

Rock Drills and Compressors.

IN USE IN CALUMET AND HECLA and SULLIVAN AND WAUKEAG MINES. .

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GOLD AND SILVER REFINERS.

Ores Crushed, Sampled and Tested.

PRACTICAL MILL RUNS 500 POUNDS AND UPWARDS.

Assays of Ores and Metals.

Refractory Ores Treated by a New Process

SURVEYS, EXAMINATIONS, REPORTS, SKETCHES AND MAPS CAREFULLY MADE.

Construction of Works and Supplies Furnished.

33 HAWKINS ST., BOSTON, MASS.

APPLETON MINING AND SMELTING CO.,
 Appleton, Me. Incorporated, Feb. 1880.
 Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,-
 000 shares.
 President and Treasurer, John Bird, Rockland; Sec-
 retary, E. M. Wood, Camden; Directors, John Bird,
 Geo. H. Cleveland, Moses Webster, S. G. Shepherd, D.
 H. Bisbee, George F. Woods, A. D. Bird.
 CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
 East Blue Hill, Me. Incorporated, Dec. 1879.
 Capital, \$500,000; Shares \$5 each; Treasury Fund,
 20,000 Shares.
 President, W. C. Collins, M. D., Bucksport; Treas-
 urer, Leader Hancock, Bucksport; Secretary, O. P.
 Cunningham, Bucksport. Directors—James Emery,
 Dr. George H. Emerson, George W. Collins, Dr. W.
 C. Collins, O. P. Cunningham.
 GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
 Exeter, Me.
 Capital, \$500,000. Shares \$5 each, unassessable; 40,-
 000 shares in the Treasury.
 President, D. N. Estabrooks; Vice President, J. Y.
 Richardson; Secretary and Treasurer, J. A. Blanch-
 ard. Directors—D. N. Estabrooks, J. Y. Richardson,
 James Weymouth, Daniel McCulloch and Erastus
 Laue, of Oldtown; — Sargent, of Brewer, and
 Charles Greenwood, of Corinna.
 Office at Oldtown, Me.

FAVORITE COPPER MINING CO.
 Bluehill, Me. Incorporated, Feb., 1880.
 Capital, \$500,000; Shares \$5 each.
 President, A. E. Herrick, Bluehill, Vice-President,
 H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Blue-
 hill; Secretary, H. A. Tripp, Bluehill; Directors—A.
 E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D.
 Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Bil-
 lings.

FRANKLIN SILVER MINING COMPANY,
 Franklin, Me. Incorporated, Feb., '80.
 Capital, \$500,000; Shares \$5 each.
 President, E. H. Greeley; Treasurer, Jeremiah
 Wooster; Secretary, E. E. Brady; Directors—E. H.
 Greeley, N. P. Doc, Edward Mullan, Richard Laf-
 fan, Jeremiah Wooster.

FRANEUIL HALL & SULLIVAN MINING CO.
 Incorporated Feb., 1880.
 Capital, \$500,000, divided into 100,000 shares, forever
 unassessable.
 Company's office at the Mine, West Sullivan.
 President, Charles H. North, Somerville, Mass.;
 Treasurer, F. W. Morrill, Boston; Secretary, L. A.
 Emery, Ellsworth, Me. Directors—C. H. North, Mor-
 ris B. Boynton, Henry Farrum, F. W. Morrill and F.
 S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
 A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.,
 Littleton, N. H. Incorporated under laws of
 Maine, Dec., 1879.
 Capital, \$500,000; Shares, \$5 each; Treasury
 Fund, 25,000 Shares.
 President, Samuel Atwood, Winterport, Me.;
 Treasurer, Henry T. Sanborn, Winterport, Me.;
 Secretary, S. W. Coffren, Winterport, Me.; Direc-
 tors, Samuel Atwood, Hanson Gregory, Jr., E. C.
 Arey, David H. Smith, Henry T. Sanborn, John At-
 wood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
 Gardner Mountain, N. H.
 Capital, \$500,000, in 100,000 shares.
 Directors—Hanson Gregory, Jr., Maynard Sumner,
 S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Mer-
 rill, Henry Spaulding, Hanson Gregory, Jr., President,
 H. T. Beverage, Treasurer.
 Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
 Blue Hill, Me.
 Capital, \$500,000; Shares \$5 each; Treasury Fund
 60,000 Shares.
 President, Wm. T. Pearson, Bangor; Treasurer,
 Porter Nealey, Bangor; Secretary, E. C. Pearson,
 Bangor; Directors—Wm. T. Pearson, Porter Nealey,
 Edgar C. Pearson, Emery G. Ingalls, of Bang-
 or; Alvin Rodolf, of Boston; Arthur S. Newman,
 of Portland; Frederick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
 Organized under the laws of the State of
 Maine. Capital Stock \$500,000; Number of Shares
 100,000; Par Value \$5; Full paid and forever un-
 assessable. Treasury Fund 20,000 Shares.
 President, D. H. Smith, Winterport; Treasurer,
 A. E. Fernald, Winterport; Secretary, Walter Hale-
 ley, Winterport; Directors—D. H. Smith, Winter-
 port; E. C. Arey, Winterport; John Pierce, Frank-
 lort; W. G. Frye, Belfast; John Atwood, Boston;
 Walter Haley, Winterport; vacancy.

McFARLAND SILVER MINING COMPANY
 Hancock, Me.
 Capital, \$500,000; Shares \$5 each; Treasury
 Fund, 20,000 Shares.
 President, Henry Whiting, Ellsworth; Treas-
 urer, I. S. Johnson, Bangor; Secretary, A. W.
 Cushman, Ellsworth; Directors—Henry Whiting,
 I. S. Johnson, S. N. McFarland, F. A. McLaughlin,
 A. W. Cushman. F. A. McLAUGHLIN, Supt.

OSHKOSH CONSOLIDATED MINING CO.,
 Lawson, Colorado. Organized under the laws of
 the State of Maine.
 Capital, \$500,000. Shares, \$5 each, unassessable;
 40,000 shares in the Treasury.
 President, E. C. Nichols, of Bangor; Treasurer, C.
 T. Plympton, of Boston; Secretary, S. P. Johnson, of
 Bangor. Directors—E. C. Nichols, S. P. Johnson,
 Dr. W. K. Knowles and John R. Mason, Bangor; C.
 T. Plympton, Henry A. Piper and Geo. W. May, Bos-
 ton.

ROBERT EMMETT SILVER MINING CO.
 Egypt Bay, Hancock, Me. In Corp, July, 1879
 Capital, \$400,000; Shares, \$10 each.
 President, H. Whiting, Ellsworth. Treasurer,
 A. A. Bartlett, Ellsworth. Secretary, George A.
 Parcher, Ellsworth. Directors—Henry Whiting,
 Marcus Mullan, James F. Davis, Guy Mullan, A.
 A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
 Bucksport, Me. Incorporated, Feb., 1880.
 Capital, \$500,000; Shares \$5 each; Treasury Fund
 40,000 shares.
 President, Capt. J. H. Hill; Vice-President,
 James Emery; Treasurer, A. H. Genn; Secretary,
 C. J. Cobb, all of Bucksport; Directors—J. H.
 Hill, James Emery, Richard Snow, Howard Swa-
 zey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
 RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
 Of Sarry, Me. Incorporated, February, 1881.
 Capital, \$500,000; Shares \$1.00, unassessable; Treas-
 ury Fund, 365,500 Shares.
 President, Jas. W. Davis; Treasurer and Secretary,
 M. Donelan; Directors—Jas. W. Davis, M. Donelan,
 Roscoe Holmes, Guy Mullan, H. B. Mason, L. W.
 Hodgkins, P. Mullan.
 P. MULLAN, Supt.

WEST BAY SILVER MINING CO.
 Gouldsboro, Me.
 Capital, \$500,000; Shares, \$5 each; Treasury Stock,
 20,000 Shares.
 President, G. R. Campbell; Treasurer and Secretary,
 William Freeman. Directors—G. R. Campbell, John
 W. Coffin, William Freeman, all of Cherryfield. Gen-
 eral Manager, Francis Worcester, Ellsworth.
 W. I. VALENTINE, Supt.

FOR SALE.
 One 40 horse power Steam Engine.
 " 70 " " "
 Can be put in good order in a short time.
 One tubular Boiler, two years old, sufficient to drive
 the 70 horse power engine. Address,
 BELFAST FOUNDRY,
 Belfast, Me.

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 OF MAINE.
 Quarry in operation at terminus of Bangor and Pis-
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 Quality and natural advantages unsurpassed
 Dumpage and drainage unequalled, Railroad trans-
 portation adjoining. Stock for sale. Sections leased
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 A. C. HAMLIN, President, Bangor.

BLUE HILL CENTRAL
Mining and Smelting
COMPANY.
 OFFICE BANGOR, ME.
 MINES AT BLUE HILL, ME.
CAPITAL, \$500,000.
 100,000 Shares: Par Value, \$5.00.
 Treasury Fund, 30,000 Shares.
 Hon. Wm. C. Marshall, of Belfast, President; H. J.
 Preble, Esq., Vice-President; S. P. Johnson, Sec-
 retary and Treasurer; Directors—Hon. Wm. C. Mar-
 shall, H. J. Preble, Esq., Samuel R. Prentiss, J. S.
 Jenness and M. Preble.

YOUNG HECLA
Mining and Smelting
COMPANY.
 Office at Bangor, Me. Mines at Blue Hill, Me.
Capital, \$500,000.
 100,000 Shares. Par Value, \$5.00 each.
 Treasury Fund, 20,000 Shares.
 President, John S. Jenness, Bangor, Me; Vice Pres-
 ident, Charles Hamlin, Bangor; Treasurer, C. P. Wig-
 gin, Bangor; Secretary, W. F. Seavey, Bangor.
 Directors—John S. Jenness, Charles Hamlin, Wm.
 D. Swazey, F. M. Loughton, Hanson Gregory, Jr.,
 Horace P. Tobey and Frank H. Williams.

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GILBERT, CRANDON & CO'S
EXPRESS.
 For Bangor, Machias, Portland, Boston, and all inter-
 mediate towns,
 Connecting with all points west and south from
 Boston, and at Rockland with points east to Machias
 and west to Portland, leaving Bangor every boat at 11
 A. M.
 Low rates and satisfaction guaranteed.
N. M. JONES & CO., Agents,
 24 West Market Square,
 At E. G. Ingall's Jewelry Store.

Bucksport and Bangor R. R.
 CHANGE OF TIME, June 27, 1881.

Leave Bucksport,	A. M.	A. M.	P. M.	P. M.
Arrive Bangor,	6.00	10.00		5.03
Leave Bangor,	7.03	11.15		6.00
Arrive Bucksport,	7.35		2.00	7.00
Arrive Bucksport,	8.40		3.15	8.07

 The 6.00 A. M., and 5.00 P. M.; trains from Bucks-
 port arrive in Bangor to connect with trains east and
 west. The 7.35 A. M., and 7.00 P. M., trains from
 Bangor await arrival of trains from the west.
 STAGE CONNECTIONS.—At Bucksport, daily, for
 Castine, Penobscot, Blue Hill, Ellsworth, Sullivan and
 Mt. Desert.
 L. L. LINCOLN, Supt.

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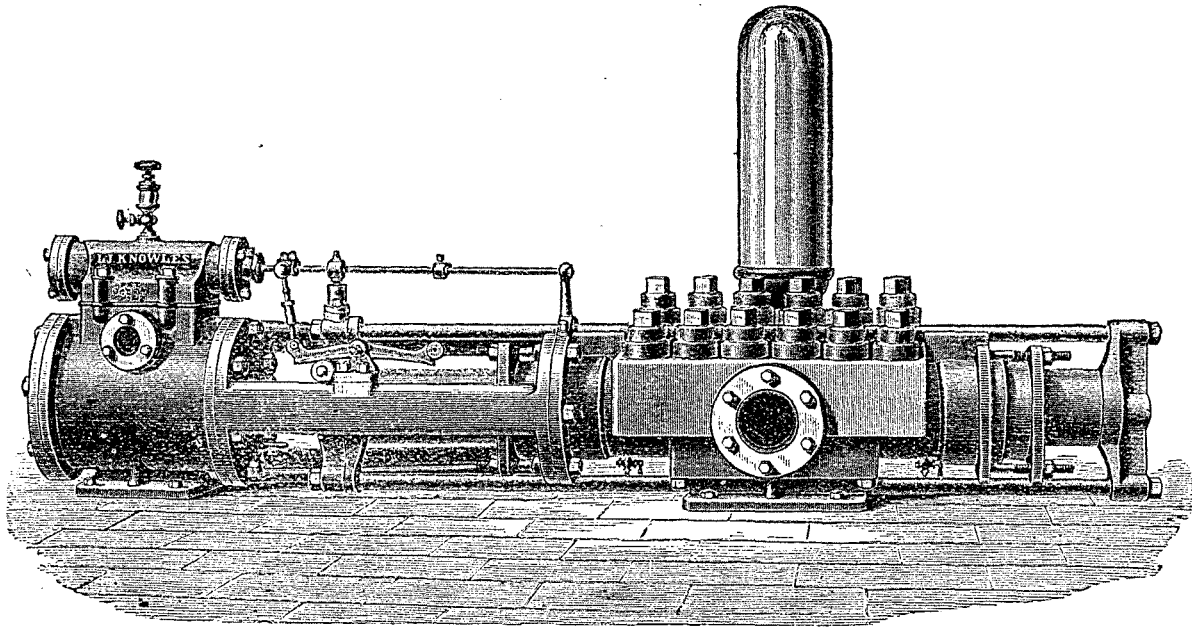
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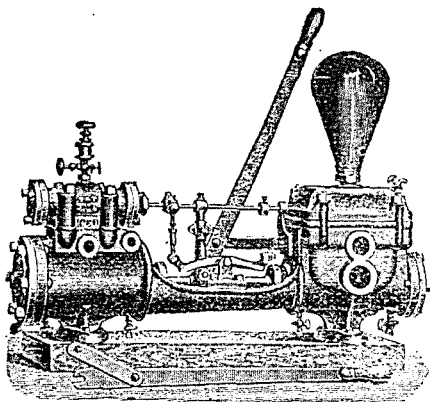
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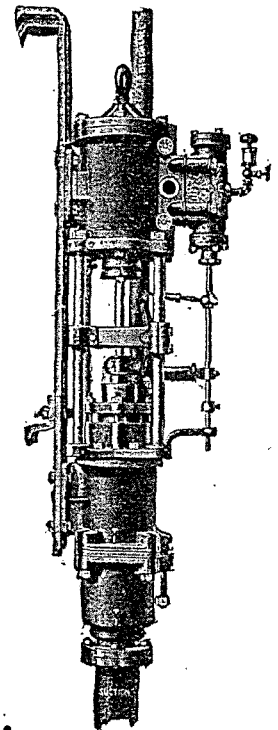


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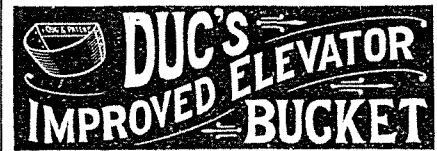
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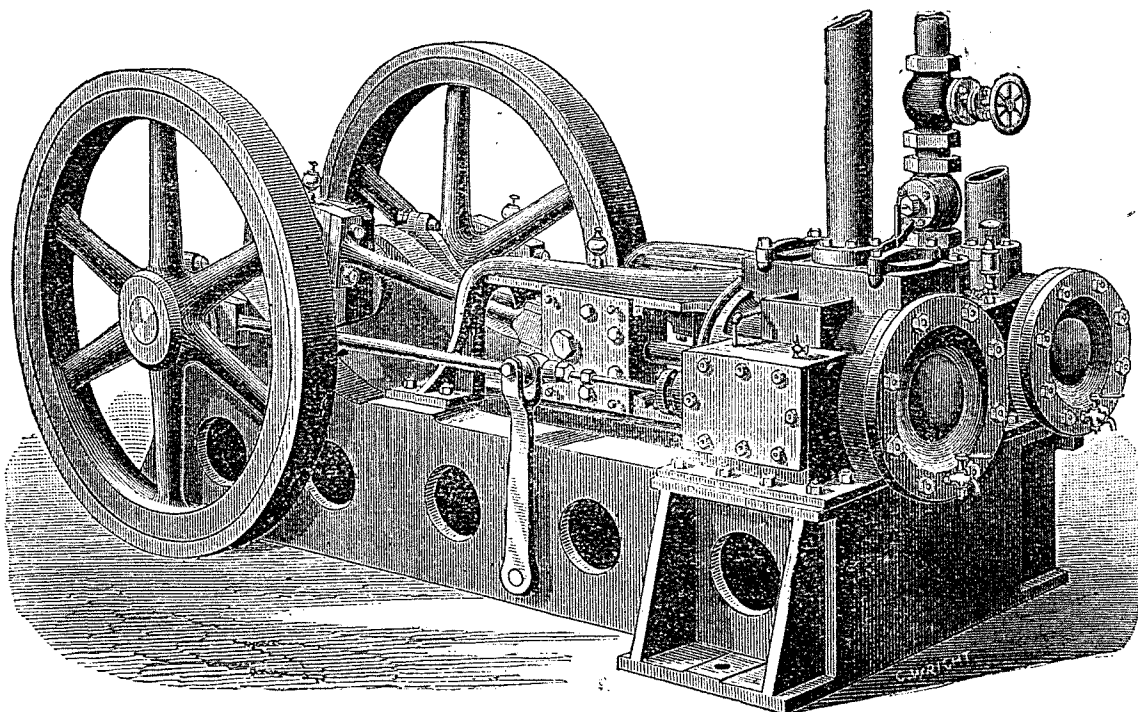
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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, JULY 29, 1881.

The New York Daily Commercial Bulletin thus quotes the copper market: "Ingot remains very quiet with prices apparently more in the buyer's favor than otherwise, and 16 1-4 c. about the best that can fairly be quoted for Lake in fair-sized lots."

The bane of the mining business is stock gambling by mining officials. As soon as the officials of a company begin to speculate in the stock of that company the interests of the public are left to take care of themselves and the property is manipulated to the interest of the insiders.—[Ex.

As an evidence of the increasing interest and stability which now characterizes the mining industry along the Atlantic Slope, we will state that measures are being inaugurated looking to the organization, by some of our most prominent mining men, of the New England Mining Development and Investment Company with a large paid-in capital.

The stock market in New York has exhibited a notable decline during the past week in railroad shares. The upward tendency of railroad stocks has been so prolonged that prices had reached a point higher than even the present prosperous condition of the country would warrant. The liquidation now in progress will probably be soon completed and the course of the market will then be upward.

The mining share market has been somewhat unfavorably effected, as is invariably the case, by the decline in New York, but mining shares are very strong at present prices and an upward movement is assured in the near future. The

closing prices on the Boston Stock Exchange Wednesday were Blue Hill \$4, Douglass \$3, and Sullivan \$3.50. At the Boston Mining and Stock Exchange on Wednesday, Copperopolis remained firm at \$1.95, Milton declined to \$1.18 with \$1.25 offered buyer 30, Silver Hill sold at 40c., and Empire 41c. Among the other sales at the Boston Mining and Stock Exchange during the week were Twin Lead 70c, Young Hecla 45c, Granger 44c, Deer Isle 60c, Pine Tree \$2.87 1-2, Douglass \$3 and Blue Hill \$3.75.

The general condition of mining in the State of Maine is now exceptionally satisfactory. Much of the doubt and uncertainty which has at times been noticeable in the horizon has been dispelled and this great industry now presents itself to the public, established on a far more permanent and stable basis than has ever characterized it in its earlier days. At no time, since the birth of this new enterprise in our midst, have we had greater confidence than now in the richness or extent of our deposits of the precious and useful metals and never have we been more sanguine than at present that the mining operations, now being so vigorously prosecuted in widely separated portions of the State, will conclusively demonstrate to the people the great value of the vast stores of mineral wealth now hidden beneath the rugged exterior. Maine is destined to have a future and it lies in the direction of the development of her mineral resources.

Personals.

HANSON GREGORY, JR., President of the Douglass, is in Boston.

MR. W. OSCAR ARNOLD, after a prolonged absence, has returned to this city.

EBEN D. JORDAN, the merchant prince of Boston, has been summering at Bar Harbor.

D. O. MILLS, the millionaire, has presented the University of California with his check for \$75,000.

W. D. SWAZEY, Esq., Treasurer of the Douglass Copper Mining Company, was in the city on Wednesday.

MR. W. A. PEARSON, the well known Superintendent, left Bangor Wednesday evening on a trip to New York.

MR. MCKENZIE, a broker from New York, has recently been examining the mines of Sullivan and Egypt districts.

E. C. BASSICK, the discoverer of the famous Bassick mine of Colorado, is now on a visit to Maine, his native State.

DR. A. C. HAMLIN, of this city, has returned from a trip to Mount Mica, his recent valuable purchase in Oxford county.

COL. WM. H. DARLING was in the city on Tuesday and expressed himself enthusiastically in regard to the prospects of the Blue Hill mines.

MR. SAMUEL P. DIXMORE, editor of the New York Stockholder, has been visiting in this city where he for some years performed journalistic labors.

MR. C. E. REED, of the Detroit Free Press, after passing some weeks in this vicinity, left Bangor on Wednesday for his home in the Wolverine State.

COL. I. S. BANGS, President of the Maine Tin Mining

Company, has been appointed Assistant Inspector General of the Grand Army for the United States.

CAPT. J. H. MOYLE, Supt. of the Blue Hill, and CAPT. DANIEL DUNN, Supt. of the Stewart, were in the city on Saturday last, and passed the Sabbath at Fort Point.

HON. NATHAN CLIFFORD, the Associate and Senior Justice of the Supreme Court of the United States, died on Monday last at Cornish in this State at the advanced age of nearly 78 years.

We hear the name of MR. EUGENE M. HERSEY, of this city, mentioned prominently in connection with the position of Colonel of the 2d Maine Regiment. The appointment would be a very excellent one.

REV. SAMUEL ANNEAR is passing the summer months at the "Crystal Cottage" in Penobscot. The cottage and garden are now in beautiful order and Mr. Annear receives frequent visitors at this singular retreat.

CAPT. G. N. ARMSTRONG has arrived at Bangor, Maine, all safe and sound. We wish him all manner of good luck, during his vacation, and a safe return to his old camp ground, in the fall.—[Florence (Wis.) Mining News.]

Among the recent arrivals at Blue Hill, the register at the Pendleton House recorded the name a few days since of CHARLES DUFF, JR. Our sincerest congratulations are tendered to the happy father, COL. CHARLES DUFF, of the Twin Lead and Mammoth.

F. H. WILLIAMS, ESQ., left for Boston on Wednesday evening. MR. GEO. D. GREELY, of the firm of F. H. Williams & Co., will during August take his annual vacation and will make an extended trip through the mining regions of Eastern Maine.

MR. CHARLES W. BRYANT, of the Deer Isle Silver Mining Company, expects to arrive home soon from Europe. During his trip abroad he made a visit to Freiberg in Saxony. Freiberg is the centre of the universe so far as knowledge of mining and smelting is concerned.

T. BRIGHAM BISHOP, the Boston broker, will soon ship his team by steamer from Boston and will drive with his family to the mining districts of Eastern Maine and visit all the principal mines, not only for personal observation but in the interest of the New England Smelting Company.

E. M. HERSEY, ESQ., of this city, returned yesterday from a trip to Blue Hill. He is very enthusiastic in regard to the prospects and reports that everything at the copper metropolis is booming. The Mammoth is making a wonderful showing and has created a sensation in mining circles.

MR. COLMAN WATSON, Supt. of the Homestake mine (Black Hills,) recently made a flying visit of a few days to his old home in Hancock, after an absence of twenty-six years. He reported the mining industry in the West to be in a very flourishing condition, and regretted very much that he had not the time to visit some of the mining localities of Maine. He intends to return later in the fall, and devote some time to their examination, as he has a friendly regard for the mining interests of the old Pine Tree State—the home of his boyhood.

—The telephone has finally reached Bar Harbor, Mt. Desert.

Dips, Spurs and Angles.

There's a land that is fairer than day,
Mine projectors have gone there before;
There are holes in the ground that must pay,
And prospects of bullion galore.

In the sweet bye and bye,
We shall hear of the shipment of ore;—
In the sweet bye and bye,
When the manager lieth no more.

—[Financial and Mining News.]

—A capital wife—a \$500,000 heiress.

—There's many a slip twixt a shaft and a dividend.

—A petrified body indicates that the man is stone dead.

—Mexican hotels charge extra for everything but the fees.—[Detroit Free Press.]

—The poet who stood by the seashore and quoted "Break, break, break," is now "broke."

—Some geologists have contradicted Moses, but as all geologists have contradicted each other, Moses stands about as well as anybody.

—"Do you think you will be able to pull through?" anxiously inquired the needle of the thread. "Eye guess so," was the curt response.—[New York News.]

—A Philadelphia millionaire persuaded his sons to study law, and then, so that they would be sure to get possession of all his property, willed it to some one else.

—The latest eccentricity connected with the name of a mining claim is the "Foundbegod," a new discovery made by Steph. Reynolds, near Pitkin.—[Silver World.]

—The book-keeper who became intoxicated with delight over his balance-sheet being right, became a total wreck on discovering that it was owing to a shortage in his cash account.

—"Madam," savagely observed a testy old grain dealer to a ponderous female who had stumbled over his foot in a horse car, "if you step on my toes again there'll be a corner in the corn market."

—The sharpest device we have yet seen related is that of an Ohio widow who owed her hired man \$320. She married him to square the account and then for \$60 secured a divorce and turned him out.—[Arkansas Mining Journal.]

—While a miner was digging near Gold camp, Nevada, he came to a solid wall of burnt brick, piercing which a clear stream of cold water rushed out. It is believed that he has found the reservoir of some old city, buried and forgotten years ago.

—There were among the guests at one of the Machias hotels last week two "Angels," a "Wolf," and two "Savages." To add to the variety a "Cousen" thought he was needed, and as if the weather was not enough a "Lowry" came in.—[Union.]

—A Western newspaper man wrote that he proposed to cook the finest turkey in the country for his Christmas dinner. The printer set it up "hook," and the poor scribe was under police surveillance every time he wandered into the outskirts of the town.

—Should the United States coal fields ever give out, a supply can be found in the British possessions. One tract, between Winnepeg and the Rocky Mountains, and extending far northward, covers an area of some 60,000 square miles, and there are immense deposits still farther toward the pole, 1,000 miles beyond settled Manitoba.

—The capacity of the steel works of the world is estimated at about 3,000,000 tons a year. The Bessemer works in England contribute about 800,000 tons; the United States, 750,000 tons more; Germany about 500,000;

France about 275,000; Belgium, 150,000; Austria, 250,000; and Russia and Sweden about 150,000.

—In Gila valley, 120 miles from Tucson, Arizona, are the famous Pintados. A heap of rocks, about 50 feet high, is covered with rude figures, geometric and anatomical. Here are squares, circles, crosses, triangles, snakes, toads and vermin, men without heads and dogs without tails. The sketches are like those of the Aztec calendar stone in Mexico.

—When a man takes prussic acid, Paris green or arsenic, there can be no doubt as to what particular poison caused his death; but when he eats Bologna sausage the premises become entirely different, for a great many queer things may get into sausage without being detected by the palate of the eater. Five Pennsylvania miners are said to have died of Bologna sausage within forty-eight hours, and an analysis of the alleged delicacy will be awaited with great interest.

—The following conversation was heard between two "bums" near the Clift House, yesterday: First B.—"What are your symptoms to-day, Bill?" Second B.—"Normal, except my appetite." First B.—"How is that?" Second B.—"Its pulse is 130, temperature 290, and respiration 173." First B.—"What does the boarding-house man prescribe?" Second B.—"Compressed wind diet with fresh air injections taken around the block."—[Salt Lake Tribune.

—This is as it was told to the Silver State: "As he sat on the steps Sunday evening, with his arm encircling her waist, gazing at the comet, he claimed the right of a kiss for every shooting star. She at first demurred, as became a modest maiden, but finally yielded, under protest. She soon got so accommodating as to call his attention to flying meteors, which were about to escape his notice, and at last got him down to steady work on the light of a lantern that a yard-man was swinging about the depot where trains were switching."

—An Idaho prospector lately followed Custer's famous rail. Up toward the Rosebud, while encamped, he noticed a little bunch of grass. Thinking it a bird's nest, he proceeded to examine it. Tearing the tuft asunder he found a small silver watch, Swiss make, lying face downward. Upon examination the works were bright and clean, and to-day the little relic of the lost command keeps as good time as it did five years ago. Searching further Mr. Smith discovered a six-shooting Smith & Wesson revolver with unfired cartridges in it.

—Frank Osbiston is at Lake Tahoe. If all the rumors are true, Frank is to be the consolidated Superintendent of the entire Comstock Lode, the State Line mines, seven mines in Arizona, the mines of the entire Black Hills region, the black sand processes on the Pacific Coast of Oregon, the Lake Superior Copper mines, the Hudson River tunnel, the Alice mine at Butte, Montana, the Ontario, Utah, and the Little Pittsburg. The truth is that Mr. Osbiston has accepted the position of Night Foreman of a coal mine in Siberia.—[San Francisco Report.

—Many years ago Mr. Stollsteiner, now a wealthy ranchman in the San Luis valley, crossed the plains to seek his fortune. Mr. S. is a native of Stuttgart, in the kingdom of Wirtemberg, the country anciently known as Schwabia, hence he is a "Schwab," in the German tongue. While on the plains he wore a red blanket. One day a band of Indians accosted the party, and envying Mr. S. the red blanket, and desiring to trade, said: "You swop?" Stollsteiner was astonished, and turning to his companions said: "How in hell do these Indians know that I am a Schwab?"—[Silver World.

—The origin of the name of "Canada" is thus given: the Spaniards visited Canada previous to the French, and finding no gold or silver, which they were in search of, often

said among themselves, "Aca nada," there is nothing here. The Indians learned this sentence and its meaning. The French arrived, and the Indians, who did not want their company and supposing that they were also Spaniards on the same mission, were anxious to inform them in the Spanish sentence "aca nada." The French, who knew as little Spanish as the Indians, supposed this incessantly recurring sound was the name of the country, and gave it the name of "Canada," which it has borne ever since.—[Ex.

The Future of Copper.

[From the Iron Age.]

For many years the copper trade in this country has been in a peculiar condition. The mines of Lake Superior, except in years of unusual activity, have produced a surplus of the metal which they have invariably sold abroad at a price lower than it was held for in this market, and in consequence of its excellent quality it always found ready purchasers there. We have no intention of entering upon the question whether this was a sound policy or not. Its effect was to keep the market here at a figure corresponding to the cost of importing foreign copper with the duty added. With raw material of unexampled tenacity, and by the use of excellent machinery, our manufacturers succeeded in producing articles, notably cartridges, which found a market all the world over. But they could only secure these important contracts by making arrangements with the Lake companies for a heavy reduction in the price of the raw material. Of late years, however, foreign governments have commenced to purchase American machinery, Lake copper and Lehigh spelter, and the demand for our manufactured products has been falling off. But within the last two months developments have been made that give quite a different aspect to the copper trade and the industries dependent upon it, and a brief review of the present condition of affairs and an examination of their prospective development deserve the earnest consideration of those interested.

Unfortunately the statistical data concerning the production of copper in the world are not complete, but a study of the output of the principal producing countries alone will prove amply that the copper mines are producing more metal than consumers are willing to take. The markets have been suffering from over-production, in the sense that increased supplies have been coming forward steadily without a corresponding reduction in the price, the result being an uninterrupted increase in the stocks. From the latest statistics available we compile the following table as the production of the various countries in the world:

	Tons.
United States.....	30,000
Chili.....	45,000
Spain.....	25,000
Australia.....	8,000
Cape of Good Hope.....	5,000
Germany.....	8,000
England.....	8,000
Italy and Austria.....	4,000
Other Countries.....	3,000
Japan.....	3,000
Total.....	139,000

The stocks in England and France have now reached the enormous total of 47,000 tons, and although a large portion of it has been held for many years in very strong hands, the indications that the load is getting too heavy for the holders to stagger under are becoming more numerous.

Such is the condition of the copper markets of the world, which the American producers are about to enter, not as the sellers of a surplus of metal at any price for the purpose of being able to maintain prices at home, but in order to reap a profit over cost of production. The exports of Lake copper from this country during the last ten years have been as follows:

Year.	Export. Lbs.	Re-import Lbs.
1874.....	8,066,399	.....
1875.....	6,342,250	.....
1876.....	15,921,460	.....
1877.....	11,418,461	.....
1878.....	12,907,597	.....
1879.....	13,731,215	2,442,416
1880.....	.....	2,159,713
1881 to July 12.....	5,789,250	268,500
Total.....	74,677,235	4,870,629

Roughly, therefore, we have exported 37,000 tons of Lake copper during a period of 7 1-2 years.

It will be understood from the foregoing that we have generally had a surplus, but that this excess of production over consumption was controlled virtually by one party. This is now on the eve of being entirely changed. Some months since

we called attention, in a brief note, to the increasing importance of the copper mines of Arizona, New Mexico and other Rocky Mountain States. What was then cried down as a phantom has now become a stern reality. Although some months ago, in the beginning of the season, the Lake companies contracted in France for the delivery of 3,000 tons of copper, which was supposed to be the entire surplus stock, the price of copper declined steadily, notwithstanding the efforts made to hold it, in the face of a confessedly good demand on the part of manufacturers. There were frequent rumors of outside lots of copper, and it was known that larger quantities of metal were being shipped from San Francisco to New York dealers and manufacturers. A few weeks ago it was learned that a large metal house had contracted with the leading Western mine for the delivery of their entire product of the year, estimated at 2,000 tons, and that 500 tons had already been turned out. The price, which had been steady at 18 1-2 cents in the beginning of the month, declined gradually to 16 cents, at which figure the companies made the extraordinary move of contracting for six months ahead for a large quantity.

Let us examine the cause of this movement. It has been known for a long time that New Mexico and Arizona are exceptionally rich in copper ores, and that many of the deposits of that region contain considerable quantities of the precious metals besides; but owing to the lack of transportation facilities, of capital, fuel, labor and a knowledge of how to treat some ores, the mines were neglected. It was not till the middle of last year that attention was turned to the subject, and that the building of the Southern Pacific railroad directed capital and enterprise to that quarter. One mine—the Copper Queen, of Bisbee—was opened, and it has already made a remarkable record, having shipped 880 tons of copper in the first six months in the year. This was the product of one furnace; a second one is now erected, and the capacity of the works will thus be doubled. The ore is rich, containing 25 per cent. of copper, and, as is usual with surface deposits, is pure and in a condition to be reduced to metal without extended processes of smelting. It is stated that the copper can be laid down in this city for about 8 cents a pound, notwithstanding the fact that coke for smelting costs \$27 a ton, and freights and labor are high. Even if this claim should not be borne out fully by actual facts, there can be no doubt that the owners of that particular mine are able to compete with Lake Superior, even if the latter should come down considerably below the present export price, and that both would find it possible to secure a market abroad at rates which would yield some profit. While the Lake mines have the advantage of possessing an elaborate plant and are well developed, with easy communication with the markets, the Western mines are favored by the fact that their ores are of high grade, are much more easily mined and are readily reduced. Some of the ores contain silver also, but as yet it is doubtful whether in most cases this would prove of any value. In this direction metallurgy has long been deficient in methods, but the fact that more attention is being paid to the subject by eminent experts encourages the belief that we are on the eve of important improvements. Enough has been said, however, to show that the growing copper industry of the West cannot be crushed out easily, and there are very strong indications that no effort will be made to do so. On Lake Superior the output of the smaller mines, which might possibly go to the wall during the decline, does not amount to more than 10 per cent. of the total production, and this would probably be made up by the increased activity of the larger mines, which would seek to earn big dividends by handling greater masses at a lower profit. While we do not, therefore, look to any considerable reduction in the output, but expect rather a notable increase, consumption will expand, stimulated by a lower price.

The question whether that expansion of consumption will keep pace with an increased output, is one which will soon be brought up. From present indications it would seem that we will have a surplus of metal. This ought not to go abroad in its crude shape, but should be placed in the markets of the world in a manufactured state. If it is considered that the only cause for our inability to sell brass and copper goods abroad has been that our raw material was too dear, it will be understood that as soon as that drawback is removed we may become strong competitors of Birmingham and Paris. The machinery of our rolling mills is as a general thing, of modern and improved patterns, and in many respects superior to that employed in any other country. Its capacity is not alone fully up to our own requirements, but considerably exceeds them. It is chiefly in the manufacture of brass and the thousand small articles made from it that they excel, and as probably nearly two-thirds of the copper consumed in this country is absorbed by this trade, those connected with it are principally interested. Our manufacturers have, on the whole, no reason to regret the changes which have been wrought during the last few weeks, nor is there any cause for apprehension in the future. They

should study the outlook carefully and shape their course accordingly. From all that we are able to gather, that course seems to us to lie in the direction of an early development of an export trade.

CORRESPONDENCE.

A Canadian Mine Superintendent at Blue Hill.

BLUE HILL, July 26, 1881.

Editors Maine Mining Journal:

We have had Mr. John L. Thomson, Superintendent of the Orford Nickel and Copper Company, of Capelton, P. Q., Canada, visiting us. Mr. Thomson has great experience in copper extracting in the dry and wet processes and under his supervision the company he represents have been most successful in smelting low grade ores. His visit has been for a pleasure trip; but with his natural acumen has applied his time in visiting the different properties and seen for himself what there is in Blue Hill; his examination has been most minute. He is pleased with the prospects and does not conceal his surprise in finding ore in such abundance. Mr. Thomson is a gentleman of great practical experience and knowledge, therefore his visit to the district will be of great practical benefit, which in a short time will be better known.

Mining in Canada.

MONTREAL, July 25th, 1881.

Editors Maine Mining Journal:

Although Montreal is the banking and monetary centre of Canada, there is very little interest taken by our people here in mining of any sort, unless it is in the coal mines of Nova Scotia, in which a considerable deal of Montreal capital is invested.

Our mineral wealth in iron ore and phosphate of lime is undoubtedly very great, both in Ontario and Quebec, but we are only beginning to develop these mines, as it is only of late years that railways have been built to touch the old formation of the Laurentian mountains, which run parallel with the St. Lawrence, about thirty miles back of this. The intervening country is a limestone region. The exports of phosphates sum up some 20,000 tons per annum and are shipped to Great Britain—a very small quantity going to the United States. The output could be greatly increased. The iron ore—chiefly magnetite of high grade, and with few injurious ingredients—is shipped almost exclusively to Cleveland, Ohio, except where the mines are owned by furnace owners in New York State. The prospect for these mines are very good as the deposits are large, and it only requires enterprise and capital to make them pay handsomely.

Among the other mining industries in Ontario and Quebec may be mentioned the gold quartz mines of Marmora and the alluvial gold mines of the Chaudiere river, which is fed by streams from the Maine mountains. I might also mention the salt and oil wells in the west of Ontario, and several asbestos and a few copper mines in our "Eastern Townships." My connection with mines is almost solely as a broker, having iron, phosphate and asbestos mines for sale in my hands.

Yours very truly,

R. H. GAIRDNER.

LODES, LEADS AND VEINS.

KATAHDIN IRON WORKS.—Since the Works started up last week, everything has run along smoothly and an increased amount of iron is being produced. O. W. Davis, Jr., of the Katahdin Iron Works, has just closed a contract to furnish the Taylor Iron Works of High Bridge, New Jersey, with 500 tons of iron.

SILVER HILL.—Mr. Frank Lippitt, Supt. of the Silver Hill, reports to us under date of July 27th as follows: "The Silver Hill is looking well; have had 6 men at work this week and expect more next. The shaft is down 25 feet and work will begin nights in a few days. Two directors of the company visited the mine this week and were much pleased with the prospects and progress."

ATRATO.—The following circular has been issued by the Treasurer of the Atrato Mining Company:

34 EXCHANGE ST., PORTLAND, ME., July, 1881.

DEAR SIR:—As the Atrato mining party remains in the field beyond the time originally stipulated, some provision has to be made to meet their expenses. The directors of the company have therefore instructed the Treasury to solicit bids from the stockholders for ten thousand shares of its treasury stock, or

any part thereof, said bids to be accepted or refused on the 23d inst.

JNO. M. MITCHELL,
Treasurer Atrato Mining Company.

SUNBURST.—The shaft is now down about 30 feet and the vein is good width. Some specimens from the mine have just been received at the Bangor office of E. M. Hersey, Esq.

PORTERFIELD LEDGE.—The Porterfield Ledge Mining Co. have resumed work in their shaft after a suspension of several months. The steam pump was set in operation last week, and the mine was soon freed from water. Two gangs of men were then set at work sinking the shaft, and work is carried on day and night. The shaft is down 70 feet from the surface, and all accounts agree that the indications are excellent. Mr. Pratt, the superintendent, informs us that he intends to go down 100 feet and then drift. They are where they can strike the main vein at any time. An aqueduct has been constructed from a spring on a neighboring hill, to supply the boilers with fresh and pure water. None of the stock of this company has yet been put upon the market. Mr. Pratt, under whose direction all the work is done, has had a large experience in mining in Colorado and Mexico.—[Rockland Opinion.

CAPE ROSIER.—Several members of the Company have visited the mine during the past week. Work is progressing steadily under the superintendence of Capt. Pollard and the developments are in every way highly encouraging. The exhibition of ore is more bountiful than ever before.

DODGE & JONES.—Since the first discoveries in the Bagaduce region, we have looked upon this district as one of great promise. During the past two years we have made numerous trips to this interesting region and each time have beheld with our own eyes remarkable exhibitions of the wonderful richness and extent of the multiplicity of metalliferous lodes which are encountered in every direction throughout this fertile mineral region. That the Bagaduce to-day presents as remarkable an array of ore-croppings—both silver and copper—as can be found in the leading mineral countries of the Globe, cannot be denied by the conservative investigator who makes a careful examination of those portions of the towns of Brooksville, Penobscot and Castine, bordering on this celebrated arm of the sea, the Bagaduce. During the past week one of our staff has again visited this region and devoted some time to an examination of the Dodge and Jones properties in which Bangor parties are largely interested. The Dodge and Jones are adjoining properties and are located in Brooksville, across the bay from the Hercules and Mermaid mines. They are properties of very large size and recent prospecting has proved them to be of great value. On the Dodge property, a prospect hole has been sunk 12 to 15 feet on a promising vein and a good quantity of ore discovered, the showing in the bottom of the shaft being exceptionally fine. This is known as the Pine Tree vein and runs for a long distance on both the Dodge and Jones properties. The prospecting of the Jones has resulted in the discovery of a mineral ledge of mammoth proportions cropping out boldly. This lode is over 25 feet in width and wherever the cap has been removed shows more or less good mineral. The few blasts thus far made have exposed a width of several feet of very massive ore and the exhibition is one that is very inspiring. The ore is argentiferous galena and zinc blende and contains some sulphuret of copper. Prospecting crews are vigorously at work under the charge of W. A. Pomeroy, a man who has mined in Blue Hill and other districts, and the developments will be watched with interest.

COPPEROPOLIS.—Good progress is being made sinking the new shafts, and the extraction of ore continues as heretofore. In excavating for a foundation for the kitchen for the Copperopolis House, the same vein of high grade ore was encountered that was uncovered a short time ago, while digging for the cellar. Every place where work has been done inside of the ore channel, up to the present time, has disclosed the presence of high grade copper ore in more or less quantities, and it only remains a question of time, when the Copperopolis will be considered one of the best productive mines in the country.—[Bulletin, July 23.

Sullivan.

SULLIVAN.—The weekly report of Supt. Cahill under date of July 20th was received by us too late for publication in our last issue. It is as follows:

"The vein in shaft and west drift continues as large and rich as usual. The Rand drills are doing excellent work. We are bailing the water from Waukeag shaft, and have lowered it 25 feet in the last twenty-four hours. Will commence sinking tomorrow for the 200 level and keep the work going as previously advised. Have sent to New York for thirty experienced miners; they will be here in a short time. Orders from the

Directors are to push work vigorously."

Under date of July 27th, Supt. Cahill reports as follows: "Since my last the developments in No. 1 shaft and west drift, 3d level, has far exceeded my expectations. The ore vein in shaft has widened over a foot with a decrease of base metals and an increase of native and chloride of silver and the average value of the assay is 90 per cent. higher than our best on our 1st and 2nd levels. On our 3d level, as we go west we cut the largest shute of ore yet found in the mine; in my opinion from measurements and the dip of the shute it is the same found in the first and second levels only increasing in width and richness as we gain depth. We will start the 4th level west in a few days when I am in hopes to cut the same shute richer and stronger than on the upper levels, as all our developments prove the ore shute gets larger and richer the deeper it is cut. The future of the mine is bright and the word Bonanza may yet be as familiar in Maine as it has been in Nevada or California. The Waukeag has been timbered and is now perfectly safe; we are sinking as fast as possible for the 3d and 4th levels, so we can drift east on the ore vein to meet the men coming west from No. 1 on the same level. If the ore vein continues to increase in width and richness for the next two hundred feet as it has done in the last 120 feet we will be able to keep at least 30 stamps running continuously on high grade ore."

MILTON.—The sump in the 180 foot level of shaft No. 2, and the new pump station are completed, and the work of driving the crosscut south, to connect with the drift running west from the southerly crosscut of shaft No. 1, will be completed at once. Work from the southerly crosscut of the 160 foot station of shaft No. 1, continues as usual, and everything is looking well.—[Bulletin, July 23.

Blue Hill.

DOUGLASS.—Everything at the Douglass is looking very encouragingly. The mine is making a brilliant showing of excellent ore and the smelters are understood to be doing good work.

MAMMOTH.—Supt. Duff reports July 23, as follows: "We are progressing wonderfully well at the Mammoth. Since commencing work one week ago last Thursday, we have built two landings, blacksmith shop, scowed over about eighty tons of ore which is now undergoing a roasting process, and removed a large body of soil from the top of the ledge. The showing of ore is wonderful. Yesterday we broke into considerable native copper."

STEWART.—Everything is progressing smoothly and the depth of the two inclined shafts is continually increasing. There is nothing special in the developments to chronicle excepting that satisfactory progress is being made.

BLUE HILL.—Supt. Moyle, of the Blue Hill, made a brief trip to this city on Wednesday. The mine continues to make a splendid showing of rich ore. There has been a slight delay to the smelting operations resulting from trouble with the boiler but this will be remedied at once.

TWIN LEAD.—A special meeting of the stockholders of the Twin Lead Copper Mining Company will be held at the office of the President in this city on Thursday, Aug. 4th, at 3 P. M. The question of reorganizing on an assessable basis will be discussed at this meeting. Supt. Duff writes under date of July 23d: "Everything is progressing finely at the Twin-Lead. We are now in 83 feet in good vein rock, stringers are continually coming in and expect to reach the ore body inside of two weeks."

YOUNG HECLA.—The Directors of the Young Hecla Copper Mining Company are perfecting arrangements looking towards the immediate resumption of work at the mine. The Directors are considering the question of a Superintendent and negotiations are now pending. It is probable that the mine will be in operation in a very brief time.

REVERE.—The directors are considering the matter of resuming work at the mine at once and it is probable that the mine will soon be in operation. Work will be concentrated on the drift which will be extended with a view of cutting the vein.

British Provinces.

During the month of June there were mined in the Sherbrooke gold fields 563 tons of quartz which yielded 212 ozs. 16 dwts. of gold.

A new seam of coal, 6 feet 5 inches thick, was struck the other day at the Vale Colliery, Pictou, N. S., some ten feet below the McGregor vein.

A freestone quarry, it is expected, will be opened shortly on Mr. W. K. Reynolds' property at Lepreaux. This stone,

which was highly commended several years ago by Prof. Bailey, is of a rich brown color. The facilities for shipment either by rail or water are very convenient.—[St. John Sun.

The annual meeting of the Belliveau Albertite and Oil Company was held recently and the following Board of Directors elected: E. B. Chandler, D. S. Harper, F. W. Hales, J. R. Noonan, Blair Botsford, A. E. Killam, and M. Lindsay. Another meeting will be held next week to receive the report from Scotland on the probable cost of manufacturing oil from shales.—[St. John Telegraph.

BRUNSWICK ANTIMONY.—The directors of this company have added to their number Mr. Thomas N. Vail, general manager of the American Bell Telephone Company. The board as now constituted is an exceedingly strong one, being composed of the following named gentlemen, all of whom are known as active, live, go-ahead business men: Thomas N. Vail, Thomas Saunders, George B. James, John J. Marsh, Henry Kenny, Jr., and Andrew Cushing.—[Sunday Globe.

SATEMO.—It is reported the Satemo gold mine of Nova Scotia is developing beyond expectations. Kent and Nugget lodes are yielding exceedingly rich quartz, and indications of permanency are growing stronger almost daily. The new mill will be finished by the middle of August, and it is expected the mine will earn regular monthly dividends from that time. The Satemo Gold Quartz Company own 3,000 feet in length and 700 feet in width, traversed the whole length by several gold-bearing veins. The company has ample funds in the treasury to pay for all improvements and development work.

There are more men now employed in the Cape Breton coal mines than at any period during the last seven years. The number of pairs of cutters at Sydney mines is about one hundred and twenty; at Bridgeport between seventy-five and eighty pairs; at Caledonia mines thirty-seven pairs, and at Little Glace Bay thirty pairs. We have not yet learned the number at Cow Bay. The output at Bridgeport is about one hundred tons of large coal daily; at the Reserve mine it is a little over that. The demand for coal is greater than the supply, so that at the Reserve a night shift is employed.—[Trade Journal.

NIGADOO SILVER MINING CO.—James Hickson, of Bathurst, Edward Hickson, of Carleton, Robert Ellis, of Bathurst, John Ellis, of Bathurst, and John Henry Harding, of Saint John, have filed in the office of the Provincial Secretary a memorandum of association for the incorporation of a company to be styled "The Nigadoo Silver Mining Company." The object of the Company is the digging, raising and mining of silver and other ores and minerals, and the crushing and smelting thereof, with such other things as are incident to the attainment of that object. The capital is fixed at \$150,000, to be divided into 30,000 shares of \$5 each. The office or principal place of business is to be at Bathurst, Gloucester County.—[St. John Sun.

General Mining Notes.

The Gilded Age is the name of a new prospect in Tombstone.

A party of Parisians have purchased the Lexington mine in Montana for \$100,000.

Numerous rich strikes of gold have recently been made along the Arkansas Valley in the State of Colorado.

The output of the Chrysolite mine of Leadville for the first half of 1881 was 3,119 tons, valued at \$304,415.

It is reported that some ore running as high as \$125 per ton has recently been encountered in the Sutro tunnel.

The receipts of bullion in Salt Lake, June 23d, were the largest for any one day this season, aggregating the sum of \$53,820.

One nugget weighing fifty-eight pounds of pure gold, has been found in Siberian Russia, in the mines of the brothers Trapeznikoff.

The Portage Lake Mining Gazette reports: "A rumor of an additional 'silver find' at the Copper Falls mine, is circulating in these parts."

A mine of mica, of a thickness of 4 feet and of a remarkably clean and fine quality, is a late discovery at the Barker, says the Benton (M. T.) Record.

The Commercial of Los Angeles, Cal., reports that an assay of tin ore from the mine discovered near Pomona in the Sierra Madra showed a result of \$89.70 per ton in tin.

The Bodie Free Press says that Bodie has not yet seen its

best days, but that at the present rate of emigration it would be reduced to a hamlet within a month.

The Quincy Mining Company of Lake Superior has just declared a dividend of \$3 per share. Exertions are being made to remove the office of the company from New York to Boston.

Arizona and New Mexico are twin leads in mining. The Silver Kings and Copper Queens of those territories are moving rapidly on the chess boards of Eastern mining centres.—[Mining World.

The slag pile of the old furnace dump of the Swansea Company at Cerro Gordo, California, has been overhauled with astonishing results. Thousands of tons of rich, half smelted ore and metal have been sorted out.

The chloride ore taken from Matchless mine is the finest taken from Fryer Hill, Leadville. The stopes in which work is now being carried on show a 19-inch streak of 3,000 to 6,000 ounces ore, with an average of 500 to 1,500 ounces to the ton, the entire length of the drifts.

The yield of the Idaho mine for the month of June was \$36,000. The usual dividend of \$7.50 per share, amounting to \$23,250, has been declared and paid. This makes the 143d regular dividend paid by the company, amounting in the aggregate to \$2,985,300, out of a total product of a little above \$6,500,000.

The report of the Ontario Silver Mining Company shows that for the period from March 1, 1880, to April 1, 1881, the mine produced bullion to the amount of \$2,051,873. The product of the three and one-half months from April 1, 1881, to July 15, 1881, was \$740,673, making the product from March 1, 1880, to July 15, 1881, \$2,792,546.

An extremely important addition has lately been made to the list of valuable minerals found in Nevada. It consists in the discovery of large beds of nitrates near Brown's Station, Humboldt Desert. Mr. Hanks, the State Mineralogist of California, finds the mineral to be a very rich nitrate of soda and regards the discovery as one of the most important ever made on the Pacific Coast.

The first mine discovered in the Wood River region of Idaho was in 1864. The next locations were made in 1873. After the close of the Bannock war, in 1879, a considerable number of prospectors entered the region, and that winter some miners and one family wintered there. In the spring of 1880 the rush began, many locations were made, settlements sprang up, and about two hundred families and a thousand single men spent last winter there. This year the rush has continued and there are now five hundred families and ten thousand men in that region.

In regard to the frequent rumors of the sale of the famous Silver King mine, the Pinal (Arizona) Drill says: "The rumor of the sale of the Silver King has been repeated every time Mr. Mason has gone to San Francisco for the last two years and every time it has been rumor and no more. The recent retirement of Mr. Mason from the Superintendentcy of the mine for a season on account of his private affairs, has renewed those rumors. The sale of stock by either Mr. Mason or Mr. Barney would take the majority of the stock out of their joint hands, but we have no knowledge of such sale."

—The Argus says: Dr. A. C. Hamlin, of Bangor, has purchased of the proprietor, O. Bowker, Esq., the old Bowker farm, situated on Paris Hill. On this farm is the famous Mt. Mica, noted among mineralogists for its deposits of rare mineral, the best of their kind found anywhere. The green and red tourmalines taken from this place have found their way into the collections of Europe, and are much admired. Dr. Hamlin tried to buy Mt. Mica separate from the farm, but the owner would sell the whole or none. This deposit of rare minerals was discovered by Hon. Elijah L. Hamlin, father of the Doctor, many years ago, and his attachment to the spot was one of the causes which led to the recent purchase. The Doctor will continue the hunt for rare minerals.

The Wood River News says: "W. A. Rooks is working a strong force on the Boyle Mountain group of mines, and they are developing beyond all anticipation. Rooks's North Star is a 'thing of beauty,' and shows plenty of rich ore 200 feet below the surface. It is being worked for future use—that is, the dumps, which are already full, are to be left as they now appear until the reduction works are ready to treat ores. In the mines the ore is left standing, and we have the word of a good judge on such matters that in the Boyle Mountain group there are not less than 300 tons which can be hoisted and shipped in a few days notice. The North Star is a contact vein with porphyry foot-wall. Taking Rooks's mines all through, and we

are told there must be upwards of 200 tons of pay ore on the dumps."

The yield of the Lake Superior mines, the reports from which have been received monthly, for the first half of 1881, was as follows:

	Tons.	Lbs.
Calumet & Hecla.....	9,782	1,738
Atlantic.....	898	927
Quincy.....	815	295
Franklin.....	791	760
Allouez.....	504	1,900
Pewabic.....	460	1,445
Huron.....	90	1,695
	13,404	760
All other mines on the lake about.....	2,600	—
	16,004	760

It has been asked if the locations of minors or married women in mining claims are good under the United States Mining Law. As all citizens of the United States are entitled by law to locate mining claims, says the Tuscarora Times-Review, minors who are children of citizens, and married women who are wives of citizens, being citizens themselves, are entitled to locate and hold mining claims. These questions have been asked by parties wishing to locate their own family in order to hold as much of a lode as possible. The United States Mining Law, however, does not limit a locator to one claim on a lode. It only specifies that a locator may locate not more than 1,500 ft in one claim, and when the local district laws do not make the limitation, there is nothing to prevent the same person from making as many locations as he pleases.

The New York Indicator says: "A mining engineer who has made an extensive exploration of the leading Mexican mines says a multitude of mines that were worked to a profit by the Mexicans have long since been deserted, the Mexicans having no means to go below water, which was often encountered near the surface, and like hundreds in Sinaloa and Chihuahua, are waiting for the enterprising foreigners to erect improved machinery, pump out the water and resume operations. Even now the system of mining is in the most crude state, and instead of steam engines and windlass, the ore is brought up from the bottom of the mines, up notches cut for steps, on poles extending from rock to rock, upon the shoulders of men hired for the purpose. The country, he says, abounds in base metals to a great extent, and the day is not far distant, in his opinion, when the mines heretofore neglected, will be the most sought after; and with the aid of modern agencies of civilization, such as the railway, the telegraph and improved mining machinery, that land of precious metals is destined to show a progress unparalleled on the continent."

The Starr-Grove Silver Mining Company held a meeting in New York on the 20th. The following communication from President Clark, now at the mine at Lewis, Nevada, was presented: "In accordance with a resolution adopted at a May meeting of the board, authorizing the president at his discretion to purchase the necessary machinery, and to sink a double compartment shaft upon the ore body, I have visited the mine, and located the shaft at the end of the present working tunnel. Less than 100 feet will bring us into the new ground under the centre of the ore chimney. I find this to be the speediest way to put the mine in shape to supply the new 40-stamp mill, which will be completed in September. This work will require the employment of a large force of miners, and the purchase of new machinery. These expenditures will consume a large part of the product of the present mills during July and August, and the dividends cannot be maintained without involving the company in debt. It therefore remains for the board to consider the propriety of suspending the dividends until the completion of the new mill, which course I strongly recommend." A resolution was adopted by the meeting, approving the action of the President and temporarily suspending dividends as recommended.

Nuggets.

- A photographer has established quarters at Blue Hill.
- It is understood one of the Royal Rock Drills will soon be used at a Brooksville mine.
- The new steam ferryboat has commenced regular trips at Sullivan ferry. She is named the Transit.
- The Maine Sportsmen's Association is arranging for an annual tournament to come off early in September.
- The Milford Land and Lumber Company will soon remove their office from Milford to 86 Exchange street, in this city.
- Some magnificent ore from the Mammoth is on exhibition

at the office of E. M. Hersey, in Kenduskeag Block, in this city.

—We acknowledge the receipt from Ira C. Stockbridge, the music dealer of Portland, of the July number of Stockbridge's Musical Journal.

—The American Bankers' Association will hold its annual convention at Niagara Falls, commencing Aug. 10th, and continuing three days.

—The contractors have commenced the work of building the Bangor & Katahdin Iron Works Railroad. Ground has been broken during the present week.

—John Varnum, of Blue Hill, received quite an injury to one of his hands recently by the explosion of a gun, at Hall's granite quarry, near Sonnes' Sound, Mt. Desert.

—The Deer Isle correspondent of the Ellsworth American says that work is soon to commence at the mine on the land of H. R. Haskell, also on the land of Sylvanus Pressy.

—Fifteen stonecutters have recently arrived in Rockland, having just come over from Scotland. There is now a great demand for good workmen at granite quarries throughout the State.

—Two large storehouses are to be built at once at the new Blue Hill steamboat wharf at Peters' Point, Blue Hill. The wharf is a model structure and is a great convenience to the public.

—Two more monster locomotives, numbered "67" and "68," each weighing 70 tons, and capable of drawing a train of ten cars fifty miles an hour, have just been added to the rolling stock of the Maine Central road.

—Mr. T. Brigham Bishop writes us that work is being pushed forward rapidly at the New England Smelting Works. Within two weeks they will be able to take care of ten tons of copper ore daily, in addition to the galena.

—The Collins Band of Portland has been secured by the enterprising managers of the steamer City of Richmond and will play on board that popular steamer on her trips between Portland and Mt. Desert from now till Sept. 20th.

—The increase in earnings of the Western Union Telegraph Company for the month of July to date is estimated at over \$200,000. The average daily increase in number of messages is more than 15,000 in the New York office alone.

—The European & North American Railway is doing a business of large proportions and as an evidence of its increasing prosperity the stock of the E. & N. A. R. has appreciated in the past eighteen months from \$25 per share to \$60.

—Attention is called to the change in the advertisement of F. C. Philbrick & Co., well known mining stationers, of Boston. Everything in the line of stock certificates and mining account books will be gotten up by this firm on brief notice. The address of the firm is 19 Milk street.

—Messrs. Glynn & Reynolds, booksellers and stationers, have opened an establishment at No. 142 Exchange street in this city. They have secured a large stock of superior goods and will be found very attentive to the wants of the public. Messrs. Glynn & Reynolds are both young and enterprising men and we doubt not they will meet with bountiful success.

—Quite an excitement was created at the Katahdin Iron Works, recently, by a heavy rumbling that sounded and felt like a slight shock of earthquake. It occurred under the ore bed, and lasted about four or five minutes. It is supposed that the sulphuric acid in the cavities took fire and exploded. Several of the men were quite frightened.—[Bangor Commercial.

—We have just received a second supply of Colby's map of the mining districts of Eastern Maine. Every one interested in the mines of Maine should have one of these maps. Nearly 200 of the mineral properties of Hancock County are accurately represented in colors indicating either gold, silver, or copper mines or undeveloped mineral property. Price only 25 cents, pocket edition 35 cents.

—That Old Orchard Beach is to have a new \$100,000 hotel is now an assured fact. The stock will be taken in a short time; \$10,000 of it was taken in one day. The hotel will be situated on the Gogginus Rocks, opposite the camp ground, half a mile from the present hotels. In front of the hotel, the company will build a steamboat pier. Both the hotel and pier will be done early for next season.

—The question of bringing Belfast and the Blue Hill mining regions into closer business relationship is being agitated. If

sufficient inducement can be obtained, a narrow gauge railroad from Blue Hill to Brooksville, a distance of ten miles, will be built.

The International Cotton Exposition will open in Atlanta, Georgia, October 5th and close Dec. 31st. Considerable attention will be devoted to the exhibition of minerals from all parts of the country and Mr. J. B. Killebrew is to have charge of this department.

We are indebted to the Ruby Hill Mining News for an interesting pamphlet entitled "Facts for Capitalists" and devoted to the mining interests of the famous Eureka District of Nevada. The publication contains an accurate map of the district, and illustrations of both the towns of Eureka and Ruby Hill and also the Richmond, Eureka Consolidated and Albion mines.

Among the good elements entering into the construction of the Bangor and Katahdin Iron Works Railroad are the following: The stock subscriptions on being called in last Friday aggregated some thousands of dollars more than the capital required; a prominent broker has offered a premium for the first mortgage bonds, \$100,000, 6 per cent. 30 years; that, with one exception, and that exception a Boston man for many years connected with Bangor enterprise and business, the stockholders are citizens of Bangor; that with a half dozen exceptions the owners of land over which the railroad is to pass have shown a praiseworthy interest in promoting the enterprise, and the work is commenced on a cash basis.

A serious accident occurred last week at the Cape Rosier mine. A correspondent of the Commercial gives the following particulars: "Several holes had been loaded and fired, and one charge not exploding as soon as was expected, it was supposed that the fuse did not ignite. Frank Blake, one of the men working in the mine, started down the shaft with the intention of relighting the wick from which the fuse takes fire. Just as he reached the bottom of the shaft the charge went off throwing the rocks in all directions. Blake was thrown against the side of the shaft and bruised in a terrible manner. It seems almost a miracle that he was not killed outright. A fragment struck him on the left breast, cutting a large gash from which several pieces of rock have been taken, but strange as it may seem he was not rendered unconscious by the shock, and ascended the ladder to the surface without help. It will be some time before he will be able to go to work again. Frank accomplished a feat a short time ago which few men would care to undertake. The shaft, the same in which he was injured, and which is 100 feet deep, was allowed to partly fill with water, and the pump being out of order the water could only be removed to within about twelve feet of the bottom, when he dove and brought up several hammers and drills, being obliged to dive once for each article brought up."

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, JULY 27, 1881.

Table with columns for days of the week (Thurs., Fri., Sat., Mon., Tues., Wed.) and rows for various mining stocks (Atlantic L. S., Blue Hill Copper, Brunswick, Calumet & Hecla, Catalpa, Central, Copper Falls, Contentment, Douglass, Duncan Silver, Empire, Franklin, Harshaw, Huron, National, Osceola, Pawabic, Quincy, Ridgely, Silver Islet, Star, Sullivan).

New Incorporations.

Name of Company. Where Organized. Date. Capital. Mammoth Copper Mining Co., Blue Hill, July 25, \$500,000. The Arizona Queen Mining Co. and Boston and Eureka Mining Co. each by a vote of stockholders at meetings duly called and held in Portland on the 13th inst. reduced the capital stock to \$157,500, by reducing the par value of shares from \$4.00 to \$1.25.

July Statement of The Katahdin Ice Co.

I, John P. Tucker, Treasurer of said corporation, on oath declare, that the amount of assessments actually paid in is \$5,000. No debts are due from the Company except some small demands not presented for payment, amounting to \$100 or \$150. The existing nominal capital is \$10,000. Capital invested in real estate, or in buildings on leased land, and fixtures, and tools or machinery, about \$3,500. Last valuation of real estate, \$2,200. Aggregate value of the taxable property of the corporation, as fixed by the assessors, \$3,000.

STATE OF MAINE.

PENOBSCOT, ss. July 25, 1881. Then personally appeared John P. Tucker, Treasurer of the Katahdin Ice Co. and subscribed and made oath to the truth of the above statement. Before me, FREDERICK M. LAUGHTON, Justice of the Peace.

July Statement of The Treasurer of The Con. Hampden Silver Mining Co.

I, Charles E. Hill, Treasurer of said Corporation, on oath declare: No assessments have been paid, the stock not being assessable. The existing, meaning the nominal capital of the Co., is \$1,000,000. The debts due from the company are \$1,552.75 so far as known. The amount of money actually invested or paid out on the property, including fixtures and machinery, is \$12,867.75 as nearly as can be ascertained. The real estate does not include title to the surface, and mineral rights are not taxable. Last valuation was \$550 for personal property, nothing for real estate.

STATE OF MAINE.

PENOBSCOT ss. July 25th 1881. Then personally appeared Chas. E. Hill, Treasurer of the Con. Hampden S. M. Co., and subscribed and made oath to the truth of the above statement. Before me FREDERICK M. LAUGHTON, Justice of the Peace.

July Statement of The Bangor & Bar Harbor Steamboat Corporation.

I, Samuel H. Barbour, Treasurer, hereby on oath declare, that the amount of assessments actually paid in, or the amount actually paid on the stock, the whole having been paid in at the outset, is \$30,000. The capital is \$30,000. No debts are due except such ordinary accounts as have not been presented, and can be paid at any time from cash on hand. Nothing invested in real estate; consequently no valuation of real estate; and as the stock is valued at nearly its par, no additional valuation of any corporate property has been made.

STATE OF MAINE.

PENOBSCOT ss. July 25th 1881. Then personally appeared Samuel H. Barbour and subscribed and made oath to the following statement. Before me FREDERICK M. LAUGHTON, Justice of the Peace.

Copperopolis Mining Company.

OFFICE, 4 SEARS' BUILDING, BOSTON, MASS.

Capital, \$500,000. Par Value of Shares, \$2.50.

Unassessable.

GEO. E. HARRINGTON, President. S. L. SYMONDS, Treasurer. W. OSCAR ARNOLD, Secretary.

Directors—GEO. E. HARRINGTON, GEO. WEST, FRANCIS TUCKERMAN of Salem, Mass.; R. MULLAN, L. W. HODGKINS of Ellsworth, Me. JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$5.00.

Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, JR., Treasurer. W. OSCAR ARNOLD, Secretary.

Directors—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, JR., of New York.

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One 40 horse power Steam Engine.

“ 70 “ “ “ “ “ “ “

Can be put in good order in a short time.

One tubular Boiler, two years old, sufficient to drive the 70 horse power engine. Address,

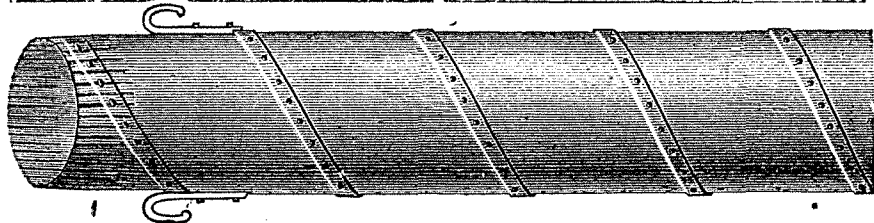
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Belfast, Me.

Reed's Sectional Covering,
For Boilers, Steam and Water Pipes.

It is cheap, durable, and the best non-conductor of heat of any covering made. It can be taken off and replaced on the pipes any number of times without injury to the covering. Any person can put it on the pipes. SEND FOR A CIRCULAR.

J. A. LOCKE & SON, 40 Courtlandt Street, New York.



Root's Patent Heavy Sheet Iron Hydraulic Pipe,
WITH RIVETED SPIRAL SEAM.

of all Diameters; Strength or Thickness according to pressure required, for MILLS, MINES, and WATER WORKS, made of galvanized or black iron and dipped in coal-tar and asphalt. Furnished with slip joint, sleeve and nipple, or flange connections. In lengths of from 5 to 25 feet, each tested to required margin of safety.

BURSTING PRESSURE 300 TO 1000 LBS. PER SQUARE INCH, according to diameter and weight of pipe.

AVERAGE FIRST COST FROM 10 TO 60 PER CENT LESS than other tubing; the greatest difference being in the larger diameters.

AVERAGE WEIGHT 50 TO 75 PER CENT less than wrought or cast iron tubing.

AVERAGE SAVING IN COST OF TRANSPORTATION 50 TO 75 PER CENT.

The advantage of the spiral over the straight or longitudinal seam is that the Spiral Seam is the strongest while the straight seam is the weakest part of the pipe by about one half.

Where it is found inconvenient or undesirable to ship tubing already formed up we can supply punched and formed sheets nested and packed for shipment (which can be riveted into pipe at destination) in packages of any desired weight.

Estimates and Price list furnished on application. A full stock always on hand.

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33 HAWKINS ST., BOSTON, MASS.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

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GEO. W. COLLINS, Supt.

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Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
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Office at Oldtown, Me.

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Bluehill, Me. Incorporated, Feb. 1880.
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President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

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Capital, \$500,000; Shares \$5 each.
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A. A. HAYWARD, Supt.

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Littleton, N. H. Incorporated under laws of Maine, Dec. 1879.
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Gardner Mountain, N. H.
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Office—Rockland, Me.

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Blue Hill, Me.
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Leave Bangor, 7.35 2.00 7.00
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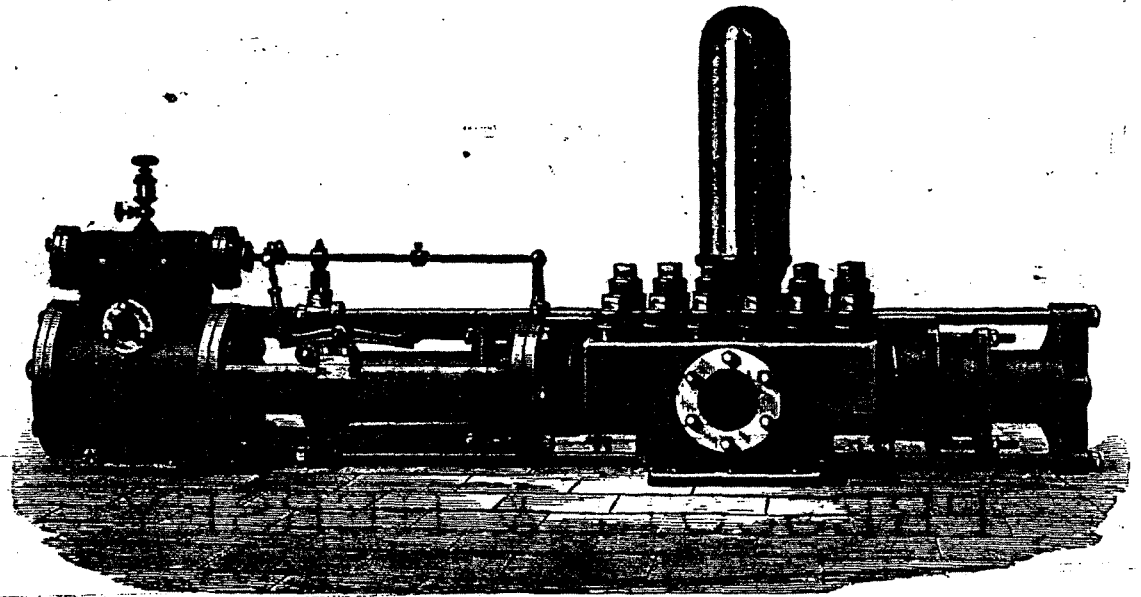
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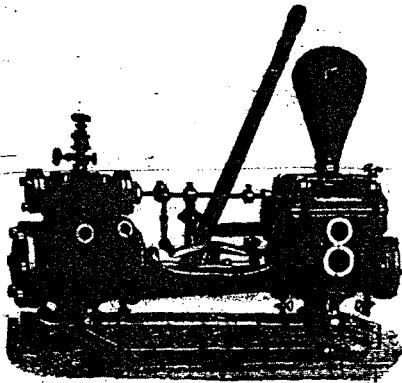
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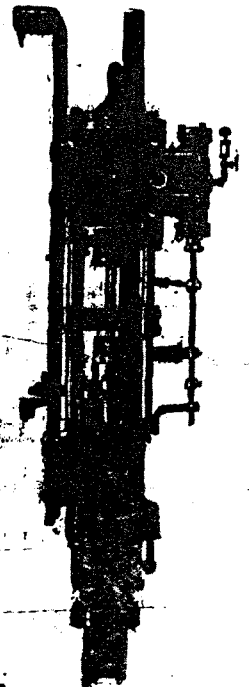


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 Capital \$500,000. 100,000 Shares. Par value, \$5.00.
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Stewart Copper Mining Com'y.

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 Capital, \$500,000. 100,000 Shares. Par Value, \$5.00
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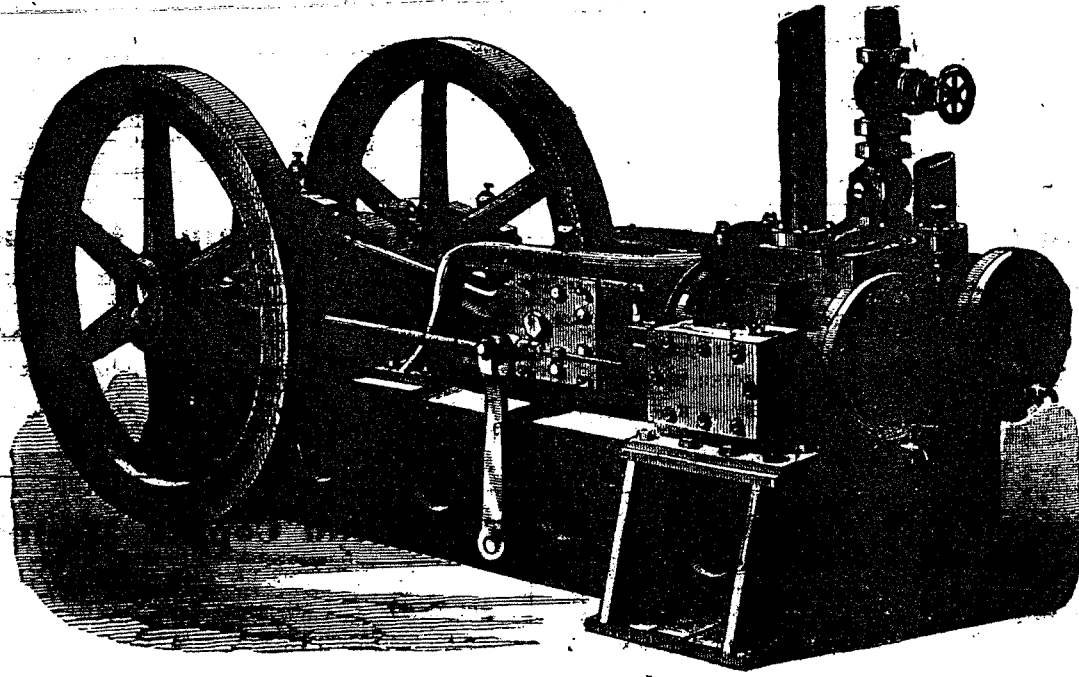
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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT
28 West Market Square, Bangor, Maine.

E. M. BLANDING, } EDITORS.
W. F. BLANDING, }
E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, over the writer's signature, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, AUGUST 5, 1881.

The condition of the stock market affords ample proof that the deplorable depression in the mining market is due more to the stupidity and cupidity of mining stock gamblers than to any deterioration in the value of mining securities. Some mining men are the worst enemies the mining business has.—[Ruby Hill Mining News.]

The Semi-Centennial Exhibition of the American Institute which is to open in New York City, September 14, will probably be one of the most important and valuable exhibitions of the kind ever held in this country. Every effort is being made to make this 50th anniversary an occasion of marked interest in the history of this representative organization.

The Boston Economist says: "All the indications now upon the street show low rates for money and a limited demand for stocks. After Aug. 20, a steadily rising market for gold and silver shares can be anticipated. Iron and coal shares are looking better. Coppers will tend upwards. The fall demand will be fairly active. The outlook for an early fall boom is quite noticeable."

The heated term having arrived in earnest, a very large influx of summer tourists now throng the famous seaside resorts along our coast. These sojourners should not fail to visit Blue Hill, Sullivan and other mining districts in Eastern Maine as these respective towns lie near the coast and possess scenery of great charm and beauty and at the same time abound with evidences of great mining activity which must be witnessed to be thoroughly appreciated.

As an evidence of the rapid growth of the summer resorts along the Maine coast, it is but necessary to glance at the papers published at these seaside cities. It is less than five years since any of our watering-places could boast of a newspaper and yet there are at present no less than six of these publications as follows: Tourist and Herald, at Bar Harbor; Sea Breeze, at Northport; Squid, at Squirrel Island, and Sea Shell and Sea Side Reporter (both dailies), at Old Orchard.

The New England Mining Development and Investment Company has been organized with a capital of \$50,000, and elsewhere in this issue may be found a list of the individuals composing the directory of the incorporation. The aim of this company is to assist in various ways deserving mining corporations that may be in financial need, and advance as much as possible the general mining interests of the New England States. The object is a very praiseworthy one and we believe much benefit will accrue to legitimate mining from it. The matter is in the hands of some of our most prominent and energetic mine promoters and great confidence is felt in its success.

A fair business has been transacted in Maine mining shares on the exchanges of Boston during the past week. The prices at the Boston Stock Exchange, Wednesday, were Blue Hill \$3 5-8 bid and \$4. asked, Douglass \$2 7-8 bid and \$3. asked and Sullivan \$3. bid and \$3 1-4 asked. On the Boston Mining and Stock Exchange, the quotations on Wednesday were Copperopolis \$1.96, Twin Lead 45 c. to 55 c. buyer 30 and 60, Milton \$1.35 to \$1.30, Empire 42 c. to 44 c. and Silver Hill 44 c. During the week, Milton has been the most active stock very large quantities changing hands at prices ranging from \$1.19 to \$1.50. Twin Lead has been somewhat active at declining figures.

The tendency to close corporation and small capitalization in mining operations is indicative of a gratifying change in public sentiment, in regard to these matters. Under less favorable circumstances the era of worthless stock, founded upon nothing more substantial than the baseless "facric of a dream," might have wrought disastrous results to the industry of mining, and locked up its advantages for another decade. Fortunately, however, its inherent worth and vitality were recognized by a class of practical men who saw the truth beneath all this fungus growth, which was heaped upon it, by unscrupulous and designing men. The people soon grasped the true idea of mining, and production is rapidly becoming the true standard of worth and value.—[Mining Review.]

BULLS, BEARS AND MORALS.

[London Bullionist.]

Bulling and bearing stocks have been frequently spoken and written of by financial critics and purists as if they were very much alike in respect of morality. In the one case a man backs his opinion that certain stocks will rise, and in the other that they will fall; and he stands to win or lose according as he proves a true or false prophet. Or to put it otherwise, he bets on the rise or the fall and pockets the differences in prices if stocks go the right way for him.

Thus badly presented, the morality of the one appears about equal to that of the other. But in this instance a bald statement is misleading. The most stern moralist will scarcely refuse to admit that a man may legitimately make money out of his superior knowledge; and if the intrinsic merits and substantial prospects of a stock are such as to justify the opinion that its value will advance, he is entitled to take advantage of the opportunity. He trades on his credit and turns to business account the knowledge of the expert which may be the fruits of a long and costly experience. If the advance is justified by the intrinsic merits of the property, and by his operations he promotes it, he is adding to the wealth of the world in a perfectly legitimate manner. If, on the other hand, the advance is without substantial grounds, he must pay for his mistakes, and will reap as he has sown.

We venture to submit that the case of the "bear" is somewhat different, especially if he runs down the market worth of property on flimsy, inadequate, and manifestly false and fictitious grounds. The "bear" puts money in his own pocket by taking it out of other peoples', and prospers by disorganizing credit, which is the very soul of commerce. A blunder in overestimating the future value of a property is more venial than one of the opposite order, if only because the world benefits by the one which it loses by the other. To bring about a depreciation in a property by false representations is to be guilty of the double crime of falsehood and fraud. The illegitimate "bear" breaks the eighth and ninth commandments right off, besides having put his foot through the tenth before he began his operations. He may sometimes serve a useful purpose, for in the economy of nature there is a place for skunks and sloths; but he lives on other peoples' misfortunes, and only prospers as they decline. These things being so, the immorality of "bearing" under ordinary circumstances is, as seems to us, matter of demonstration.

Personals.

GEN. W. S. HANCOCK is expected to arrive at Bar Harbor soon.

MR. E. M. HERSEY, of this city, has been in Boston during the past few days.

NOAH BROOKS, Esq., of the New York Times, is visiting his old home in Castine.

GOV. POND, of Wisconsin, has formed a syndicate to purchase Wood River mines.

MR. F. W. LEAVITT, Supt. of the North Castine mine, was in the city over Sunday.

GOV. ST. JOHN, of Kansas, is visiting Socorro, N. M.; where he is interested in mining.

FRANK B. DOLE, of Boston, and CHARLES A. GIBSON, of this city, have visited Blue Hill during the past week.

W. D. LEWIS, Esq., of Boston, was at Fort Point Sunday and early the present week accompanied by his wife visited Blue Hill.

FREDERIC R. NOURSE, Esq., Treasurer of the Sullivan Mining Company, is passing the summer with his family at the Waukeag House, Sullivan.

PROF. ALEXANDER TRIPPEL, a New York mining expert who recently inspected the Bagaduce district in Maine, is now making a professional tour through Nevada.

COMPTROLLER KNOX has accepted the invitation of the American Bankers' Association to deliver an address during its convention to be held at Niagara Falls, August 10, 11, and 12.

CAPT. DUNN, Supt. of the Stewart mine, passed through this city last Monday evening on his way to Portland where he meets his family who are en route from their former home in Michigan to take up their abode in Blue Hill.

SECT. DUFF, of the Twin Lead and Mammoth, was in the city yesterday afternoon and favored the MINING JOURNAL office with his presence. He is in excellent spirits over the bright prospects at Blue Hill and especially over the recent addition to the Duff family.

MR. R. A. VARDEN, of Varden & Varney, Mining Engineers and Assayers, Santa Fe, New Mexico, has been commissioned United States Deputy Mineral Surveyor for the Territory of New Mexico. MR. F. W. VARNEY is suffering from a severe attack of mountain fever but is now in a fair way to recover.

N. D. C. HODGES, Esq., of Salem, Mass., who has been in Fredericton for the past few days, spent the whole day Monday inspecting the Brunswick Antimony Mines with a view, it is said, to purchasing the greater part of the mining stock. He went to Fredericton with Mr. W. F. Best, the Government Assayer, and spent Saturday with Prof. Bailey.—[St. John Sun.

PROF. ALEX. GRAHAM BELL, the great telephone inventor, has made another contribution to science which may take its stand side by side with, if not above, his first. He has invented an electric apparatus by which he is reported to have located the pistol bullet in President Garfield's body. This will simplify the surgeons' work, and enable them to extract the missile as soon as the patient's condition will admit of additional probing or cutting. No more auspicious occasion could be selected for giving the invention to the world of science, and the distinguished electrician is to be congratulated on the success of his apparatus.

LIEUT. GOV. TABOR, of Colorado, owns from four to eight millions, all acquired within four years. But his sudden wealth was preceded by eighteen years of poverty, deprivation, and struggle for himself and wife. They went west from Maine during the Pike's Peak excitement, spent all their money, found no gold, and thereafter roughed it in border settlements, working for small wages at first, and afterward keeping small stores in mining camps. In 1877 he bought in Denver \$2,500 worth of goods for a Leadville store, and tried to induce the firm to take half of the Little Pittsburg claim in payment, but they preferred to take his note. That mine yielded him \$150,000 in three months, and eventually \$1,300,000. The original cost was "grub stakes" for the two prospectors, the bargain being that he should have half of whatever they discovered on the trip.—[Ex.

—Lubricating oil is said to exist in large quantities in the northern portion of Wyoming.

Dips, Spurs and Angles.

"A miner on his death-bed lay
Receiving consolation
From a good priest, whom, ere that day,
He knew by reputation.

"Have you," the priest said, "e'er believed
In one who reigns supremet?"
"In life I always was deceived,
For I believed—in ve'n."

- A railroad king's fortune is on wheels.
- Barbers and editors both do a great deal of head work.
- The seller of an oil well is engaged in a hole sale business.
- Even a broker will get broke. But the plumber is always plumb.
- Pickpockets succeed because they have an awfully taking way about them.
- Five-cent pieces are in circulation on the Comstock. "How have the mighty fallen."
- The spots on the son do not begin to create the disturbance as do the freckles on the daughter.
- A Bodie girl has just returned from one of the watering places. She passed a week at the milk ranche.
- The lumberman sends his logs down stream and introduces them to the circular saw as his buzz'em friend.
- "Smith," said Brown, "there's a fortune in that mine!" "I know," said Smith; "I've put my fortune in it!"—[Phila. Sun.
- A clear and beautiful agate bowlder, twelve feet long, eight feet wide and five feet thick has been found in Plumas County, Cal.
- Out in Leadville, where they have Jack rabbits in abundance, the facetious miners call the animals "narrow-gauge muffs."
- In reply to the rich old chap, who asked if it was advisable to begin a lawsuit against a neighbor, the lawyer said he thought it feasible.
- Positively no more rhymes based upon the eccentric pronunciation of final syllables will escape the waste basket. That lead is worked out.—[Boston Globc.
- A strange astronomical phenomena is seen in the fact that when the irate father takes down his trunk strap there are liable to be spots on the son.—[Prof. R. A. Proctor.
- Credit is said to be a wise provision by which lawyers and sheriffs make a living. It might have been added with propriety, and which also makes debtors very insolent as well as forgetful.
- Miss Kate Field has just finished signing ten thousand certificates of stock in the Co-operative Dress Association, and claims that considering the season of the year, she has been working hard.
- A suspicious mother in Las Vegas placed some nitroglycerine in her daughter's corset on the evening her fellow was coming. The girl loaned them to the cook, and they had to scrape the old man off the ceiling to get enough of him to hold an inquest.
- An Iowa man has named his two daughters Time and Tide. This is probably because he thought that Time and Tide wait for no man; but the old rancher is wrong there. They only wait and swing on the gate with the proper fellow, but in time both will be tied.
- There is no known substitute for dividends. The most promising reports that it is a "grand good mine," or that the most eminent graduate of Freiburg produces marvelous-

ly rich assays, does not create the same satisfaction as just one little dividend.—[S. F. Report.

—Another mine has suspended operations until after "hay-ing." The St. George (Knox County) correspondent of the Rockland Free Press says: "Work is suspended on the mine at Clark's Head while the men are getting their hay," Sing hay—the merry, merry miners.—[Cambridge Tribune.

—Buckshot Bill, of Nevada, speaks twenty-five Indian tongues. Once seeing eleven comrades buried alive by the Comanches, he signed with his blood a vow to have the blood of eleven Indians who killed his brother and stole his diamond pin, and he has on exhibition 117 scalps taken by his own hands.

—The French Academy of Science publishes the engineer's statement of the preliminary investigations into the geological structure of the Isthmus of Panama at the part to be traversed by the canal. The result is satisfactory, and M. De Lesseps calculates that the work can be done considerably under the original estimated expenses.

—A Butte County, Cal., miner says to the editor of the San Francisco Chronicle: I am a miner. I send you one dollar in dust. I want every miner in the State to send one dollar in dust. We are two hundred thousand. Have it made into a brick, and present it to the first lady in the land, Mrs. Garfield. Come down, miners, with your dust.

—A few miles north of Virginia City there is an immense deposit of diatomaceous earth. Blocks of it a yard square may be easily quarried. It is known to be 20 or 30 feet deep and how much deeper it may be no one has ever taken the pains to ascertain. At one time several hundred tons were dug and shipped to the East for sale as a polishing powder.

—A man of tact always manages to get out of difficulty. The clerk of a parish, whose business was to read the "first lesson," came across a chapter in David in which the names Shadrach, Meshach, and Abednego occur twelve times, and finding it extremely difficult to pronounce these names, he went through the chapter referring to them as "the afore-said gentlemen."

—The silver plate for insertion in the granite-panel which will represent Nevada in the Washington monument is one-sixteenth of an inch thick, about six inches wide and twenty-seven inches long. It was rolled at the Carson Mint, and its silver value is that of \$64. "Nevada" will be engraved on it in large letters. The polished granite tablet is six inches deep, two feet wide and three feet long.

—Base Ball is a noble game. It develops the muscles; closes up a man's eye; makes his back feel as if fourteen mules had kicked him for a week; mashes his fingers into fourteen different shapes, and costs him a pile of money. Then he lays off for a week to doctor up, and by the time he pays his bets, he begins to feel there are other amusements quite as pleasant, and a great deal more profitable.

—A man under-examination as to his sanity, in Sacramento last week, was asked what pay he received for certain work which he said he was engaged in, and replied that the amount was \$10 per day. "What do you get that salary for?" said the District Attorney. "Well," replied the supposed lunatic, "I get \$5 for minding my own business, and \$5 for letting other people's alone." He was discharged.—[S. F. Report.

—That whether a man is "rich" or "poor" depends only on how he looks at the matter, is strikingly shown by an incident which has just occurred in France. A millionaire lost his entire fortune, except about one hundred thousand francs, and died of grief within twenty-four hours. His brother, who was his sole heir, had long struggled in poverty, and now, on the sudden receipt of what he regarded as a large fortune, has just died of joy.

—The only important crop in the United States that seems likely to be much deficient is the wheat crop, and that yields but a small part of the yearly profits of agriculture. The cotton crop now promises to exceed even the unprecedented yield of last year. In most localities, and on the whole, the prospect is good for a larger yield of corn than the country has ever been able to use with advantage. Other products of agriculture are promised in abundance.

—Blast furnace slag or cinder is turned to a useful purpose at the Sclessing Iron Works, near Liege, Belgium. After the molten slag has escaped from the furnace it is conveyed immediately to a stream of cold water. The effect of this is a division of the slag into a substance very like coarse sand. This substance is then raised by an elevator and deposited in wagons, which convey it away to places where it will be applied as an excellent "ballasting" for railroads.

—The intelligence of some tourists passes all belief. The other day a passenger up Mount Washington pointed to the telegraph wires and asked the conductor: "Will you please tell me what that wire fence is for?" Another visitor, a lady, who had been gazing with interest at a "Birdseye View of the White Mountains" in the hotel office, said to clerk: "Have you any more of those pictures? I know Mr. Birdeye, and would like very much to get one of his views.—[Among the Clouds.

—The Missoula (Montana) Missoulian says: "A few days since a loud noise was heard in the mountains on the west side of the Bitter Root, the report resembling the firing of cannon and reverberations. The noise was caused by the falling of a high peak on one of the mountains about opposite Coryallis, and was so loud that it was distinctly heard at Eight-Mile, below Stevensville. Probably thousands of tons of rock, the foundations of which had been crumbling for ages, came down in the grand crash."

—A Western girl in attendance at the Concord School of Philosophy wrote home to her young man in a Chicago pork factory in this affectionate language: "If there is one drop of blood in your heart that pulsates for me; if there is one conceit, nooscopic or psychological, that in the incogitancy of your dreams, or in the perquisition of your waking hours, absorbs a thought of me, I beg that you would eliminate any abstruse or equivocal particles of distrust from the profound and all-transpicious abnormality of your love."

—It would appear as if Jay Gould and his associates were not going to have the telegraphic business of the United States all to themselves. A rival group of capitalists have enlisted in the same field. Prominent among them are James B. Keene, and John Mackay of California, George D. Roberts, and a well-known citizen of Massachusetts. They have organized a new telegraph company, whose lines are to be constructed on a cash basis, and will extend to all points now connected by the Western Union.

—The black crickets of this section have snakes in their stomach eight to fifteen inches long, according to the experiments lately made by snakeologist Barton a few evenings since before an awe-stricken company in one of our saloons. Some unprincipled cuss has been saying about town that Professor Barton "had 'em," and the balance of the company "had 'em," but the cricket actually "had 'em," at least so says the Professor, and Lawrence testifies to the fact. One gentleman remarked that it was probable that the cricket "had 'em," as the bird had been making the saloon his abiding place for some months.—[Esmeralda Herald.

—The roughest heat story this season came to light on 'change at St. Louis recently. Mr. Mapleson, one of the grain men, is responsible for its veracity. Mr. Mapleson has a cat of the maltese variety which has been suffering for the last two days extremely with the heat. Yesterday

while crossing the yard it was sunstruck and fell over, lying in the sun some time before it was discovered. Mrs. M. brought the animal, which is quite a pet, into the house, and after a little time it revived. As soon as it could walk it crept to the refrigerator and began to mew. Not knowing what it wanted, Mrs. M. opened the door of the ice-chest to get it some milk, when the animal leaped in and nested against the blocks of ice. It stayed there for some moments and then jumped out again. Two or three times in the afternoon it repeated the performance, and this morning, when the servant went down to get some ice, she found pussy on the steps leaning its head up against one of the blocks.

—The Nevada Transcript irreverently tries to find sacred authority and precedent for the hydraulic system of mining: "It has there been generally conceded that the industry of hydraulic mining was born in Nevada County about thirty years ago, and its supposed recent origin has been urged as a cause for its suppression by some of the anti-slickens clique who were hard up for arguments. We should not be surprised if it could yet be proven that hydraulic mining flourished during the days of Job; that Job was a hydraulicer himself, and that the boils he is mentioned as being afflicted with were nothing more than injunctions that the ranchers living in the swamps below him had served on him. The foundation for this theory is to be found in chapter xxviii, of the Book of Job, the ninth verse reading: 'He putteth forth his foot upon the rock; he overturneth the mountains by the roots.' Now that is exactly what the North Bloomfield, the Blue Tent and scores of other big companies all through the mountains of California have been doing of late years. The tenth verse of the same chapter further enlightens us: 'He cutteth out rivers among the rocks, and his eyes seetheth every precious thing.' The succeeding verse gets down to business still more emphatically, showing now the slickens troubles of those days were finally settled: 'He bindeth the floods from overflowing.' Now that last thing was just what dams in the Yuba and Bear rivers would have done if the people of Marysville had given them a show."

—A remarkable feat of railroad building will be the line from Portland to Dallas, in the State of Oregon. Much of the roadway must be blasted in the flinty face of lofty precipices, or drilled through no less unyielding rock, and every foot is a struggle with nature. About ten miles below Dallas is a bluff of basaltic rock, rising abruptly 300 ft. from the Columbia river, along whose side the road is to pass. Men suspended by ropes 150 feet over this wall drill and blast the solid rock, the work being attended by the greatest danger. The largest blast on the line thus far has been at a point 10 miles above the Cascades, a mass of rock 165 feet high, 170 wide and 70 thick at the base, containing more than 40,000 cubic yards, being removed by the explosion of 10,000 pounds of Judson powder, equal in force to 20,000 pounds of black. Three tunnels from 300 to 550 feet long are now being drilled, steam or compressed air being used in the work. At two points a new and phenomenal difficulty is encountered, the mountain settling, or sliding into the river at the rate of about 12 inches a year, and the trouble will not cease with the finishing of the road. In other places the mountain side is covered with small broken stones, which slip with every movement below, and walls of rock have to be built high up on the cliff to check the descent. Trestle work and bridges will also have to be erected along the line. The maximum grade is 26 feet to the mile, and there is hardly a mile of straight track at a stretch. Notwithstanding these difficulties and the fact that the road was located only a year ago, the Oregon Railway and Navigation Company expect to have the line of 86 miles finished this year.

—The European & North American Railway has recently added a locomotive and passenger cars to its rolling stock.

CORRESPONDENCE.

New Mexico.

SANTA FE, NEW MEXICO, July 21, 1881.

Editors Maine Mining Journal:

Some time ago, I mentioned as a rising New Mexican mining camp, the Taos district, seventy-five miles north of Santa Fe, as one destined to make some stir among local mining men. My prediction is being fully realized as far as the interest in the developments goes, for most people ask for or are the happy possessors of the latest intelligence from thence. In fact so general is this the topic of conversation that I had everything ready, burro at the door, and all to go and see for myself and make some locations if desirable, had not a totally unforeseen circumstance occurred necessitating a postponement of my trip. Nevertheless a gentleman who has been spending the greater part of the summer up there has been staying here for a few days bringing with him samples of ore from the camps, and from him I gather the following items.

The camps of the district are the Picuris, Rio Hondo, Arroyo Hondo, McGregor, Carbonate and Copper Hill, the minerals being gold, argentiferous galena, and copper, also specular iron, corundum and certain rumors of tin. The copper ores are said to assay as high as fifty per cent. and even more, galenas \$110 per ton and gold yielding good returns from river washings and quartz leads. From the McGregor camp, I was shown some really very handsome specimens of quartz, well impregnated with galena, taken from the surface croppings with moss still adhering to them. There are something like 300 locations made here, many of them by old Colorado and Californian prospectors who are well satisfied with the showing and refuse to try their chances anywhere else in preference. As is naturally to be expected very few developments have been made in so new a camp, the greatest depth yet attained being 60 feet, besides a tunnel driven some distance into the side of a hill. In each case really good ore has been found in fair quantities. The main feature thus far seems to be the scattered nature of the veins but which seem to consolidate in depth so that before long larger veins with more abundant mineralization are expected.

To show this is no bogus affair the D. & R. G. Railroad have offered to ship the ore to Pueblo free of charge to help the miners to develop, this arrangement however being limited to a certain time. One of the parties most largely interested there has sent orders to his superintendent to send off ten tons at once, so this sounds like business. Developments must be made no matter what the surface showing, or to use an expressive Cornish term the "grass showing," appears to be, for capitalists will not pay the fancy figures they did at one time on the strength of a few high assays taken from the Lord only knows where. My partner has just been engaged on special business illustrative of this. Some Eastern capitalists having entered into negotiations concerning the purchase of a property involving an outlay of several hundred thousand dollars each, (not "forever unassessable" stock) requested us to undertake the sampling of the mine and the assaying of the samples. Thus under their own supervision a complete section of the vein was made at every ten feet of the shaft, each sample assayed separately and the average struck, giving a good idea of the real value of the ground passed through. Very different was the manner of proceeding some years back when a big assay was held to be indicative of a big mine,—"Experientia docet," which the boy translated "experience does it."

Every day some one or other comes in to know what tin looks like or to have a sample tried for that metal, showing that we are on the "qui vive" for anything that may turn up, the great trouble being none of the prospectors would know it even if they should stumble across it, and to give a description of it is just as difficult as it is to recognize it. Every book on mineralogy confines itself to a description of the larger crystals such as are found at the Winslow tin mines which occurrence however is the exception rather than the rule. In the Taos district there is a legend of an old abandoned tin mine but with what foundation I know not. However its locality is claimed to be known so I propose overhauling it thoroughly when up there.

There is another district at present dark and without name where I am told there is a 40 foot vein of quartz carrying copper which as soon as some locations are completed I am to visit and report on. Surface specimens from there promise very well. Duryee's furnace is at work at the Cerillos on ore from the Bonanza mine and reports are that everything works satisfactorily.

R. A. VARDEN,

Mining Engineer, Assayer & U. S. D. Surveyor.

—The Rockland Courier says there is prospect of the Owl's Head silver mine starting up again soon.

LODES, LEADS AND VEINS.

NEW ENGLAND MINING DEVELOPMENT AND INVESTMENT COMPANY.—There has recently been incorporated, under the laws of the State of Maine, the New England Mining Development and Investment Company, with a capital of \$50,000, divided into 50,000 shares of \$1 each. The organization was perfected in this city and the following are the officers elected: President, Hon. Frederick M. Laughton, of Bangor; Secretary and Treasurer, Frank H. Williams, of Bangor; Executive Committee, Hon. Frederick M. Laughton, John S. Jenness and Frank H. Williams, all of Bangor; Advisory Committee, J. H. Moyle and Daniel Dunn of Blue Hill; Directors, Hon. Frederick M. Laughton, John S. Jenness, Frank H. Williams, J. H. Moyle and Daniel Dunn. The company will have offices at 12 West Market Square in this city and at 23 Water Street in Boston. The organization will have a large paid-in capital and this will be used in dealing in the stocks of deserving mining companies. The principal object of the corporation is to ensure protection to leading mining shares and to assist deserving companies that may be in financial straits. The promoters of this promising enterprise are confident that it will prove very remunerative to stockholders. Subscription books will soon be opened in this city and Boston.

ATRATO.—The Atrato mining party have reached Portland in good health, with the exception of Mr. Simonton who remained behind. They bring with them abundant evidence of the great mineral richness of the streams in that region. To the best part of this rich territory the company will secure from that government exclusive rights. A full report of the doings of the party and their prospects will be published in a few days.

BLANCHARD SLATE.—Dr. A. C. Hamlin, Charles Hamlin, Esq., and other parties visited the quarry of the Blanchard Slate Company on Wednesday. A crew of twenty men are now being employed and a very superior quality of slate is being taken out which cannot well be surpassed. The vein so far as uncovered shows a width of 126 feet with 93 feet of clear slate. One of the streaks is 25 ft. wide, another 16 ft. and another 15 feet with no flint interspersed making a most remarkable deposit. As the company have from one to two miles of this vein they have slate enough to supply the whole country for many years.

JONES HILL.—Everything at the Jones Hill is moving along nicely and the Silver Hill is being pushed vigorously and making fine showing. Supt. Cahill, of the Sullivan, is preparing a report on the Silver Hill property.

NORTH CASTINE.—Supt. Leavitt reports that on Saturday the shaft had reached a depth of 50 feet. The dip of the vein has been ascertained and the shaft will now be sunk on an incline. Some mineral has recently been encountered and the managers are confident that they will succeed in opening up a good body of ore.

JONES.—Prospecting has been continued on the Jones property with very excellent results. The cap of the vein is being removed and it is proposed to sink a shaft in the ore body.

GOULDSBORO.—A correspondent writes to the Ellsworth American: "The Superintendent of the Gouldsboro mine has moved into his new house. There is talk of sinking the shaft another 100 feet."

COPPEROPOLIS.—Active operations at this mine are progressing with the usual energy and perseverance, and everything about the works is assuming a shape, assuring stability and permanence. Sinking of the new shafts is progressing as rapidly as circumstances will permit, and is producing ore of a very satisfactory character. The completion of the "Copperopolis House" is being pushed as vigorously as possible, and as soon as finished, a large force of men will be employed extracting ore from the various openings already made, which present an excellent showing of high grade ore.—[Bulletin, July 30.]

MOUNT MICA.—The famous Mt. Mica, at Paris, Maine, will soon be explored for its valuable minerals, chiefly for its mica and tin. The promise of mica is exceedingly good, and the specimens of tin now on exhibition are the finest ever seen in this country. Mineralogists are looking forward to these explorations with the greatest interest.

SURRY.—The working of the Surry mines of New Hampshire is to be prosecuted with renewed activity, a furnace and machinery for reducing the ore will be put in, and a tramway will be built down the mountain side. Additional stock to the amount of \$10,000 was sold recently. A ton of ore, taken 75 feet from the surface, recently assayed, yielded over \$30 a ton. One hundred thousand tons of ore are now within easy access, with an unlimited quantity back of that. The expense of tak-

ing out and reducing the ore will be about \$5 a ton.—[Boston Traveller.

ORANGE COPPER MINE OF VERMONT.—The Orange Copper Mines are situate in the town of Stafford, County of Orange, Vermont, and are located on a high ridge or spur of the mountain. The veins run nearly north and south, showing surface croppings from three to ten feet in width, and are a continuation of the veins upon which the Vershire or Ely mines are being so successfully worked. The Ely at present employs some 1200 men, running 24 furnaces, and producing 4,500,000 pounds yearly against 10,000 pounds in 1854. The mining rights of the Orange property extend over an area of some 160 acres, upon which four openings on as many different veins, from which excellent ore has been taken. There is a market for all the crude material, either at the Ely or Dr. Peters's furnaces. The Vermont Copper Mines have for years given rich returns, handsomely remunerating all the capital employed.—[Conservative.

Sullivan.

SULLIVAN.—Work is progressing vigorously in every department of the mine. During the week delegations of experienced miners have arrived on the steamer from the West. The erection of a large boarding house has been commenced by the company near the road and it is proposed to build three neat and tasty cottages on the Sullivan grounds. Supt. Cahill under date of Aug. 3d reports:

"We are building a large boarding house to accommodate 60 men; that will be about the force required in and about the mine. Two of the directors were here last week; they made a thorough examination of the underground work and from what they saw they came to the conclusion to open the mine as rapidly as possible, feeling satisfied that the near future with vigorous work will place the Sullivan on the list with the paying silver mines of the country. We have a large force of men grading for the house, in the quarries, and building the foundation, besides the carpenters. The lumber is arriving every tide. Good carpenters and miners will be sure of employment. Shafts and everything about the mine are perfectly safe, none more so except those that have their safety cages at work. We have a safety cage of the most approved patent which will be put in the vertical shaft as soon as the 200 level is reached; it is now 135 feet deep and being sunk rapidly. When in place our vertical will be the safest and best equipped shaft in the State. We are putting in pump station on fourth level No. 1; soon as finished will start drifts east and west on ore vein. The third level is now in 60 feet west. The shaft of ore mentioned in my last continue to improve."

MILTON.—The work of driving the new crosscut south from the 180 foot level of shaft No. 2, is progressing in very favorable blasting rock, and good progress is anticipated until the outer vein is reached, when it is proposed to connect shafts No. 1 and 2 by a drift along the lode. In the southerly crosscut and drift, from the 160 foot station of shaft No. 1, work is progressing energetically, and arrangements are now being perfected with a view of commencing operations on a much larger scale than heretofore. All the machinery in every department of the works is in perfect running order, and the property is presenting a healthy and prosperous appearance.—[Bulletin, July 30.

PINE TREE.—The Pine Tree mine is now the scene of busy operations. A new building is now being erected further back on the shore than the other buildings of the company. Mr. A. A. Messer is the Superintendent in charge.

Blue Hill.

BLUE HILL.—Developments are progressing very satisfactorily and the incline shaft and winze are both being continued downward in very fine ore.

TWIN LEAD.—Supt. Duff reports everything moving along smoothly and good progress being made in the crosscut. The smelting furnace is now being relined. The meeting of the Twin Lead stockholders announced for yesterday was postponed one week on account of the absence from the city of the President.

STEWART.—Supt. Dunn reports work progressing as expeditiously as could be desired. Both shafts are increasing in depth and an improvement in the ore body is noticeable.

MAMMOTH.—Supt. Duff reports the Mammoth as making a prodigious showing of very high grade sulphurets of copper and also native copper. One hundred and eighty tons of ore have been taken out. Eighty tons of the Mammoth ore have been roasted and are ready for smelting.

GRANGER.—The Directors of the Granger Copper Mining Company, for the purpose of meeting certain objections, on Friday last voted "That one dollar shall be paid to the trustees of

the bonds as a sinking fund, for every two dollars to be paid in dividends to the stockholders." They also voted "That the Company shall have the right, after three years, to pay off the bonds, by giving due notice," etc. The first provision is intended as a guarantee that the value shall not, during the eight years the mortgage has to run, be so largely divided among the stockholders as to injure the security of the bonds. In so large a property as the Granger, however, with a vein stated by experts to underlie at various depths the whole property for half a mile long, it is considered doubtful if all the pay ore could be taken out in twice that time. It is claimed by the directors that the title being good, and the bonds carrying ten per cent interest per annum, the various provisions should, without injuring the stock, make the security for the mortgage satisfactory to any one who has investigated and knows the value of the mine.—[Boston Advertiser.

British Provinces.

There are more men now employed in the Cape Breton mines than at any period during the last seven years.

A rich vein of anthracite coal has been discovered within five miles of the city of Victoria in British Columbia.

The work at the Acadia iron mines, Londonderry, progresses favorably. Several new coke ovens have been added, indicating extension of business.—[Maple Leaf.

Mr. Geo. Carter, of Nashwaaksis, York County, and a number of American gentlemen are prospecting with a view to forming a company for the mining of antimony in Albert County.—[New Era.

On Friday, July 22, four cars loaded with coal of the Spring Hill Mining Co's train were thrown from the track between Spring Hill and the Junction, tearing up the rails and sleepers for a considerable distance.

The pumps have been safely removed out of the pit at the Albert mines and nearly all the remaining coals are on the wharf. As soon as these are shipped and matters adjusted, this hitherto useful industry will be closed.—[Chiguccto Post.

The capabilities of Cape Breton as an oil producing country are pronounced to be second to neither the Pennsylvania nor Ontario oil regions in their best days. About forty wells are going down or are under contract.—[Exchange.

The Standard says: 4,468 tons of coal were shipped from Pictou last week. The Halifax Coal Company are now raising coal in large quantities from their new mines, and will begin shipping in a few days. They are now running two new slopes and one vertical shaft into the new seams, which are of excellent size, and of the very best quality of coal. At the Ford pit the work of emptying by means of water boxes continues. The water is lowered from six to nine inches daily.

The Sateimo Gold Quartz Mining Company has filed a certificate of the full payment of the \$50,000 added to its previous capital stock of \$100,000, not in cash, but in the purchase of certain mining interests in the Tangier gold district, county of Halifax, Nova Scotia. The \$50,000 was issued in stock at \$1 per share to William S. Clark and John R. Bothwell, owners of the property purchased. The latest report from the mine is: "Struck very rich chimney on the Nugget lode, drifting west."

MONTAGUE.—A Montague correspondent of the Halifax New Era reports: The main shaft of the Rose Lode is now 210 feet deep, and has increased from 2 up to 5 inches in thickness.—The Messrs. Foster have commenced on a new lode, south of the American crusher. It shows gold and is about three inches thick. Work is being carried on along, or near the surface, searching for a rich part to sink upon.—Mr. Desmond is hard at work upon his lead with good prospects. The Symonds lode fair.

CARIBOU.—The Halifax New Era publishes the following from a correspondent: "I have just visited the gold mines at Caribou, and they appear to be in a flourishing condition. Messrs. R. McDonald & Co. have recently discovered and opened a new lead about one hundred yards north of that owned and worked by Messrs. Lowell & Co., of Halifax. The new lode is about 18 inches wide and appears to be very rich. The prospectors have raised some 30 tons of quartz, and it will yield about 4 ozs. of gold to the ton. The McDonalds have discovered other leads in the vicinity which show well, and they purpose sinking shafts in them."

General Mining Notes.

The yield of the Tombstone district of Arizona is given at \$526,000 per month.

The Circular gives 1,071 tons as the general daily ore output of the Leadville mines.

The Morning Star mine, of Butte, Montana, is yielding net \$1000 per man employed.

It is said that Boss Shepherd employs 1,500 men in his Mexican mines and could use 5,000.

The New York Smelting and Sampling Company are to erect a smelter at Bullion, Wood River.

M. B. Hayes will soon have 150 men at work on the Santa Rita copper mines of New Mexico.

A group of mines at Gibbonsville, Idaho, has been purchased by London parties for \$250,000 cash.

Colorado will probably produce this year 45,000 tons of lead, this being one-half the total product of the country.

Mr. A. R. Myer, of Leadville, is about to erect the largest smelting and refining works in the world at Kansas City.

The Iron Age, in a review of the outlook for iron, sees much to encourage the producer of ore and the manufacturers of iron.

There are about 25 tons of silver bullion in the mint at Philadelphia. The gold and silver on hand is valued at \$31,000,000.

It is understood that a large pool has been formed in State Lignite stock and that there will be an advance in prices shortly.

Freshets on Arizona rivers led to a brief suspension of the stamp mills at Tombstone but they have now started up once more.

There are now more men at work in the mines of the Gold Hill section of the Comstock than at any time within the last three years.

The Altā shaft has reached a depth of 2150 feet. An 18-foot sump will be dug when the 2150 station will be opened and a drift started for the vein.

Stormont's Superintendent telegraphs July 29: "The shipment to-day of forty-one hundred bullion, makes an aggregate of \$22,000 since July 6th."

Chrysolite has once more come before the public as a dividend paying mine. The amount disbursed by this dividend is \$100,000, or 50 cents per share.

The eastern shareholders of the Eureka Consolidated are making efforts to bring about at the coming meeting of the company a change of management.

The quantity of coal produced in the United States during the last year was 69,200,934 tons an increase of something more than a hundred per cent. in ten years.

It is reported that the great Manhattan silver mine at Austin, Nevada, is yielding nearly \$200,000 monthly. For a long time this mine has been yielding one-half that amount.

A consignment of bar gold has been received at the Philadelphia mint weighing more than eleven tons, or, to be more exact, 266,960.78 ounces Troy, valued at \$5,104,466.31.

The Paris correspondent of the London Daily News says: "A terrible explosion has occurred in a mine at Lourches, in the department of Nord. Ten persons were killed and twenty previously wounded."

A despatch, from Deadwood, D. T., states that there is great excitement over the discovery of rich carbonates nine miles west of that city. Ore brought in to-day is alive with native silver, and assayed \$2600 to the ton.

There are six to eight thousand tons of ore on the dump at the Silver King mine, Arizona, and piles of the "precious stuff" lie in the mine only waiting to be hoisted. It will take six months to reduce the ore now on the dump.

The Mining Associated Press reports a Salt Lake special, which says that the mines of Southern Utah are opening up beyond all expectation, notably Horn Silver, Carbonate and coal mines, and also mines of North Horn Silver Company.

The work of placing the National, Ontonagon county, Mich., mine on its industrial feet again, is rapidly progressing. The end of the present year will see the mine in such a shape as to admit of indicating the date of the commencement of copper production.

Five American silver mines produced over a million dollars each in the first half of 1881. They were the Ontario, of Utah, the Standard, of California, the Western, or Contention, of Arizona, the Eureka Consolidated, of Nevada, and the Iron Silver, of Colorado.

The Old Dominion Copper mines, Arizona, consist of four 500x600 feet of claims, known as Old Dominion, New York and Chicago. Assays made recently show an average of about 28 per cent. These assays were made from 50 samples taken from the various ore heaps by two different parties.

Advices from Bodie station, San Simon valley, Arizona, are to the effect that a very singular epidemic prevails among the workmen of the Bodie mill and mining company. The symptoms of the disease are peculiar pains in the throat, dizziness and nausea. It was first thought to be poisonous air in the shaft, which is 200 feet deep, but later investigations seem

to indicate that it is caused by the water used. It is believed that several will die.

Several important discoveries of petroleum have been made in Hanover. A bore of 200 feet near the village of Penice yields from a single source in twenty-four hours 20,000 gallons, of which one-third can be used for illuminating purposes. This has given rise to a speculative fever, which is running very high, and ground in the neighborhood is selling at \$750 to \$1,000 per acre.

The following is an extract from a dispatch received by Messrs. Goff, Hastings & Co., of Boston, from Edward H. Goff, President of the Boston Gold and Silver Mining Co.: "Professor W. F. Stewart has returned from the Dolly Varden mine, and says it is one of the richest mines he ever saw. Until now I have had no idea of the enormous value of this property. Prof. Stewart will astonish you."

As an evidence of the advance of quartz mining interests, our foundries are busy on mining machinery, and are shipping more or less all the time. A noticeable feature is the coming to the front of localities where lead and copper predominate, such as at Wood River, Idaho, and some parts of Arizona. The experience of Eureka with lead ores, and of such camps as Bisbee with copper ought to be sufficient to show that there is great profit in this kind of mining. People who have sulphur mines ought to do well with them, as the product is scarce and in demand.—[S. F. Mining and Scientific Press.

The Smelting works of the Shawmut Co., at Montezuma, Nevada, are running successfully, producing four tons of bullion every twenty-four hours. A correspondent of the Candalaria True Fissure, speaking of these works says: "This is regarded as a very important enterprise for this section of the country and its success will call the attention of capitalists to the vast deposits of copper and galena ores which abound in this part of Nevada, as soon as made accessible by the rapid approach of the railroad. Montezuma has flattering prospects indeed, and before many months expire it will be a very lively mining camp."

The Virginia Chronicle thus discourses upon the Comstock situation: "Small investors should bear the fact in mind that the bonanza firm still retain their hold on the Comstock and have shown no signs of letting go their grip. During the last three years they have invested large sums to keep up the work of prospecting, and have not yet lost faith in the ultimate rally of the old lode, which, when it does wake up, has a peculiar faculty of springing into active life from one end to the other. One thing is certain, and that is that there is no geological or other reason why bonanzas should not be discovered on the lower levels, and those best informed as to the lower workings of the mines believe the day is not far distant when the coast will ring with the glad tidings of a rich treasure find on the Comstock. If a bonanza is found at any time at the great depth the mines are now being worked, there will be absolutely no limit to the possibility of prospecting."

Nuggets.

—On Saturday last a large party came over to Sullivan from Bar Harbor and examined the mines.

—The Kennebec Granite Company have purchased a fine red granite quarry in New Brunswick near to the Bay of Fundy.

—The corn-packers of Maine have orders from the Pacific slope for 400,000 cases of green corn, for which the contract is to pay not less than \$1,000,000.

—Montgomery Havey was severely injured a few days since by a blast in one of the granite quarries at West Sullivan loses an eye and suffers other injuries.

—A party of prominent gentlemen from Maine and Massachusetts will in a few weeks make a trip to the celebrated Mount Mica in Paris, Oxford County, Maine.

—It is reported that the men at work fixing up an old building on Campobello for a hotel found a bag of gold in tearing away a wall, that had been hidden there many years.

—A New Mexico correspondent writes us: "The news of the attempted assassination of the President caused deep feelings of regret and indignation and numerous regrets were expressed that it did not happen here as then Guiteau would have been made 'crows meal' of before this."

—Messrs. Mitchell and Bright, the contractors of the pro-

posed Bangor and Katahdin Iron Works Railroad, have sublet the six miles of the road from Milo through Brownville village. The persons who have taken these contracts guarantee to complete their work by the middle of November.

—There is a curiosity at Cobb, Wight & Co's in the shape of a barrel of the Cobb Lime Co's Portland cement, which fell overboard a short time ago. The action of the water has converted the cement into a mass as hard as adamant, which resists every effort to break it. It is a fine testimonial of the excellence of Rockland's new product.—[Courier.

—We have received from Mr. Sewall S. Quimby, of Wesley, Washington County, Maine, specimens of rock taken from a vein of white quartz which is about two feet wide and has been traced for fifteen or twenty rods. The samples are heavily mineralized, largely with sulphurets of iron, but carry some argentiferous galena. It would appear to be a prospect that is worthy of further development.

—We have received the published report of Prof. W. Frank Stewart on the Copperopolis mine of Hancock County. It is printed in pamphlet form in elegant style and is a very handsome publication. The elaborate report of Prof. Stewart is exceedingly readable and is worthy of careful perusal. The work also contains two good maps, one showing the routes to the Mining Districts of Maine and the other the location of the principal mines of the Sullivan, Copperopolis and adjacent districts. The publication is from the press of F. C. Philbrick & Co. and is very creditable to them.

—At a granite quarry in Westerly, Rhode Island, there was recently detached a monolith 150 feet long, 10 feet wide, and 8 feet thick, weighing over 1000 tons. These dimensions greatly exceed those of the Obelisk of Semiramis, the largest of the Egyptian monoliths. The Westerly stone was loosened by one oblong blast-hole in such a simple and perfect manner that the theories and conjectures advanced by many as to the methods of the Egyptians appear absurd. It contains over 12,000 cubic feet of granite and when cut into smaller blocks will bring about \$30,000. It is believed it could be transported to New York, finished as an obelisk and erected for about \$150,000.

—Mr. C. J. Hall has just finished at the Belfast Foundry a pair of improved slag pot carriages of his own invention for use at the Blue Hill mines. Heretofore the "slag pots," or hemispherical cast iron kettles into which the metal is drawn from the cupola furnace have each been mounted on a pair of wheels, thus necessitating a carriage for each pot. Mr. Hall's device consists of a pair of wheels with crank axle and pole, the crank turning upwards. To load a pot on the carriage, the pole is elevated, bringing the crank to a horizontal position over the pot. The ears of the pot are then attached to the axle by hooks, and the pole lowered, thus raising the load and swinging it under the axle. After being wheeled to the required position the pot can be unloaded in the same manner. By this contrivance one or two carriages will serve for a large number of pots.—[Belfast Age.

—The lime manufacturers of Rockland all signed an agreement last week to run down their kilns and burn no more lime for two weeks. The last rock was put on the lime kilns on Monday last. This action is taken partly on account of scarcity of casks. The extremely low price for casks which prevailed for several years caused a great many people to go out of the business of manufacturing them, and these have never resumed. Of late the supply from outside has almost entirely ceased, as the farmers have been so busy at haying and other farm work that they have not been able to get out much cask stuff. So the market has been pretty bare of casks for some time. The demand for lime has been quite good, but there is plenty in stock to last until the kilns are lit again. The fall in the price of lime probably had a tendency to influence the manufacturers to shut down.—[Opinion.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Suaburst Copper & Silver Mining Co.,	Ellsworth,	July 30,	\$500,000.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, AUG. 3, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Aiguaz	2 3/4	2 3/4	2 3/4	2 3/4	2 3/4	2 3/4	3	2 3/4	3	2 3/4	3	2 3/4
Atlantic L. S.	11	11	11	11	11	11	11	11	11	11	11	11
Atlas												
Aztec												
Blue Hill Copper	5 1/2	4 3/4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4	5 1/2	4
Brunswick	12	14	12	14	12	14	12	14	12	14	12	14
Calumet & Hecla	210	220	210	220	210	220	210	220	210	220	210	220
Catalpa	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Central												
Copper Falls	6	7	4 1/2				6	7	5	7	4	6
Contentment												
Douglass	2 3/4	3	2 3/4	3	2 3/4	3	2 3/4	3	2 3/4	3	2 3/4	3
Dann												
Duncan Silver	1 1/2	1 3/4	1 1/2	1	1	1	1 1/2	1	1 1/2	1	1 1/2	1
Empire												
Franklin	10 1/2	11	10 1/2	40c	45c		11	11 1/2	11 1/2	12	11 1/2	12
Harsbaw	5 1/2	6	5 1/2	6	5 1/2	6	5 1/2	6	5 1/2	6	5 1/2	6
Huron							3 1/2	4	2 1/2	4	2 1/2	3 1/2
Hanover												
Humboldt												
International							3	3	3	3	3	3
National												
Oscoda		31	29	30			29	30	30	31	29	30
Pewabic	11 1/2	11 1/2	11				11 1/2	12	11	12	11 1/2	12 1/2
Phoenix												
Pontiac												
Quincy	30 1/2	37	36	37			33	34	33	33 1/2	33 1/2	33 1/2
Ridge		4	3				3 1/2	3 1/2	3	3	3	4
Silver Islet	59	40 1/2	40	40 1/2			59	40	59	40	57	38
Star												
Sullivan	3						3		3	3 1/2	3	3 1/2

Norombega Silver Mining Company.

I, W. P. Hubbard, Treasurer of the Norombega Silver Mining Company, on oath declare: No assessments have been paid in the stock not being assessable. The existing, meaning the nominal capital of the company, is \$500,000. The debts due from the company so far known are \$750. The amount of money actually invested or paid out on the property, including fixtures and machinery, is \$2,211.05 as nearly as can be ascertained. The real estate does not include title to the surface and mineral rights are not taxable. There has been no valuation for personal property or real estate.

W. P. HUBBARD,

PERSONAL, ss.

Personally appeared W. P. Hubbard, Treasurer of the Norombega Silver Mining Co., and made oath to the truth of above statement to the best of his knowledge and belief.

WILBER J. WEBB, Justice of the Peace.

Bangor, Me., Aug. 3rd, 1881.

Copperopolis Mining Company.

OFFICE, 4 SEARS' BUILDING, BOSTON, MASS.

Capital, \$500,000.

Par Value of Shares, \$2.50.

Unassessable.

GEO. E. HARRINGTON, President.

S. L. BYMONDS, Treasurer.

W. OSCAR ARNOLD, Secretary.

Directors—GEO. E. HARRINGTON, GEO. WEST, FRANCIS TUCKERMAN of Salem, Mass.; P. MULLAN, L. W. HODGKINS of Ellsworth, Me.

JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000.

Par Value of Shares \$5.00.

Unassessable.

GEN. JOHN M. CORSE, President.

ROBERT L. CUTTING, JR., Treasurer.

W. OSCAR ARNOLD, Secretary.

Directors—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, JR., of New York.

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President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$250,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Ernest Lane, of Oldtown; Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE COPPER MINING CO.
Bluehill, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, A. E. Herrick, Bluehill. Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.
P. MULLAN, Supt.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullin, Richard Laffan, Jeremiah Wooster.

FRANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, E. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—E. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffin, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY-COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Roddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

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MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, J. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, J. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

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Capital, \$500,000. Shares, \$5 each, unassessable; 40,000 shares in the Treasury.
President, E. C. Nichols, of Bangor; Treasurer, C. T. Plympton, of Boston; Secretary, S. P. Johnson, of Bangor. Directors—E. C. Nichols, S. P. Johnson, Dr. W. K. Knowles and John R. Mason, Bangor; C. T. Plympton, Henry A. Piper and Geo. W. May, Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp. July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullian, James F. Davis, Guy Mullian, A. A. Bartlett.
P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, \$68,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullian, H. B. Mason, L. W. Hodgkins, P. Mullian.
P. MULLAN, Supt.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
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MINES AT.....BLUE HILL, ME.
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100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.
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	A.M.	A.M.	P.M.	P.M.
Leave Bucksport,	6.00	10.00		6.00
Arrive Bangor,		7.03	11.15	
Leave Bangor,		7.35		9.00
Arrive Bucksport,		8.40		8.15
				8.00

The 6.00 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
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J. E. HARRIMAN, Manager,
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BANGOR, MAINE.

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The law partnership heretofore existing under the firm name of PLAISTED & SMITH is this day dissolved by mutual consent. The business will be continued by Bertram L. Smith, in the same office recently occupied by the firm.

H. M. PLAISTED,
BERTRAM L. SMITH.

Bangor, June 22, 1881.

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4.—6.—85.

BANGOR, MAINE, AUGUST 12, 1881.

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W. FRANK STEWART,
Practical Geologist and Mining Engineer.

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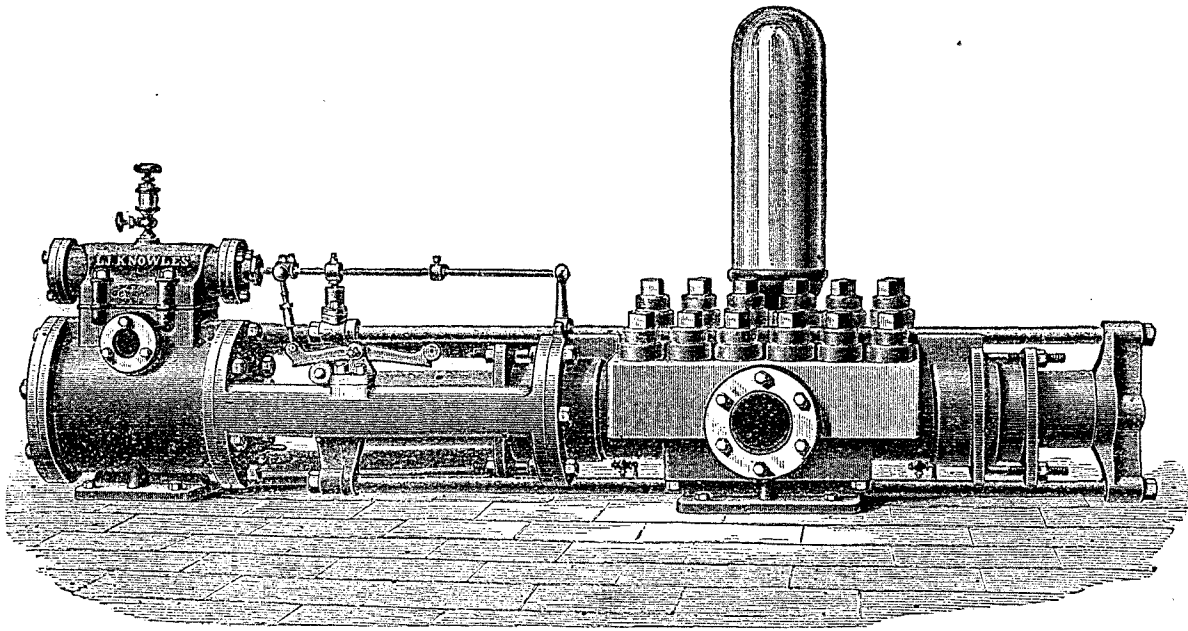
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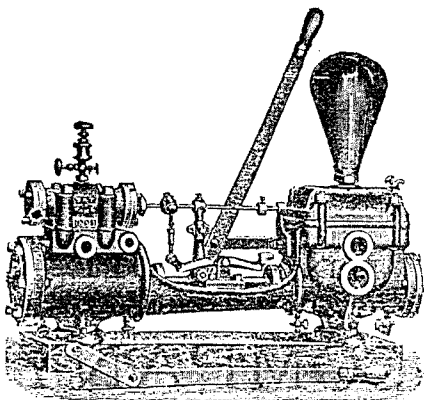
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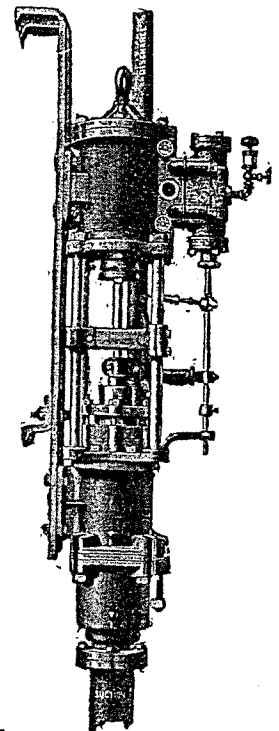


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W. A. LEONARD, Superintendent.

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OFFICE, PORTLAND, ME. MINES, DEER ISLE, ME.

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JOHN SHOENBAR, Superintendent.

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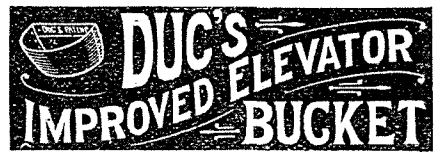
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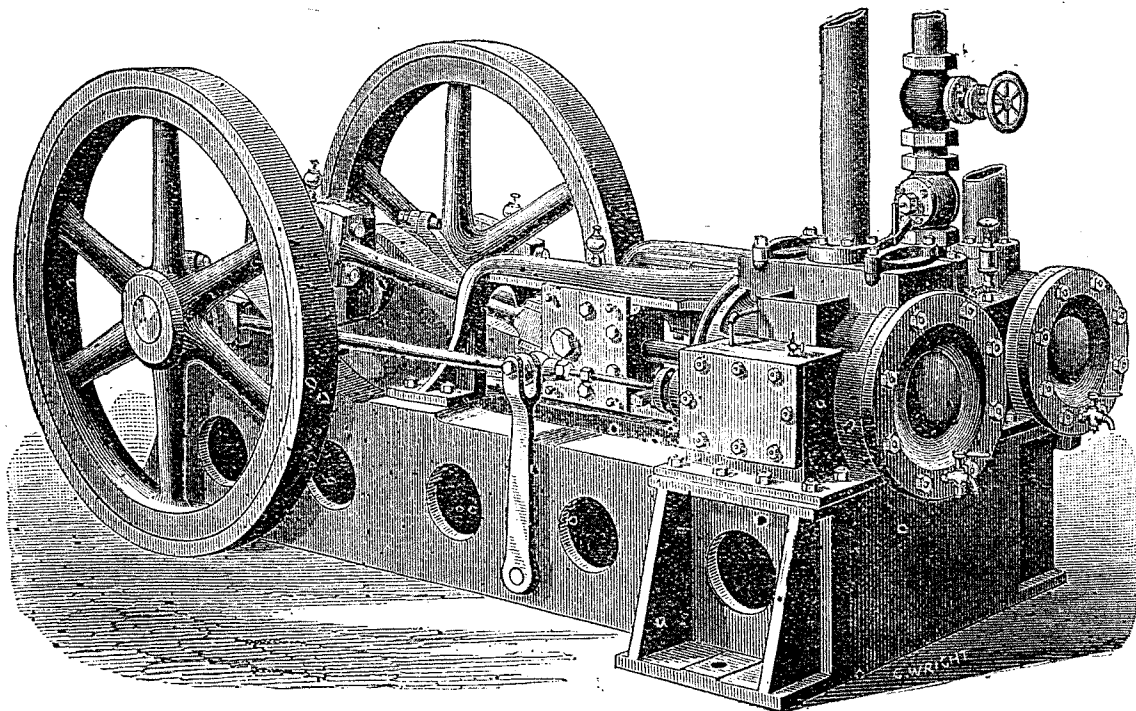
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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

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E. M. BLANDING, } EDITORS.
W. F. BLANDING, }
E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, AUGUST 12, 1881.

Copper has developed a very much stronger undertone. The aggregate sales in Boston and New York is small, owing to the anticipation by holders of a higher market. At present 16 3-4c. appear to be the latest quoted sales.

The Boston mining market is unusually active, and prices, always liable to fluctuations, have been well maintained. The Maine stocks are growing in favor. The reports from the mines indicate renewed activity.—[Economist.

Mining shares at the Boston Stock Exchange have been quiet during the past week and the sales have been very few. Blue Hill sold, Wednesday, at \$3.62 1-2, Douglass was offered at \$3 and \$2.50 bid, Pine Tree sold at \$3.75 and Sullivan sold at \$3.75 and closed \$4 asked.

It is a fact that most of the mining companies now presenting their claims for the confidence of the public are composed of business men who have secured mining properties more or less developed, or in localities where known values exist. It is this class which is giving the business a solid and enduring existence, and upon which the industry is thriving.—[Ex.

We are in receipt of a copy of an elaborate article by Prof. F. L. Bartlett, on the condition of the Maine mining industry, prepared at the request of the British Government. It is to be published in the "Annual Record of Mines," a work issued yearly by the government of Great Britain for the benefit of the miners of that country. Elsewhere in this issue will be found Prof. Bartlett's article and it will be perused by our readers with much interest.

The New York Stockholder says: "Many prominent members of the New York Stock Exchange, it is said, have lately invested in the mines of Maine. The Pine Tree, we understand, is owned almost entirely in this city, and the Milton, which is on the same lode, is being quietly bought up in Boston by a syndicate of New York and Boston gentlemen. We understand that both of these stocks are to be placed on the Mining Exchange list, and judging by the ability of those interested, we anticipate lively times in these securities."

The past week has in several respects been an eventful one in the history of the Boston Mining and Stock Exchange. Milton has been a mystery, and after a decline jumped suddenly on Saturday to \$1.45 with large sales, but subsequently has gone down again and on Wednesday sold at \$1.12 to \$1.00, \$1.20 and \$1.22 being offered buyer 30 days. Twin Lead rose into special prominence during the closing days of last week and created the greatest sensation in the history of the Exchange, surpassing Empire even in the palmy days of that formerly active stock. At Friday morning's session of the Exchange, Twin Lead sold at 40 cents seller 10 days; but in the afternoon a boom was inaugurated and the stock steadily rose to \$1.30 with quoted sales of over 20,000 shares and on Saturday the stock rose to \$1.50 with quoted sales of nearly 10,000 shares. Twin Lead has since declined and, Wednesday, sold on the Exchange for \$1.04 and \$1.05, with \$1.25 buyer 30 days for a block of 5000 shares. Deer Isle after remaining quiet for a long time stepped to the front on Wednesday with sales at \$1.00 and \$1.05, and \$1.10, \$1.20 and \$1.25 bid on 30 and 60 days. Young Hecla sold, Wednesday, 50c., 53c., and 55c., buyer 60 days. Copperopolis advanced to \$2.00 but on Wednesday sold from 1.95 to \$1.98. Empire has declined from 42c. to 36c.

PORTLAND SMELTING AND REDUCTION WORKS.

The Portland Smelting and Reduction Works present a very active appearance at the present time. The old Works are running now on gold ores, one car load having come from Massachusetts and several lots from Nova Scotia. Great success has been attained with Nova Scotia gold tailings, working them up to 90 per cent. of the assay value. A cargo of coal recently arrived and fuel enough is now on hand to supply the Works for some time. A vessel with a cargo of ore from the Cape Rosier mine is at present on the way to Portland. The acid chambers are all finished and will be started as soon as the ore arrives. The enlargement of the Works has been going on for some weeks and the extensive additions previously detailed in the columns of the MINING JOURNAL are now about two-thirds finished. The new machinery is being set in place as fast as it arrives. Two immense crushers from Messrs. Totten & Co., of Pittsburg, Pa., arrived on Monday. Work is being pushed with the utmost celerity and the Works begin to assume a very imposing appearance. The Works when all completed will have 8 kiln furnaces, 4 reverberatory furnaces, 2 cupola furnaces and 2 roasting furnaces, 1 complete set of lixiviation works, 1 set of amalgamating and 1 set of sulphuric acid works, 2 engines of 50 and 25 horse power respective-

ly, 3 crushers and 3 condensing chambers for zinc. Up to the present time the buildings of the Works cover 15,000 square feet of ground.

Personals.

W. D. LEWIS, Esq., of Boston, was in the city on Wednesday.

SUPT. SHOENBAR, of the Milton and Copperopolis, passed last week in Boston.

HON. F. M. LAUGHTON, President of the Stewart, is rustivating at Castine.

SUPT. DUFF and MR. BARCLAY, of the Twin Lead, were in Bangor on Monday last.

COL. CHARLES H. LEWIS, President of the Milton, was at Fort Point over Sunday.

DR. A. C. HAMLIN, of this city, left yesterday on a visit to Mt. Mica in Paris, Maine.

JAY GOULD is to visit the White Mountains with his family the last of the present week.

E. M. HERSEY, Esq., President of the Twin Lead, has been in Boston during the present week.

DR. W. C. COLLINS, of Bucksport, is taking a vacation of several weeks owing to impaired health.

EDITOR FULLER, of the Rockland Courier, was in Bangor, Wednesday, en route to Moosehead Lake.

PROF. ALEX. AGASSIZ has presented the schools at Lansing, Mich., with a fine collection of copper specimens, from the Calumet and Hecla mine.

CAPT. J. H. MOYLE, Supt. of the Blue Hill, was in the city Monday evening. He is very much pleased with the present condition of his mine and works.

EDWARD H. GOFF, President of the Boston Gold and Silver Mining Co., has returned to Boston from an extensive trip through the mining districts of Colorado.

PROF. F. L. BARTLETT is engaged at present in making a report of the condition of Maine copper mines and smelting works for the appraisers of the New York Custom House for "statistical purposes."

M. DONELAN, Secretary of the Sunburst Copper and Silver Mining Company, was in the city on Monday and called on the MINING JOURNAL. Mr. Donelan was on his way home from a trip to Boston and New York.

MR. JOHN WALTER, proprietor of the London Times, will shortly arrive in this country and stay until October. His wife and children will accompany him. After visiting Long Branch and Newport he will go to California.

The Traveller chronicles the return to Boston of PROF. W. F. STEWART, in company with E. H. GOFF, Esq. The Professor has been making an elaborate examination of the mines of the Boston Gold and Silver Mining Company in Colorado.

CAPT. HENRY A. FORD, and wife, after a stay in our city of several weeks during which time they have been engaged in collecting statistics for an elaborate history of Penobscot County, departed for their home in Detroit, Mich., on Wednesday morning.

MR. C. W. BRYANT, of the Deer Isle Silver Mining Co., returned on Saturday last from a business trip to England and Germany in the interest of the company. It is understood he has brought with him a proposition in writing from one of the largest smelting companies of Swansea to purchase the entire output of the mine for the next five years at a good figure.

Dips, Spurs and Angles.

—A loan woman—the female pawn broker.

—The Bar Harbor Tourist says Sullivan is hole-y ground.

—California speculators in stocks who invest large sums are called "high rollers."

—"This is hard luck!" exclaimed the gold miner, as he struck a big ledge of rock.—[Phila. Sun.

—A St. Louis editor found a nickel on the street and then wrote a half-column editorial on "Our Increase in Wealth."

—A little boy on being asked where the wicked finally went to, replied: "They practice law for a spell and then go to the legislature."

—Why is it that there is no difference between a man who leaves a coal mine and one who remains? Because the first is a coal leaver, and the second is also a coal heaver.—[Phila. Sun.

—The New Albany Forge Works, Indiana, have received a 36,000 pound pair of shears, capable of cutting a four-inch square cold bar of iron. What a pair of shears for an editor to wield!

—According to some antiquarians the word "Humbug" comes from a worthless coinage, used in Ireland in the time of William III, which was called "oom bag,"—soft copper—worthless money.

—A Colorado girl, only eighteen years old, on the death of her father, took charge of his family and farm, and now manages her mother and brothers, and also her sisters, her cousins and her ranch.

—One of the San Francisco excursionists who was recounting what he saw below to a friend said: "The Palace Hotel is the boss of the world, and they light it up all over with the 'electorial' light."

—Stage riding in Idaho is full of incidents and excitement. When the stage is not upset it is pretty sure to be robbed, and *vice versa*. Sometimes both events enliven and give interest to the trip.

—A new use has been discovered for abandoned mines. In Western Pennsylvania, two murderers have escaped from justice and are now hiding in the deserted coal mines which honeycomb the hills there.

—A paint mine has been discovered in Yuba County, Cal. This is not intended as an item in the "Social and Personal" column, as it is not the kind of paint in which the ladies are interested.—[N. Y. Stock Report.

—A Cairo editor recently went on a moonlight excursion, and wrote in his paper that "the silver rays of the harvest moon fell in a glimmering sheen like the broken threads of a fairy dream." It does look that way to some men.

—A man who was fishing for trout in the Tionosta years ago, so the story runs, caught his hook on a bag of gold and brought it safely to shore. As he looked at the gold he sadly said, "Just my luck, never could catch any fish.

—The Atchison, Topeka & Santa Fe Railroad company has recently ordered 105 new locomotives, 50 passenger cars, and 15 Pullman sleepers. Two extra daily trains are

required to accommodate the increased passenger traffic to Colorado, Arizona, and California.

—A. Skunk, Esq., called on Mayor Ladd, at his residence last Sunday, and proved a troublesome visitor. Not even the official seal of the city of Gardiner will keep those fellows away, when they make up their minds to pay their respects to a person.—[Kennebec Reporter.

—A miner who sold a mine and received his money this morning was inveigled into a saloon and gave up \$400 for a few minutes' experience at "top and bottom." He then became alarmed and started for the depot, where he took the first east-bound train and is now well on his way to his Louisiana home.—[Arizona Citizen.

—A Gilroy lady wanted her little girl to bathe in a room the windows of which opened into the yard, in which were some fowls. "But," said the little girl, "I don't want to bathe before the chickens." "Oh, never mind the chickens," said the mother. "Well," said the little woman, "I won't bathe before the rooster anyhow."

—The fate of Nebuchadnezzar has befallen an insane Italian named Virgillis Strozzi, near Eureka, Nevada. He escaped from the hospital, took to the hills and since then has refused all offers of food and has lived on grass and roots. Those who have watched his movements declare that his mouth is colored green from grass stains and that he seems to be waxing fat on his curious diet.

—Very few of those who have used the expression, "He's a brick," know that it came from Plutarch. An ambassador from Epirus was shown by King Agesilaus of Sparta over his capital, and expressed surprise at the absence of walls and fortifications. "Come to-morrow," quoth the King, "and I will show you our walls." On the morrow he showed him an array of 10,000 men, remarking, "each one is a brick."

—A Provincial man discredits the superiority of American fog and thus addresses the St. John Sun: "In your issue of to-day (Aug. 4), I noticed some American fog stories. In the matter of fog New Brunswick can compete with the U. S., for only last week a farmer at Milkish went to work in the morning shingling his barn, and coming down for dinner he discovered he had shingled ten feet off onto the fog."

—Smokers will please take notice that a judge in New York has just decided that a man has a right to punch a smoker in the ribs with the end of his umbrella if he "puffs the smoke of a bad cigar in his face, even if it is in a smoking-car." The man has his right to smoke, and the umbrella man his right to punch, and the New York laws refuse to step in and say that either was wrong. The smoker, who sued, had to pay costs.

—Bob Ingersoll is one of nature's great deposits or ledges, containing her choicest and rarest qualities, full of rich chlorides, horn silver and pure metal, assaying way up in the thousands. But like all mortals and all true fissure veins, however favored by nature, he has his plaus and breaks, and perhaps in this combination of nature's richest gifts the greatest defect or horseback is his peculiar views as to God and religion. But as time rolls on the sharp drill of his intellect, the wisdom that comes of mature years, will penetrate the horseback, the base rock, and the dark clouds of doubt will disappear and roll away—the great fissure vein will stand out clear and well defined in all of its primitive purity, yielding regular and fruitful dividends to all who may be fortunate enough to be shareholders in his society and live within the influence of his bright example.—[Weekly New Mexican.

—That naughty Silver Reef Miner tells the following little yarn: "A short time ago a reverend gentleman, while bathing at Santa Cruz, was attacked and bitten by a shark.

Thus the theory that the sharks on the California coast are not dangerous, and that one may swim among them in perfect safety, is exploded. The citizens of that delightful little watering place at once offered a reward for the capture of this shark, just as they would for a stage robber or a defaulting county treasurer. But the shark has not been arrested. He is probably gambling out in deep water, and telling the rest of the gang that he tasted an old priest in among the rollers, but that the next time he felt an appetite he'd go for a change of diet. We should think so! With the dainty layout of nice plump matrons and budding virgins, the sweet tenderloins and sirloins, the nick-nack and tidbits around him, he must be a stupid and gross feeder to take a round steak from an old, old priest, in preference to this high-toned bill of fare."

The Baltimore Copper Works.

[From the Engineering and Mining Journal.]

In this country, copper ore smelting, as disconnected from concentration at the mines, and distinct from the mining and casting of native copper, was carried on for some years in five different places—at Boston, New Haven, Taunton, within New York Harbor, and Baltimore. * * * * *

Only one of the six works at one time running is now in existence, and flourishing—the one at Baltimore. And it is a stubborn fact (stubborn as anything Welsh can be—which surely is emphatic enough), that the main reason why that establishment is in existence, and the others not, lies in the steadfast faith, incarnate there, in Mr. Vivian's doctrine, "South Wales against the world." Adhering to the Welsh copper smelting process pure and unchanged, the Baltimore works had turned out good copper for brass. The other works, having mixed in the German practice of blast furnaces, never had. The one main result, good copper, could be relied on at Baltimore, and upon the faith of it there was again built up a business which at this time has assumed large proportions and rests upon a solid basis.

The Baltimore Copper Works were started in 1844, by a stock company, called the Baltimore & Cuba Smelting and Mining Company, in connection with a mining scheme never undertaken. Prominent merchants of Baltimore, however, became identified with it, and smelting was seriously undertaken. Mr. Hazlitt McKim, now a banker in New York, and the late Dr. David Keener, were the managers. A whole colony of smelters was imported from Wales, and the furnaces built on Locust Point, where now are located the grain elevators and steamship wharves, but then a waste tongue of land; historical ground, however, as on it waves the star-spangled banner of Fort McHenry. The company subsequently divided, and Dr. Keener built in 1846 new works on the opposite shore, at Canton.

The business of Dr. Keener's company was very successful and profitable. It was wound up in 1861, the works being sold to the other company, who then for a number of years—during the civil war—ran both works, the President until 1867 being the late Clinton Lovering. That at Locust Point was in 1868 sold to the Baltimore & Ohio Railroad Company for terminal purposes; the Canton works finally suspended through losses in the business, mainly occasioned by bad commercial operations, currency fluctuations, and the radical change in the tariff of 1869. Mr. John W. Garrett and the late Johns Hopkins took a lively interest in the affairs of the company, and were so well satisfied of success under reasonable management that they joined the present owners in reviving the Baltimore Copper Works at Canton in 1872, which were thenceforward and are now conducted under the firm of Pope, Cole & Co., by whom the business is managed in a strict mercantile way and with marked success.

The Welsh smelters, transplanted from a field where the ugly, rebellious ores of Cornwall, etc., made success in good copper smelting difficult, as Mr. Vivian amply testifies, encountered a new condition of things at Baltimore. Instead of finding impure ores, instead of having to practice the selecting process and making several grades of copper, they found only pure ores, and could only make one grade of copper, and that better than any they had been able to make from the promiscuous ores sent to Wales. They found the best of long-flame coal only as fuel, instead of the laborious mixture of coal imposed on them in Wales. They were allowed to retain their customs and liberties, and thus really transplanted their particular industry in its integrity to Baltimore; were content, and taught the handicraft to their sons. That they made uniformly good copper, was due to their skill and discipline no more than to the fact that tin, nickel, antimony and arsenic did not exist in the ores which came into the works for years, these metals never being found in the copper mines on this side of the Rocky

Mountains. These pure pyritous ores were a very different furnace material and had a very different effect in mixtures, than those at home. Hence, the work of the men resulted better in all respects than in Wales. The brand of "Baltimore Copper" became as famous as the painstaking manager, Dr. Keener, became popular in the manufacturing districts of New England. His chief smelter, Mr. Davis, is still superintendent of the works.

There were smelted at Baltimore the ores and mattes of Tennessee, of Virginia, Maryland, Vermont, and of Lake Ontario, all pure sulphurets, mixed with the rich ores of Chili, especially such from the famous mine of Sr. Urmeneta, the late President of Chili, with whom an excellent contract had been made. After the civil war, California sent many cargoes of sulphurets, and Arizona of rich oxides, to the wharves at Canton Copper Works. Lake Superior sent her native mineral there to be melted, before the refineries at Cleveland and Detroit were built; and indeed it was a detachment of Welsh smelters from Baltimore who built the furnaces and taught the Lake Superior people how to melt and refine their copper. And for years, both here and in Europe, the brand of "Baltimore Copper" was considered quite equal to Lake Superior copper, and the quantity produced in Baltimore was greater for a long time than that of the Lake mines. Baltimore has produced as much as 10,000,000 pounds of refined copper per year.

The plan of the works at Canton was designed with a view to future growth. Originally only three acres, the land has been made to grow by the filling in of slags and debris to some five acres; they are admirably situated upon deep water, so that the largest sized vessels can discharge at the wharves; the division of the ground and buildings to serve for the various departments of work of the several industries which have been engrafted upon the original copper smelting works does justice to the policy of the founder; the arrangement is harmonious, although the additions were made by piecemeal. There were formerly in the works eighteen reverberatory furnaces for smelting and metal working, two refiners, three calciners, worked by two great and four or five lesser stacks, a fire-brick house, crusher, one assay office, with lesser shops, all under lofty roofs, extending over coal sheds in the rear, with plenty of yard room. Five ore houses were built of slag stones, from which also was built a handsome wall around three sides of the property. Subsequently, upon some extremely crude notion and without regard to its economical relation to copper smelting under changed conditions, a handsome sulphuric acid chamber system had been erected near the wharves.

When the works came into the hands of Messrs. Pope, Cole & Co., the commercial aspect as well as the nature of the supply of furnace stuff was almost totally different from what it was in the earlier history of the business. Poor ores no longer came; instead of them, regulus, rich ores, black copper, argentiferous and auriferous mattes and speiss from our Western territories. It became now necessary to add new processes to the old system of smelting, and to practice "selection." This is done radically. Into the department where the Baltimore copper—branded "B. C. W."—is made, nothing is admitted except well-known pure and soft material. The rest goes to the departments of silver extraction, blue vitriol making, and residue treatment. These departments are fenced off: each has its own tools, furnaces, staff, and workmen. The silver extraction is worked by ingenious processes differing from those elsewhere practiced quite materially. The blue vitriol establishment is the largest and most complete in the country, turning out an extremely popular quality for all uses, and an unsurpassed extra kind for the fine color manufacture. There are now in the works three refineries—and room for three more—many metal and ore furnaces, two blast furnaces, four steam-engines, eight boilers, sixty tanks, and machinery to work it all.

The scientific department is superintended by G. W. Lehmann, Ph. D., and assistants, who use three separate assay offices and make independent assays and analyses. Weighing, sampling, keeping of accounts, are all systematized in the simplest manner; errors are unknown in all these details. All repairs are made in the shops on the ground, and the smallest piece of old iron is husbanded. One of the firm spends all his time at the works, and through the telephone, etc., can manage everything inside and outside the works with rapidity.

The capacity of these works is very great; for the treatment of such rich and pure copper material as now comes forward from the Southwest and Northwest, it is practically unlimited. The proprietors are progressive men; besides understanding the metallurgy of copper, the staff at these works has produced on a working scale, by way of a demonstration, 150 tons of chemically pure zinc out of impure spelter and dross; also equally pure carbon harder than emery; and at present, experiments in electro-metallurgy are making, which may add to the facilities of the establishment largely. The great influx of argentiferous copper material from the Western mines necessitates a further extension of the works.

Maine Mining.

PORTLAND, July 18, 1881.

To Hon. William Ward, British Consul:

DEAR SIR:—I have the honor to submit herewith the following brief report upon the CONDITION, IMPROVEMENTS AND METHODS OF MINING IN THE STATE OF MAINE, hoping that it will in part at least fulfill the object for which it is required.

Maine, being a comparatively new mining State and being situated so conveniently to the great machinery factories of the New England States and having the proverbial inventive faculties of the native Yankees to draw upon, should exhibit the most improved, reliable, and rapid methods of mining for the precious and base metals. In just how great a degree the standard has been raised in Maine, I will attempt to show by a somewhat condensed account of our methods of mining, together with the prices of some of our machinery and supplies, intending to give such data as may be of use in comparing our methods with those in use in Great Britain.

ACCIDENTS.

Some 1,500 or 2,000 men have been constantly employed in our mines during the past two years, with I believe but two, or at most three fatal accidents, and those were caused by undue carelessness of the men themselves and were not within control of the mine managers. There has been no accident from premature explosions or faulty hoisting apparatus, or by caves or break downs in the underground workings.

DRILLS AND DRILLING.

Hand drilling has given place largely to steam drilling; in fact, I may say that in about all the older mines steam drills are in use. The improvements made in hand drilling consist mainly in the use of small drills and lighter hammers. Since the use of high explosives is the rule, a hole of small diameter may be made as effective as the larger ones with black powder. The size of drill considered most economical is one inch octagonal which is struck with a 5 or 5 1-2 lb. hammer, although in many cases 7-8 and even 3-4 inch steel is used. It has been proved that a crew of men will break more ground in a given length of time with the light steel than with anything above one inch in diameter. The tendency is now-a-days to put in deep holes; more especially is this the case where the battery is in use for firing. Steam drills are much in vogue and are used in nearly all our mines. Of the varieties in use, may be mentioned the Rand, Burleigh and Ingersoll as the leading drills. Steam can only be used down to a depth of about 100 feet owing to condensation; below that depth compressed air must be used. The only improvements worthy of note is that the later drills are made more compact and with fewer parts, combining lightness with strength. The air compressors are also now made very neat and compact and are much cheaper than formerly. The drills may be obtained in sizes ranging from those cutting a hole 3-4 inch in diameter up to five, with or without automatic feed. All parts of the later drills are made interchangeable, so that in case of breakage the parts can always be duplicated without loss of time. Steam drills cost all the way from \$100 to \$500; the medium cost of a good mining drill will be about \$325. Air compressors cost from \$1000 for one driving two drills up to \$6000 for one driving twenty drills. Diamond or core drills are not much used in Maine; they are in use for prospecting principally.

PUMPS AND PUMPING.

The compact steam pumps of the Blake, Knowles, or Cameron pattern are almost universally used in Maine for draining mines; the cumbersome Cornish lifting pump has few advocates, while in point of first cost and in the running expenses, there may not be much difference; economy of space, rapidity of setting up, and value in case of discontinuance of the mine are vastly in favor of the steam pumps. These pumps are made in hundreds of patterns, adapted for all kinds of work. They are made to work submerged as well as dry, to pump sand, clay, gravel and dirt of all kinds. To pump 20 gallons or 3000 per minute, to lift one foot or one thousand and the cost of one lifting five hundred gallons per minute is about \$500. I am not able at the present time to give any correct estimate of the effective work of one pound of coal applied to pumping purposes. In all cases the same boiler does duty for hoisting and using air compressors, rendering it quite impossible to get at the exact amount of steam used for pumping.

HOISTING APPARATUS.

All the Maine mines are provided with reversible safety hoisting engines, that is to say, all of those which are far enough advanced to have recourse to steam hoisting works. Several varieties of steam hoisting engines are in use. There is no great difference in them. The best type is the double cylinder or "twin" engine. Cog gear is preferred to the friction gear. Steel wire rope is used most extensively. The form

of "bucket," "skip," "kibble," or "cage" in use in Maine varies greatly. Only a few of the mines are provided with "skip roads" or "ways," but those having such ways use the safety cage which in case of accident stops itself on the ways in descending. Some excellent local devices have been invented for automatic discharging of the raised ore. All the mines using steam power for hoisting are provided with bell calls or signal codes which the men must all understand. A very good arrangement for the hoisting works has been adopted in Maine as regards the engineer's position, and one that is worthy of notice, and possibly accounts for the few accidents from hoisting. It is that the hoisting works building or shaft house is open and high inside with no obstructions to the vision of the engineer who usually stands on an elevated platform overlooking all the machinery, thus enabling him to see at a glance if anything is wrong. In well regulated works the engineer is not allowed to hold conversation with any one while on duty. As a general thing the speed used in raising ores and lowering the cage is greater than in foreign works; this last however can not be said to contribute anything to safety. In most works the men are let down and raised in the buckets or skips although ladder ways are always provided.

EXPLOSIVES.

No black powder is now used in Maine for regular mining purposes. The high explosives are now so cheap that black powder has been practically driven from the market. Several brands are in use as "Atlas," "Rend Rock," "Hercules," "Glucodine," etc.; all are made from nitro-glycerine, having some material for an absorbant as clay, sawdust, charcoal, mica, tripoli, etc. These explosives have proved remarkably safe in use. No accidents have occurred by premature explosions or by rough handling. The only danger to be apprehended is in thawing frozen cartridges in the winter; this must always be done in hot water or in sand surrounded by a casing of hot water. No accidents have occurred in Maine by transportation of high explosives. In blasting preference is given to the 35 to 40 per cent. grade; that is, the grade containing 35 to 40 per cent. of nitro-glycerine. In all the principal mines firing is done by electricity. This also accounts for much of the safety experienced in Maine mining. It is claimed, and well taken too, that firing by battery is much more economical than fuse firing. It takes less time in preparing the charges, no tamping is needed, although water is sometimes used and consequently there is no danger whatever in charging. The holes are fired simultaneously and are more effective in consequence. There is absolutely no danger from after-explosions and no miss-fires. The expense is about the same as when fuse is used. The cost of blasting material is now as follows:

Batteries for firing up to 15 holes.....	\$25.00
Leading wire per foot.....	2 to 3½ cts.
Connecting wire per lb.....	75 cts. to \$1.
Explosives each.....	3 to 4 cts.
Explosives containing 20 per cent. nitro-glycerine.....	15 cts. per lb.
" " 25 " " ".....	17 " "
" " 30 " " ".....	19 " "
" " 35 " " ".....	21 " "
" " 40 " " ".....	23 " "
" " 45 " " ".....	25 " "
" " 50 " " ".....	27 " "
" " 60 " " ".....	31 " "
" " 75 " " ".....	37 " "

The above prices are wholesale rates in quantities of one ton or more, the retail price is about 2 or 3 cents per lb. additional.

VENTILATION.

The mines of Maine are not yet deep enough to require any elaborate system of ventilation. The ordinary fan blower is now almost universally used. No deleterious gases have been encountered in mining in Maine thus far. No fires have occurred and no accidents have resulted from bad air or defective ventilation. Lamps are used, mostly for lighting. It is, however, proposed to use electricity and one of the mines at least intends its early adoption.

Rigid attention is given to the comfort of the men working in the shafts. Drying rooms are always provided for clothes and in many instances convenient and roomy washing and bathing apartments are to be found. Underground men usually work in three shifts of eight hours each. Sometimes only two shifts work when about eleven hours will be the average time. Ten hours is the basis for day work. The wages paid are from \$1.25 to \$2.00 for underground men with an average of about \$1.50 per day. Foremen receive \$2.50 to \$3.50 and Supts. \$3.00 to \$7.50 per day.

Respectfully submitted,
F. L. BARTLETT, State Chemist for Maine.

—A dispatch yesterday from Waterbury, Vermont, says: "A vein of silver two feet wide was discovered on the top of a mountain near here. The owner of the land has refused \$18,000 for it. Some ore assayed in Boston was said to be worth \$5,000 per ton."

LODES, LEADS AND VEINS.

ATRATO.—Mr. W. T. Curtis, Vice President of the Atrato Mining Company, has submitted an elaborate report of the Atrato expedition to the company. We have not space in this issue to give the entire article publicity but the following summary conveys a good idea of the work accomplished: "Therefore, although we have not brought home the amount of gold expected by some, we have at least done this much; we are the first and only mining company that has ever gone up the Atrato as far as Quibdo by steam; the boats, machinery and mining appliances are now at Quibdo ready for future work; we have verified the richness of the country, have proved the efficiency of the pump to raise the material from the bottom of the river; have secured the good will of government officials and citizens; have surveyed and obtained guarantees of exclusive valuable grants; and have ascertained that mining operations can be carried on for the entire year with reasonable exemption from dangerous sickness. And we claim that we have laid the foundation for a mining enterprise that may be confidently regarded as a safe business venture, promising immense profits, and have also opened up a prospect of other commercial transactions with that country which may sooner or later be of great importance."

MOUNT MICA.—The celebrated Mount Mica, of Paris, Me., is now attracting more than ever before the attention of mineralogists and scientific men. Some forty different minerals are found at Mount Mica.

ESSEX.—The Essex (Consolidated) Gold mine, situated in Lyman, Grafton county, New Hampshire, has for some months past been in process of development, with results of the most flattering nature. The treasury has been supplied with an ample cash capital, and the company is quietly but vigorously opening up the ground for a large and permanent output of ore. The principal shaft has been re-timbered to a depth of one hundred and twenty feet, and sinking is being pushed to a depth of one hundred and fifty feet, whence drifts and galleries are to be projected in all directions through the ore body. Coincidentally, extensive surface explorations have been made which fully determine the existence of several other auriferous veins, which give indications of being extremely rich in the golden deposits. Prospecting has been carried on with astonishing results. The vein matter grows thick and fast, and every rock fragment, from pebbles to blocks of half a ton in weight, is thickly impregnated with rich sulphurets, and many show free gold abundantly. Mr. W. J. Smart, a well-known Western miner, has just returned from a week's visit to the property. While there he made an exhaustive examination of its capabilities. He says he went up a skeptic, but has returned a convert to the belief that "gold exists in New Hampshire, and especially in the town of Lyman, in very large quantities." He asserts that the ores on the surface of the Essex property are extraordinarily rich in gold, while the general outcrop of the vein is well defined. This outcrop can be traced for a distance of two miles, extending, as a matter of course, through other properties. In the shafts of the Essex, the vein is from eight to ten feet in width between the walls, and the gold is visible on all hands. He made between forty and fifty tests of the ore, and in no case did he find any that did not show gold, and in the great majority of cases very freely. The ore of the Essex is similar to that found in the Colorado mines, and is, in truth, identical with the well known gossan of that State, being a porous, iron-stained, honey-combed quartz. In addition to the main vein, Mr. Smart says there are certainly three other well-defined veins on the property, running in a lenticular form, and these, he has no doubt, are richer than the main vein. He speaks in the warmest terms of the discoveries now making along the line, and says there is not a stone turned up which does not yield gold, with indications that the entire property will prove one of great richness to its owners.—[Boston Traveller.

NORTH CASTINE.—Work is being systematically pushed by three shifts of men under charge of Supt. Leavitt and Foreman Danton. Good progress is being made and the shaft has reached a depth of about 60 feet. The managers feel much encouraged about the prospects.

DODGE & JONES.—The Dodge and Jones properties in Brooksville are to be consolidated and placed upon the market on reasonable terms. The mineral showing as witnessed by us on a recent visit to the Bagaduce region is remarkable and we desire to see it thoroughly developed by a strong company.

DEER ISLE.—Supt. Dickson reports to Secretary Gould under the date of Aug. 1st as follows: "We are sinking a winze from the 130 foot level to connect with crossect on the 180 ft. We are taking out nothing but ore. When the connection is made we will have 100 feet of solid ore above us to stope out,

from which it is safe to estimate we can take out 2000 tons. Everything is working and looking first rate."

SUNBURST.—Developments are progressing steadily and the ore vein shows a steady increase as depth is attained. The Sunburst is making a very handsome showing and is a mine of much promise.

COPPEROPOLIS.—Making excellent progress sinking the shafts, and doing other work necessary to put the mine in a condition for extensive operations in the future. The bottom of shaft No. 1 shows a fine streak of ore three feet wide. Shaft No. 2 is improving with every foot gained in depth, and is making a good showing. The additional buildings to the Copperopolis House are being erected as fast as possible, and when completed, will make that establishment one of the completest and best arranged taverns in the State.—[Bulletin, Aug. 6.

MARION.—Col. J. Cary French and others have filed articles of incorporation in the County Clerk's office, New York, for the Marion Copper Mining Company, its projected operations to be on the shores of Gardner's Lake in Washington County. The Company has a capital of \$300,000, divided into 100,000 of \$3 each.

Sullivan.

SULLIVAN.—Supt. Cahill under date of Aug. 10th reports to us as follows: "The ore shute on 3d level is steadily improving. We are running drift east on 4th level. The vein is stronger and richer than at any time in the history of the mine east of No. 1 shaft, going to prove that the ore will be the full length of the vein at a greater depth. The boarding house is being pushed to completion rapidly."

MILTON.—There is no material change to note since our last report. The usual work in the mine is progressing in a satisfactory manner.—[Bulletin, Aug. 6.

Blue Hill.

BLUE HILL.—Supt. Moyle reports everything very satisfactory at the Blue Hill. The mine is making a very excellent showing and the shaft and winze are being steadily continued downward. The winze shows very superior ore and a streak of good width has just been encountered which runs twelve per cent. copper. The smelter is running in first class shape and high grade matte is being turned out.

TWIN-LEAD.—Developments at the Twin-Lead have reached a very interesting point. During the middle of last week a large stringer of ore was cut through, and on Saturday it is understood the main lode was encountered and good ore found. During the past week the stock of the Twin-Lead has figured very prominently on the Boston Mining and Stock Exchange. The Sunday Globe alludes to the movement as follows: "A stock that caught everybody this week was Twin-Lead. For six weeks the stock has been falling off, and finally touched 45c. Many thought it was going to 25c., and consequently there was quite a short interest out. Therefore when on Friday it began suddenly to rise like a shuttlecock, there was well nigh a panic on the floor of the exchange. It sailed up like a balloon until \$1.30 was reached, and then the shorts began begging it at any price. Saturday it gained twenty points more, and closed at \$1.50. It was a neat trick and many were 'burnt.'" The stock is cheap at its present price, when considering that the mine has made its first shipment of copper matte to the Revere Copper Company of this city."

DOUGLASS.—The mine is making the same brilliant showing as in the past. The cupola furnaces are continually turning out matte and the new black copper furnace is converting the matte very satisfactorily into black copper and regulus.

MAMMOTH.—Supt. Duff reports developments progressing and a great amount of fine ore exposed. Large shipments of ore have been made across the Douglass Lake to the Hersey Smelting Works.

FAVORITE.—Mr. H. A. Tripp, the Secretary, writes us: "The stockholders of the Favorite Copper Mining Company have accepted a proposition made them by the Favorite Mining Company whereby the latter become the owners of all the real and personal property of the former Company and assume the payment of its indebtedness, giving each stockholder in the Favorite Copper Mining Company an equal number of shares in the stock of the Favorite Mining Company. The stock in the latter Company is liable to be assessed to its par value, but no greater assessment than 10 cts. per share can be made at a time. The certificates of stock in the new company will probably be ready for delivery in about five or six weeks."

British Provinces.

Henry McGowan, an old miner, was killed in a coal pit on Cape

Breton a few days since. Coal fell and crushed him and when found life was extinct.

The total quantity of coal shipped from Pictou during the last week of July was 6,000 tons, from the various mines, as follows: Halifax Co., 87; Intercolonial Co., 4,773; Acadia Co., 1,007; Vale Co., 202.

Mining licenses on Crown lands in the Restigouche and Gloucester counties, N. B., agreeably to existing regulations, will be offered for sale at the Crown Land office, Fredericton, at noon, on Wednesday, the 24th day of August next.

Samples of some of the minerals, to be found in Alma, have been handed us. The Alma Mining Company are now working on a ledge 100 feet long, which is said to have a large percentage of silver. Four men are now working at it.—[Maple Leaf.

The Chignecto Post says the company working the New Ireland gold and silver mine are more than pleased with the returns, so far. The quartz gives them \$40 per ton, in gold, silver, copper and lead. Four men are kept steadily employed.

The Maple Leaf says: "Manganese is being taken from the Hill mine, during the week, in large quantities. They have abandoned the tunnel and are now working the lead from the outside.—Mr. Geo. Carter, of Fredericton, has been sent by the Hopewell Manganese Co., Boston, to open up the mine on Mr. Barnaby Newcomb's property. Men are now at work there."

The New Era says: "Gold bearing quartz exists not only in the vicinity of Halifax, but underlies almost the entire city, and gold mines are now being worked in her suburbs. In reading statistics of the gold fields of Australia and California we find that best yielding portions of quartz reach but little above two ozs., not equal to Nova Scotia, and the facilities for getting machinery, wood or coal (if necessary) are so great that the means necessary to enable a man to engage in the business, who could not do it under ordinary circumstances, are small."

A correspondent of the Kingston Chronicle and News gives the following items from Loughboro (Canada) mining camp: "An American gentleman named Boe has purchased the Fraser property at the foot of Gold Lake for mining purposes. He has at present some very fine shows, three men taking out of one show an average of four tons a day.—David Brown, who was blown up in the Yarker mine some time ago, and whose recovery for a time was doubtful, is now doing well and is able to walk around, although it is feared that he will lose the sight of one of his eyes."

NIGADOO.—Mr. Edward Hickson, Secretary of the Nigadoo Mining Co., writes us from Bathurst, N. B., under date of Aug. 4th, as follows: "The first meeting of the proprietors and shareholders of the Nigadoo Mining Co. was held at the office of the President, James Hickson, Esq., here on the 2nd inst., and the reports brought in by the expert employed were very satisfactory indeed. They resolved to sell a few shares of their working capital of \$50,000 and on offering them at close of meeting the \$5 shares were readily bought at \$2 and \$2.50 until about 4,000 were sold after which the proprietors deemed it advisable to hold the rest at \$4. The workmen have struck a nice lode of galena in the shaft which is only ten feet deep yet. As the fingers all point downward they expect to find the main lode in a day or two."

NEW FOUNDLAND COPPER MINING COMPANY.—It is reported that a wealthy London house has purchased the great copper mines of Betts Cove, Little Bay and Roberts' Arm, the now well-known mining centres of Notre-Dame Bay, from the original English and Scotch proprietors of these mines. A New York company, incorporated as the Consolidated Copper Mining Company, effected some months since a transfer of this property. The sum of \$200,000 was paid down in cash, and the company, having watered the mining stock up to \$3,000,000, attempted to float it upon the money market of Europe. It being, however, rejected both on the Bourse of Paris and on the Exchange of London, the company threw up the sponge and withdrew their stock lists. The London house referred to has assumed the entire money liability to the foreign company, and has paid off the advance made by the Consolidated Copper Mining Company. The terrific forest fires that lately raged around these mining colonies, while they appeared to be mere emissaries of ruin, have proved to be absolutely beneficial. Thousands of acres of valuable timber were indeed laid low, but the fires that wrought such destruction to the forests have laid bare a vast metalliferous area hitherto unanticipated and undreamed of. Over this ground eager prospectors and explorers are now busily engaged locating lodes and tracing veins of copper ore. The Crown's Land Office is daily besieged with anxious applicants for licenses of search and for land grants. These are all met with a uniform refusal, for until the New York Railway Company alluded to have selected all their eight

mile blocks along the whole 400 miles of railway guaranteed under the existing contracts with the company, the New Foundland government has no authority to convey or grant to outsiders any of these mineral lands.—[N. Y. Mining Record.]

General Mining Notes.

The Silver King mine of Colorado has just paid its first dividend.

Colorado's production of coal increased from 4500 tons in 1869 to 573,000 tons in 1880.

The Mt. Diablo mine suspended the production of bullion on Aug. 5. The company talks of erecting a new mill.

Nine of the stock company mines of Leadville paid a total of one million dollars in dividends in the first half of this year.

There has been a consolidation of foremen on the Comstock, which reduces expenses on the mines from Union to Gould & Curry by \$700 a month.

An Illinois coal company, being unable to secure workmen, has sent an agent to Europe to engage and bring over 500 practical miners, with their families, as soon as possible.

A dispatch from Starr-Grove mine says the two mills are going night and day on ore from stopes in drifts Nos. 2 and 3. Water easily handled. Work on Eagle mine started July 26.

The Bodie Free Press takes notice of the fact that Eastern capitalists are investing heavily in the mines of Tioga District, a region perched on the summit of the Sierra, at an elevation of more than 10,000 feet above the sea level.

A miner who has arrived at Victoria, (B. C.), from Takon gives a glowing account of the quartz mines. Several claims had changed hands at large figures. The diggings are believed to be very extensive, and prospectors report new discoveries daily.

In the shaft now sunk to a depth of 300 feet at the Sulphur Bank Quicksilver mine, Napa county, Cal., gas is a source of great annoyance to the workmen, nauseating them and making necessary frequent change on each shift of men required to perform the work.

At the Silver Islet mine the work of shafting bonanzaward is going on. Nearly one hundred feet more will have to be sunk before what is claimed to be rich ground will be economically available for stoping. It is thought now that the stamp mill will start up about the middle of September.

CHAPPARAL.—The latest advices from the Chapparal mine state: "Everything around the mine looks most favorably. A great improvement has taken place in face of tunnel No. 1. We are getting the mill ready and will start up in a few days for crushing, will extract ore by contract and will run a month before cleaning up."

The Chicago & Northwestern Railway Company is under contract with mining companies in Upper Michigan to transport no circus, menagerie, or tent show north of Menominee River. It is claimed by the mining companies that the advent of a circus or tent show into the district during the shipping season results in thousands of dollars damage to their interests.

A singular accident occurred recently in a western mining camp. A blast not going off as speedily as expected, a miner went back to examine the cause. When within 15 or 20 feet of the place, the explosion took place and a very small fragment of rock pierced his breast and imbedded itself in his heart, making a hole as if shot by a musket ball. Death resulted instantly.

The number of miners and other persons employed in and about the mines in England, Scotland and Ireland, during 1880, aggregated 557,841. In the coal mines 301,381 were employed under ground and 93,552—of whom 4,640 were females—above ground. The total number of fatal accidents was 897, and deaths by accidents was 1 to every 383 persons employed, and is exactly the same as the average of the last seven years.

The Silver Nugget mine, Arizona, is now being opened systematically. They have 700 feet and more of shafts, drifts and crosscuts, and will soon connect the two drifts. The easterly crosscut is being made in the reasonable hope of striking the Mack Morris and other veins in the next 60 or 70 feet, and are also exploring the ground to the northwest of the main shaft. There is ore in sight through a good part of the levels, and they have stoped enough ground to prove that the ore will yield \$30 to \$40 per ton. The mill is in good working order and the Superintendent proposes to start up as soon as he has made his shaft connections.

The celebrated Mulatos Gold Mine, of Salenaripa district, State of Sonora, Mexico, has been bonded for \$2,000,000, by New York capitalists. The bonders have a specimen of ore from the mine, the size of a man's head, that literally hangs together by stringers of gold. It came from the 300 foot level, where they have a tunnel on the vein 860 feet and a crosscut 800 feet, all in solid ore that will work \$15 per ton. There are 30 stamps now running on this ore, and 30 more will be started shortly. This is the largest gold mine in the world. It is the property for which Mr. George Hearst, of California, offered \$1,000,000 in cash last summer, which was refused by its owners.—[Arizona Daily Star.]

The St. Lake Tribune thus refers to the new antimony district in Southern Utah: "Grass Valley district is now looking well, and the present workings of the mines show a marked improvement in the depth and width of this valuable deposit of antimony. This district has now about fifty miners employed, and can be reached via Milford, the end of the track of the Utah Central, in Beaver valley, thence by the way of Fremont Pass to the Sevier river and up the east fork of the same to Grass Valley to the mines. The distance from Milford is 60 miles, over a well watered and timbered country. The scene through Fremont Pass and up the Sevier river will cheer the heart of an old prospector. The wagon roads are in good condition, with speckled trout in every stream, and the sage chicken under most every bush. The district is situated in Piute county, the first Gentile county in Utah."

Nuggets.

—The manufacturers of lime in Rockland resumed operations this week.

—Carleton, Norwood & Co., of Rockport, recently shipped sixteen hundred casks of lime to Jacksonville, Florida.

—An effort is being made to erect a chapel in Sullivan. Some of the prominent citizens of that town have subscribed liberally.

—Several tons of copper matte from the Twin-Lead smelter at Blue Hill have been shipped to the Revere Copper Works in Boston.

—The Bangor Foundry & Machine Company suspended work in their foundry during a portion of last week on account of the intense heat.

—The man-of-war "Yantic" of the North Atlantic Squadron came up the Penobscot several days ago and is now anchored a few miles below the city.

—The Sunday Globe says an ingot of refined copper from the State of Maine is on exhibition at the office of the Copperopolis Mining Company in Boston.

—A four-page paper, purporting to be printed on the comet, will be furnished with every copy of the Boston Globe next Saturday, without extra charge.

—The Maine State Fair will open in Lewiston on the 6th of September. This will be the nineteenth annual exhibition of the Maine State Agricultural Society.

—A dispatch from New York states that the guarantee has been paid by the Syndicate Company and work on the Newfoundland Railway will commence about the 10th of the present month.

—We acknowledge the receipt, with the compliments of the author, of a pamphlet, "On the Origin of the Iron Ores of the Marquette District, Lake Superior," by Prof. M. E. Wadsworth, of Cambridge.

—A company of persons a few months since bought a tract of land in Wesley, of George Walker, Esq., at Portland. Latterly it is reported that a rich vein of silver has been discovered on the lot.—[Machias Union.]

—It is currently rumored that the stock of a Maine mining company will soon be listed on the London Stock Exchange. English capitalists are already quite heavily interested in the stock of the above mining company.

—Mr. Samuel Pillsbury is building a patent lime kiln in the place of two old-fashioned ones on his privilege, which have been out of use for some time. He is also repairing the wharf and will burn lime next season.—[Rockland Opinion.]

—Dispatches from Boston yesterday (Thursday) afternoon gave the following quotations of stock on the Boston Mining and Stock Exchange: Douglass, no sales; Twin Lead \$1.20 buyer 60 days; Young Hecla 52c., buyer 60 days; and Milton 95c.

—A telegram has been received in this city announcing the accidental killing of James Cannon while at work in a New Mexican mine. Cannon was about 28 years of age and formerly resided in Bangor. He has been in the Southwest about five years.

—From Salt Lake City, Utah, comes the first number of the "Utah Review," a monthly magazine of not very large proportions but containing a great amount of interesting reading on the current topics of the day. The Review is edited with ability by Rev. Theophilus B. Hilton and is deserving of a large patronage throughout the Great West.

—The first issue of "The Colorado Champion" has been received. It is a monthly magazine, embellished with numerous illustrations and is devoted to the mines, railroads and industrial interests of the Centennial State. Its table of contents is varied and embraces very readable articles. It is published in Denver, Col., and the subscription price is \$3 per year.

—The elegant Fort Point House is now well filled with summer boarders. Bangor people patronize the house well Saturdays and Sundays. The popular steamers of the Ross & Howell line take large numbers to Fort Point and Northport every Saturday and return Monday morning. Most of those who go to Northport own cottages and it is fortunate for them, for there is not a public house at this place worthy the name of a hotel.

—The Boston Evening Star, the penny daily of the Hub, has undergone a thorough transformation. On Monday it issued from the new office, 332 Washington Street, and appeared resplendent in a new dress of type. It is now published by the Star Publishing Company, of which Col. Charles H. Lewis is President and Hon. Wm. A. Simmons, General Manager. The Star during the ten months of its existence has been a bright and racy publication and under the new management we expect to behold great strides in the march of progress. Mr. Charles J. Brooks now has editorial charge.

—The new and commodious steamer "Queen City" has been chartered by a party of Bangor gentlemen to make an excursion from this city to the Bagaduce on Tuesday, August 23rd. The object of the trip is to enable our citizens to examine the well known Dodge and Jones mineral properties located in North Brooksville on the shores of the Bagaduce River. The steamer will leave her wharf in this city promptly at 8 A. M. The sail down the Penobscot, around Castine and up that famous arm of the sea known as Bagaduce will be one of great interest and doubtless a very large party will participate in the trip. The fare will be 50 cents for the round trip.

—On Thursday, Aug. 18, the great fair of the New England Manufacturers' and Mechanics' Institute will open in Boston. The exhibition will be opened by Governor Long at 11 o'clock in the morning, when it is expected that the Governors, United States Senators, Representatives in Congress, and the Mayors of all the cities of New England and other distinguished guests will be present. The buildings where the fair is to be held were specially constructed for the purpose, and are the largest and finest in the United States, containing offices, restaurants and two large halls, the larger capable of seating 100,000 and the smaller 10,000 people. Hon. George B. Loring will deliver the oration. The contributions will cover nearly ten acres of floor space, and will be sent by the leading manufacturers of this and other countries. New England's resources and industry will be fully represented.

—The MINING JOURNAL has published several items in regard to the extensive Mexican land grant bestowed upon Samuel Brannan, formerly from Maine. A telegram from Tucson, Arizona, to the San Francisco Daily Report says the party of Americans who have just returned from the Yaqui and Sonora river country, where the Brannan land grant is situated, speak of the Country in the highest terms and say it is the very best of land for agriculture, horticulture and stock raising. The valley is rich and capable of producing two crops a year, and the supply of water is bountiful. The oranges are equal or superior to the famous Indian River of Florida; but they give it as their opinion that it will be utterly impossible for the Mexican authorities to put him in possession of it, as it is and always has been held by the Yaqui and other industrious but warlike Indians, who will fight to the bitter end for the land they deem their own.

—Hon. Joseph L. Smith and others have secured a bond of the Yeazie mill privilege on the Penobscot at Oldtown, twelve miles above Bangor, of the Yeazie heirs for \$51,000. This is unquestionably one of the greatest water privileges in the country and we are confident that the efforts now being made to utilize this splendid water power, which for some years has been idle, will be crowned with success. The fact that this priv-

ilege has the largest water power in New England is not generally known. The total fall at Oldtown in the summer without dam is over 16 feet in a distance of 500 feet, and with a dam on the level of Johnson's Ledge, would give 18 feet fall. By increasing the height of the dam four feet above Johnson's Ledge, a power may be created at an average height of the water equal to 12,000 horse power, with an area of back flow- age of very large extent, extending back 20 miles, being thus the most extensive privilege in New England. It is proposed to enlist capitalists both in this vicinity and in Boston and New York in a company which will soon be formed to erect large manufacturing establishments at Oldtown and thus put to use this magnificent power. There is no reason why Oldtown should not be transformed into a great business community.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Twin Lead Copper Mining Co.,	Bangor,	Aug. 1,	\$500,000
New England Min'g Devel'nt & Invest'nt Co.,	Bangor,	Aug. 3,	50,000

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, AUG. 10, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Attouez	2 3/4	3	2 3/4	3	...	...	2 3/4	2 3/4	2 3/4	3	2 3/4	3
Atlantic L. S.	11	15	11	14	...	...	11	...	11	14	11	14
Atlas	...	...	...	...	...	...	...	...	...	...	...	...
Aztec	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper	3 3/4	4	3 3/4	4	...	...	3 3/4	4	3 3/4	4	3 3/4	4
Brunswick	12	12 1/2	12	14	...	...	13	13	14	...	...	11 1/2
Callimet & Itccia	219	220	218	220	...	...	218	220	219	220	219	220
Catalpa	1 3/4	1 3/4	1 3/4	1 3/4	...	...	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4
Central	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls	4	5 1/2	5	7	...	...	4	...	5	7	5	7
Contentment	...	...	...	...	...	...	...	...	...	...	...	...
Douglass	2 3/4	2 3/4	2 3/4	2 3/4	...	...	2 3/4	2 3/4	2 3/4	3	2 3/4	3
Dana	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver	3/4	1	7/8	1	...	...	...	...	7/8	1	3/4	1
Empire	...	49c	50c	...	...	...	42c	45c	...	...	...	...
Franklin	11 1/2	12	11	11 1/2	...	...	11	11 1/2	11	11 1/2	10 3/4	11 1/2
Harslow	5 3/4	6	5 3/4	6	...	...	7	7 1/2	6 3/4	7	7	7 1/2
Huron	3 3/4	2 3/4	3 3/4	...	...	...	3 3/4	...	...	...	3	3 1/2
Hanover	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt	...	...	...	...	...	...	...	...	...	...	...	...
International	...	...	...	...	...	...	...	...	...	...	...	...
National	...	2 3/4	...	2 3/4	...	...	...	2 3/4	...	...	...	2 3/4
Osceola	...	29	...	29	...	...	...	30	...	...	30	...
Pewabic	...	12	13	12	13	...	...	13	12 1/2	14	13	13 1/2
Phoenix	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac	...	...	...	...	...	...	...	...	...	...	...	...
Quincy	33 3/4	34	33 1/2	33 1/2	...	...	33 3/4	34	33 3/4	33 1/2	33 3/4	34
Ridge	...	4	3	4	...	...	...	3	...	...	...	4
Silver Islet	38	39	37	38	...	...	37 1/2	37 1/2	37 1/2	37	37	38
Sar.	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan	3 3/4	3 3/4	3 3/4	3 3/4	...	...	3 3/4	...	3 3/4	4	3 3/4	4

Copperopolis Mining Company.

OFFICE, 4 SEARS' BUILDING, BOSTON, MASS.

Capital, \$530,000. Par Value of Shares, \$2.50.

Unassessable.

GEO. E. HARRINGTON, President. S. L. SYMONDS, Treasurer.

W. OSCAR ARNOLD, Secretary.

Directors—GEO. E. HARRINGTON, GEO. WEST, FRANCIS TUCKERMAN of Salem, Mass.; P. MULLAN, L. W. HODGKINS of Ellsworth, Me. JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$5.00.

Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, JR., Treasurer.

W. OSCAR ARNOLD, Secretary.

Directors—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, JR., of New York.

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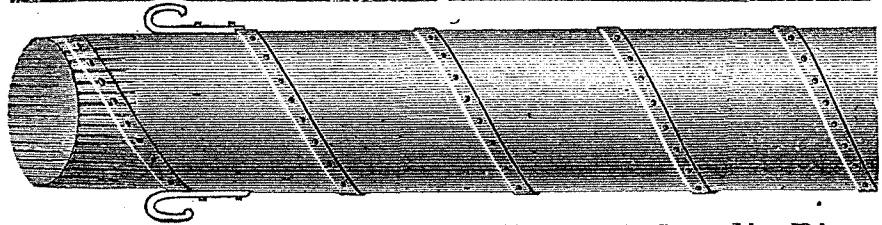
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Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE COPPER MINING CO.
Bluehill, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., '880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Lafan, Jeremiah Wooster.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.,
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. F. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Roddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

OSHKOSH CONSOLIDATED MINING CO.,
Lawson, Colorado. Organized under the laws of the State of Maine.
Capital, \$500,000. Shares, \$5 each, unassessable; 40,000 shares in the Treasury.
President, E. C. Nichols, of Bangor; Treasurer, C. T. Plympton, of Boston; Secretary, S. P. Johnson, of Bangor. Directors—E. C. Nichols, S. P. Johnson, Dr. W. K. Knowles and John R. Mason, Bangor; C. T. Plympton, Henry A. Piper and Geo. W. May, Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000. Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 303,500 Shares.
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WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

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Office, 11 CENTRAL STREET,
Room 4, - - - - - Boston.
Mines at Garland, Me.
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25,000 Shares in Treasury.
President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.
Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

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OFFICE BANGOR, ME.
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Treasury Fund, 30,000 Shares.
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Office at Bangor, Me. Mines at Blue Hill, Me.
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Treasury Fund, 20,000 Shares.
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Arrive Bangor, 7.03, 11.15, 6.00
Leave Bangor, 7.35, 2.00, 7.00
Arrive Bucksport, 8.40, 3.15, 8.07
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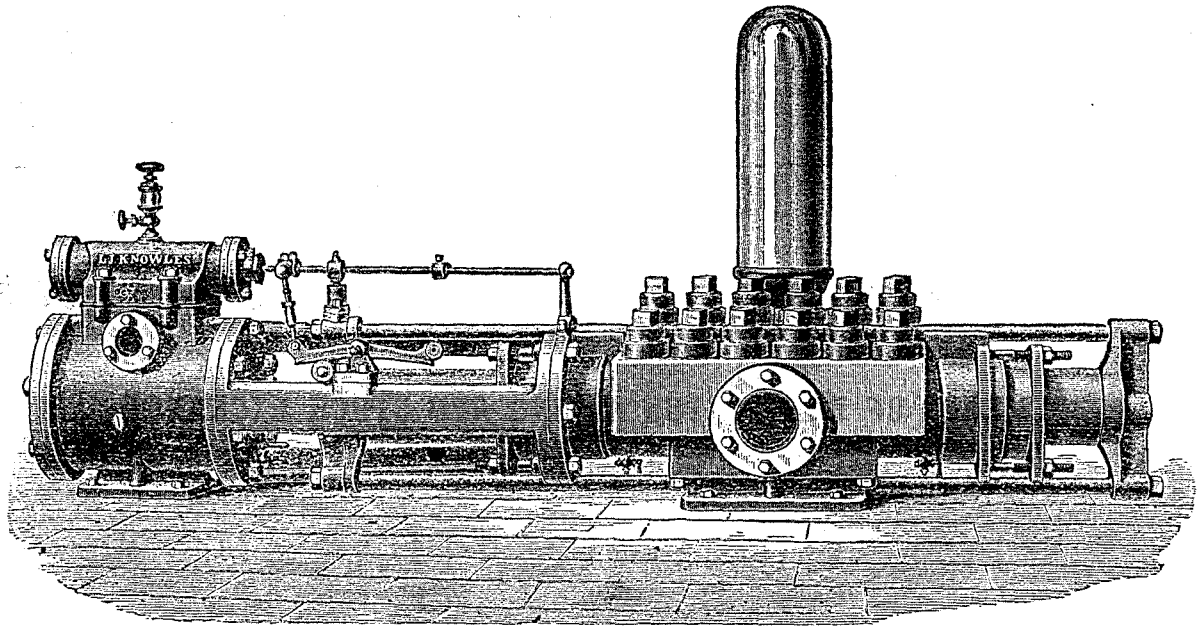
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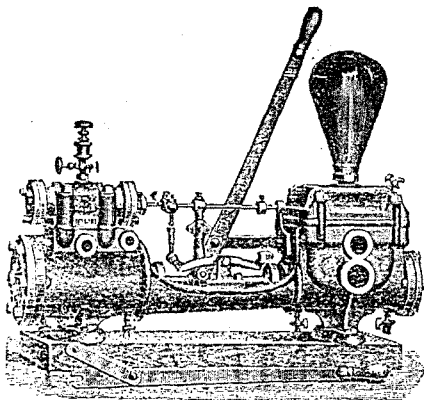
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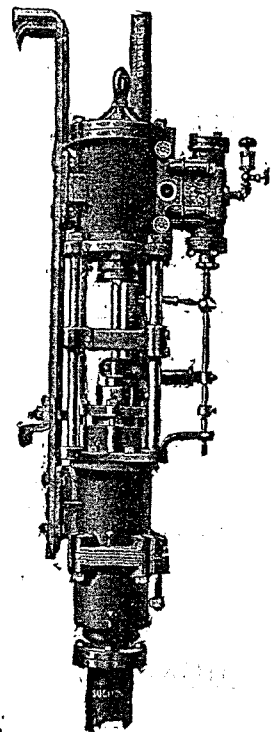


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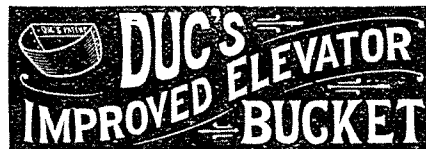
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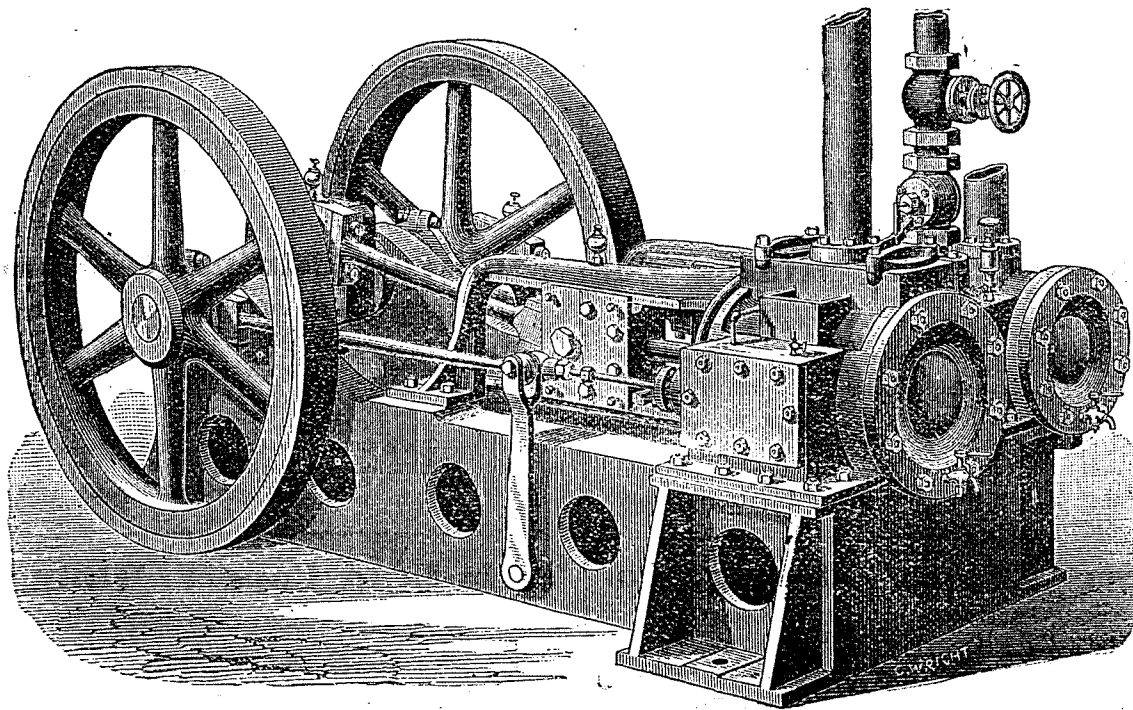
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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

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E. M. BLANDING,)
W. F. BLANDING,) EDITORS.

E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, AUGUST 19, 1881.

In New York, the general stock market has a bearish tendency. This is an outcome of the railroad war and the President's illness.

The midsummer meeting of the American Society of Mechanical Engineers was held at Altoona in the State of Pennsylvania on the 10th, 11th and 12th. The occasion was one of much interest to those in attendance.

Once again we call attention to the importance of mining men assisting in all ways possible the publication of information in regard to mine developments. The advantage of presenting to the public such facts in regard to the various mining sections as will interest the general reader is at once apparent and yet upon this important point many who are in a position to impart valuable and important information through heedlessness neglect so to do.

The New Mexican Mining News says: "Mining reports from all over the country are very favorable and nowhere is the industry represented as being depressed. Maine is fast showing to the world the extent of her mineral wealth and across the continent California still keeps up her prestige. New Mexico and Arizona are at present attracting as much, if not more attention, than any other section, and the great southwest will in time become the center of interest for those investing in mining, both in Europe and this country."

The past week has been a quiescent one in stock circles. The unfortunate illness of President Garfield has still further increased the midsummer dullness. Dealings have been very

light and in some instances at declining prices, but most of the Maine stocks have been very firm. At the Boston Stock Exchange, Blue Hill and Sullivan remain unchanged while Douglass shows a slight decline. On the Boston Mining & Stock Exchange but little activity has been noticeable. Copperopolis has sold down to \$1.92. Twin Lead continues strong at \$1.00 with \$1.12 1-2 offered buyer 60. Milton has steadily declined and Wednesday sold from 77c to 90c., a somewhat higher price being offered on 30 and 60 days.

Our worthy contemporary, the San Francisco Stock Report, has a bit of good advice for those who are urging the people to be "cautious" in regard to mines which levy assessments. It says, "they ought to be still more cautious in regard to mines which cannot levy assessments, no matter how much the interests of the stockholders demand that some should be levied." This is Bullion's idea. Many a stockholder in a good mine has lost all the money in it because there was no way to force him to protect his own interests. We believe in putting in assessments where they will do the most good. No "cautious" man ought to go into a business into which he cannot put all the capital that is needed to make it profitable.—[N. Y. Bullion.

A perusal of mining exchanges from different portions of our extensive country impresses one with the idea that there is much bad feeling and antagonism among the publishers of mining newspapers. Perhaps there has been no time within the history of mining journalism when this has been as noticeable throughout the East and especially the West as at the present. This is not as it should be. Such a course is far from beneficial to the general mining interests and retards rather than advances the great industry for which we are all striving. Let less space be devoted to the discussion of personal differences and more to the hearty advocacy of legitimate mining and it will not be long before the American public will view these enterprises in a more favorable light than at present.

Personals.

MR. BLACK, of the New York Times, has been visiting Blue Hill.

STEPHEN JENNINGS, Esq., of Boston, was in the city on Saturday last.

COL. W. H. DARLING, of Blue Hill, was in the city on Tuesday and called at our office.

H. GREGORY, JR., President of the Douglass, has been at Blue Hill during the past week.

F. H. CLERGUE, Esq., and MR. FRED W. HILL have been at Mooshead Lake this week.

MR. FRANK H. WILLIAMS, the well known Boston broker, is in the city recovering from a slight illness.

MR. F. W. LEAVITT, Supt. of the North Castine mine, was in the city on Monday and called in our sanctum.

SUPT. SHOENBAR, of the Milton and Copperopolis, has returned to Sullivan after an absence of a fortnight in Boston.

MR. H. E. DILLINGHAM, of H. E. Dillingham & Co.,

brokers of New York, is summering at the Newport House, Bar Harbor.

MESSRS. ARTHUR MASON, WM. LEE JOHNSON, J. E. PARKER and FRED VERPLAST, of Bangor, have visited the mining regions this week.

JOHN I. BLAIR, the railroad king of New Jersey, is eighty-one years of age, and worth a quarter of a million of dollars for each year.

CHARLES D. JAMESON, C. E., after a visit of some weeks in this city, has departed for Mexico where he is engaged in surveying for the Mexican Central Railroad.

PROF. BAIRD, of the Fish Commission, is busy this summer with his new steamer the "Fish Hawk," in making investigations for the benefit of our deep-sea fishermen.

MR. G. E. WRIGHT, business manager of the Chicago Mining Review, accompanied by his wife, is making a trip through a portion of the mining regions of Colorado.

MR. B. G. BEAN, of the Cape Rosier Mining Company, is visiting the mine. Mr. Bean formerly resided in Maine but has lived now for several years in New York City.

GEN. B. F. BUTLER, in his yacht "America," has arrived at Halifax en route to the oil regions of Cape Breton. The General and his party are heavily interested in the Inverness Oil and Land Co.

JOHN F. HUDSON, Esq., President, GEORGE MUDGE, Clerk, and C. E. PARENT, Treasurer, of the Silver Hill Mining Company, recently came down from Boston and examined their mine in Garland.

MR. J. P. FROST, the accomplished mining editor of the Boston Globe, has visited the mining districts of Blue Hill and Sullivan during the present week. Mr. Frost left this city Tuesday evening on his return home.

HON. EDWARD CUSHING, General Manager of the Portland, Bangor & Machias Steamship Company, gave a reception at the West End Hotel, Bar Harbor, last week to a large number of railroad and steamboat men.

MR. EUGENE M. HERSEY, President of the Twin Lead, visited Blue Hill and Sullivan during the early part of the present week. MR. HERSEY was accompanied by his brother, COL. R. F. HERSEY of Stillwater, Minn., on his trip to Blue Hill.

HENRY VILLARD, the railroad manager, was born in Speyer, the capital of Rhenish Bavaria, in 1835. He came to this country when twenty-one years old, was among the first of the Pike's Peak emigrants, and afterward acted as a newspaper correspondent. At the close of the war he passed a year in Germany, came back and married a daughter of William Lloyd Garrison and then went to Germany again for two years. There he formed business connections out of which his control of transportation interests has sprung.

—Young man, beware of stock and grain speculations! If you want an "option" that is safe, get the option to a good sensible girl of marriageable age, and put up a cot and a neat little cottage as a margin. It will be the grandest speculation you ever made, and will bring you big profits. You can stake your last dollar on that and be safe.—[Hawkeye.

Ye Sad Fate of Ye Mining Expert.

A spectacled goose, from college let loose,
Said: "A mining expert I will be;
I'll examine all mines in the bowels of earth,
And some that are under the sea,
Don't you see!

And some that are under the sea.

For I know all things that are to be known,
Of the science called Ge-ol-o-gee;
By which I'll show people just how to get rich,
And charge them a comfortable fee,

Don't you see;
And charge them a comfortable fee.

But hold! I have heard, that miners out West,
Bamboozle such fellows as we;
And I think it is best, that I live there awhile,
For they may come their tricks over me;

Don't you see!
For they may come their tricks over me."

So to Kokomo camp, he hied him in haste,
This master of Ge-ol-o-gee;
But the natives all thought he was very low grade,
And they hanged him right up in a tree;

Don't you see;
They hanged him right up in a tree!

Then the death angel dropp'd this spectacled youth,
Setting his bright young spirit free;
And I'm told he's now out with a ghostly crew,
Prospecting all Eternity;

Don't you see!
Prospecting all Eternity.

—[Silver (Col.) World.

Dips, Spurs and Angles.

—An air line—the telegraph wire.

—The Boston boy is called a hubbub.

—As tony a place as one can go to is a granite quarry.—
[Boston Times.

—Smith calls his mother-in-law a windlass, and says she is always wound up.—[Phila. Sun.

—"Silence is golden" sometimes, but when a fellow fails to respond to a dun it looks more like brass.

—A pig was never known to wash, but a great many people have seen the pig iron.—[Commercial Bulletin.

—A river's mouth is larger than its head, the sea has arms but no hands and a mountain has a foot but no legs.

—Living up to your income—Locating yourself next door to the bank where all your money is deposited.—[Phila Sun.

—One thousand stocking makers of Chemnitz, Saxony, are coming to this country. If this is not a yarn there must be something on foot.

—Mr. Jay Gould is a very rich man. He got the most of his wealth by exchanging liquids for solids—giving watered stock for hard cash.

—On the north side of Lake Superior, every man owns a mine, every poor man owns from two to three, and a very poor man from six to eight.

—Nevada, with its population of less than sixty thousand—Chinese and Indians included—has nineteen daily newspapers and about a dozen weeklies.

—A chivalrous exchange thinks when a man marries a widow he should give up smoking. "She gives up her weeds;" he should be equally polite.

—The world revolves on cash and not on its axis, as many suppose. Reverse the world, says the prospector, and we can open the mines from the other side.

—"The." Allen, the notorious keeper of the American Mabile has struck bed rock. He has married an heiress to \$422,000.—[N. Y. Mining & Financial News.

—Tombstone is excited over the nightly visitation of a ghost. He is doubtless troubled over the conversion of his tombstone into bullion, and rests uneasy without his epitaph.

—“Ah me,” said a well known speculator who had just paid a bill for painting his yacht, “it is cheaper to keep a wife than it is to keep a yacht. Your wife will paint herself.”

—Texas will soon be the first State in the Union in the way of enlightened legislation. It has a new law making it a misdemeanor to injure baggage by handling it “maliciously, carelessly, or recklessly.”

—One of the most curious wagers ever won was made by an Englishman, that he could stand all day on London bridge with a trayful of new sovereigns fresh from the mint, and not find a single purchaser at a penny apiece.

—Eureka, Nevada, has a mystery. An unruly drunken man was locked in the vault in the County Recorder's office, in the presence of a number of gentlemen, but when the vault was opened to let him out he was not there.

—“When an Indiana man found that his dead wife had been converted into stone, he didn't allow her to longer linger in the cold, damp ground. Digging her up tenderly, he had her broken into pieces of a stuitable size to fire at serenading tom cats.—[Indianapolis Journal.]

—The latest news from Arizona is that the centipedes of that country are perfectly harmless. A miner down there lets them crawl about his arms and neck, and even puts them in his breast with impunity. However, there still remain to be disposed of the tarantulas, scorpions, lizards, rattlesnakes and Apaches.

—There are a great many men born in the world who imagine that they were born with genius, and lie down on the sofa and wait for an inspiration until some other fellow, who thought himself a dunce, rises by hard labor to a competency, buys the sofa and leads the waiting genius out by the ear. This is not a joke, it is a fact.

—A miner brought to our office Thursday, a live toad, which he took out of the Parrot mine at a depth of 95 feet from the earth's surface. He says there is a little vein of water where he discovered his frogship, but that it seemed so very small that it is impossible for him to have gotten in by that channel, unless he closed up his tunnel behind him.—[Inter Mountain.]

—John Deyent, a Polander living in San Jose, Cal., had a pair of boots built in Sonora, on marine ways constructed for the purpose in a large open lot. They were lifted off when completed, by derricks. They measure 17 1-2 inches in length, 14 1-2 around the instep, 11 1-2 around the ball of the foot and 18 around the heel. They were made by contract.

—Out on a farm not a thousand miles from Austin there are several colored families, who work a part of the farm on shares. Their cabins are all close together. The other day all of them were out in the field chopping out corn, when it occurred to one of them (Sam Johnson) that he had not locked up his cabin. He started back to do so when Uncle Daniel called out: “What does you want to go up to your house for? Who am gwine to steal anything? Ain't we all out here togedder in de field?”

—The coin for soldiers—quarters.—[Yawcob Strauss.] The coin for musicians—the lire.—[Boston Courier.] The coin for Congressmen—the franc.—[Wit and Wisdom.] A coin for perfumers—a cent.—[New York Evening Post.] The coin for ornithologists—the eagle.—[Green Bay Advocate.] Coin for riflemen—a mark. (We've hit it!)—[Helena Independent.] The MINING JOURNAL adds the following: The coin for assayers—an ounce or a pound; for

lawyers—a sou; for monarchs—a crown; for dealers in fowls—a guinea, and for assassins—a pistol.

—The Leadville Herald gives the following good story in regard to New England's favorite basso: “A somewhat sacreligious, but at the same time amusing story, is told of Philip Phillips, ‘the sweet singer,’ who is expected in Leadville next week. He wrote Myron W. Whitney, of Boston, asking him if he would aid him in some service of sacred song, and seemingly, as if to give him a half-smothered hint that no sordid pecuniary consideration should be expected or desired, the writer signed himself ‘Philip Phillips, singing for Jesus.’ The implication meant to be given was taken, and in reply Mr. Whitney wrote his terms, and asking if the Lord was not fully as able to pay his price as was a poor human, he signed himself ‘Myron W. Whitney, singing for stamps.’”

—There is an old gentleman wandering round Leadville who undertakes to detect the presence of ore under the earth by the use of a wallow wand, which has the property of bending downward when its holder, who has one end of the wand in his mouth, passes over the spot where the ore lies. Not only this, but the wand conjurer claims that he can tell by the dip of the wand and its flopping to and fro, how large the ore body is, and how rich in precious metal. There is another chap at Denver who has discovered a peculiar magnet, by which he also can detect mineral at any depth by suspending the magnet over the surface. And now there comes a lady who can detect the presence of mineral on a location or in the vicinity of a shaft or drift by the aid of clairvoyance or spiritualism. All you have got to do is to place yourself in communication with her while she is spiritually moved, and she will tell you exactly how many feet you have to go, and in what direction, in order to strike pay ore. It would be curious to ascertain, as a useful memorandum for the future compilation of a history of human credulity, how many miners pay money to these operators for their information. It is very hard to set a limit to the gullibility of mankind. Schemes so transparently ridiculous that it seems incredible that any one should give them the least attention seems to command believers in the cities. Every day we hear of new suicides being successfully floated, and an eager cry for more. So, for aught we know, the wand man, and the magnet man, and the clairvoyant woman may be making fortunes.—[Leadville Circular.]

The Old Bonanzas.

[From the San Francisco Daily Report.]

To-day's Daily Report contains the delinquent list of the California Mining Company. The list naturally attracts attention because of its great length, and not a few people will wonder why so many stockholders failed to pay the assessment of 30 cent per share before the day of delinquency. Under the circumstances it is surprising that the list of delinquents did not reach even greater proportions. The California Mining Company, like the Consolidated Virginia, has 540,000 shares, forty thousand more than any other mining corporation on the coast, the next in size being the Consolidated Imperial with 500,000 shares while most of the Comstock companies have 100,000 shares. But no company can begin to boast of such a general representation in the world as the two bonanza corporations—Con. Virginia and California.

The shares of these bonanza companies are scattered all over the world, and, despite the great care taken for the general dissemination of the news of the assessment, it is more than likely that hundreds of stockholders, living beyond the reach of mails and telegrams, perchance sweltering in the heat of Sahara, clambering up Icelandic volcanoes or rotting in Siberian dungeons, are in blissful ignorance of the fact that they have been called on for “more mud.” This initial assessment of California is a new feature in the history of the Comstock bonanza. The California mine is a segregation from the north end of the Con. Virginia and covers 600 linear feet on the lode. The mine has earned 34 dividends aggregating \$31,320,000, and this amount has been disbursed among the stockholders. The last dividend, paid December 22d, 1879, amounted to \$270,000—50 cents per share. The present assessment aggregates \$162,-

000. It was levied because of the failure of the mine to earn expenses. The condition of the mine has been known to the public for a long time and the levy of an assessment therefore caused no surprise.

While speaking of the bonanzas, reference to Con. Virginia is not out of place. The Consolidated Virginia mine passed into the present management January 11th, 1872. For five years, from 1867 to 1872, a company worked the ground all the time, expending \$161,340.41 upon the property without realizing one dollar in return. At last it was forced to give way. The new and present management expended \$277,150.12 before it yielded them anything. It was a stubborn fight against the heat and barren porphyry—a steady pouring out of gold upon a hope, which continued altogether eight years, and which would have been abandoned in any other country but this, and by any other class of men in the world except Nevada miners. The last assessment on Consolidated Virginia, levied June 11th, 1873, was three dollars per share. It was the fifteenth time the stockholders had been called on to pay for the work of explorations, and brought the aggregate amount of assessments levied up to \$411,200. The company paid 53 dividends, aggregating \$42,930,000, the last dividend—50 cents per share—being disbursed in August, 1880. The dividends disbursed by Con. Virginia and California aggregate \$74,250,000.

The Atrato Mining Expedition.

REPORT OF VICE-PRESIDENT CURTIS OF THE PROSPECTING PARTY.

The following is the full text of the report which Vice-President Curtis, who accompanied the prospecting party to South America, has submitted to the Atrato Mining Company:

When the Atrato expedition was organized, it was believed that mining operations could be carried on for only a part of the year, January, February, March and a part of May. It is now known that neither the climate nor the rainy season offers any serious obstacle to continuous work for the entire year.

But the expedition was expected to accomplish its work before June 1st, and yet the party did not sail from the United States until January 27th and owing to unavoidable delays at Cartagena, Turbo and on the river, did not reach Quibdo, its destination, until May 16th, and the pump and sluices were not ready for work until the 23d. On trial of the pump on a playa, or sand bar, it was found to do all that was claimed for it. Not one-third of the available steam power was used, and yet the pump brought up more gravel and discharged it into the sluices than the water from the pipe could well wash away. So that it was often necessary to allow nothing but water to pass through the pipe.

The bar was a poor one, not one that the natives wash. It was therefore no surprise that on cleaning up but very little gold was found, and that in very minute particles. But by a very fortunate incident, a small piece of bird's wing which had been thrown into the sluices and detained, was in a short time covered all over with very fine particles of gold, showing conclusively the presence even in the surface sands of this place, of gold in good quantities, and that the reason of the poor returns from the sluices was due to the faulty construction of the same to save fine gold; this was afterwards found to be the fact; and we are convinced that the pump with properly constructed sluices would more than pay running expenses even on this poor sand bar. But there are numerous bars immeasurably richer where the pump can be worked.

But even if we had then known the fatal defects of the sluices, no time remained to remedy them. The contract time with the men had expired, but they remained until the company's property was taken care of. All articles liable to be damaged or stolen were stored; the machinery liable to be damaged by rust was protected, etc.

They also surveyed and prospected different rivers, had the company's stakes set up, and had maps of the rivers drawn and forwarded to the government; also prospected the country, and obtained all possible information and did the necessary work for the obtaining of valuable grants from the government, and private claims from individuals.

In prospecting the country, evidences of its richness for mining were found that exceeded our most sanguine expectations. Every river for over 200 miles on the east side of the Atrato and 75 miles on the west is gold-bearing.

Although not a single mine has been worked in this whole region, yet hundreds of millions of dollars have been brought down the Atrato, and the natives continue to obtain gold every year from the same bars from which it has been washed for hundreds of years, thus showing that the waters are constantly bringing it down from the mountains, and that the deposits must be immense.

For lack of time and facilities for deeper work we were

only able to do surface prospecting, but not a pan of gravel was washed that did not show gold, and it is doubtful if a pan full of gravel from the gold regions can be taken that will not show it by careful washing. Our prospecting was not in places reported to be very rich and yet our results showed an average of one dollar per cubic yard, which would be considered any where else an extraordinary showing for surface gravel.

For hydraulic mining as distinguished from subaqueous mining this country must be superior to any now known by reason not only of its great richness of alluvial deposits but of the facilities for such mining; such as plenty of water easily utilized, abundance of wood, cheap labor, provisions of the country at reasonable prices, and mining claims easily secured.

Mr. Steen by digging into a gravel bank, then tunnelling and panning the gravel, obtained \$64,000 in two years. Gold is being constantly brought to Quibdo for sale. Parties make it a business to visit the different rivers to buy it. In numerous places natives wash from five to six dollars per day.

We learned of very successful mining on the Magdalena and Cauca rivers and in Antioquia. It is generally admitted by all that the Atrato region is the richest known; and that it has not, been operated upon by mining companies is simply due to reports of its extreme unhealthiness, which our experience, inquiry and observations convince us have been greatly exaggerated.

The government officials are anxious to have the mineral wealth of their country developed, and the Atrato company have been singularly fortunate in obtaining reliable assurances from the President of the Republic, from the Governor of the Province and from the leading officials and citizens personally that exclusive grants of numerous and reliable claims will be secured to it on unusually favorable terms.

Therefore, although we have not brought home the amount of gold expected by some, we have at least done this much; we are the first and only mining company that has ever gone up the Atrato as far as Quibdo by steam; the boats, machinery and mining appliances are now at Quibdo ready for future work; we have verified the richness of the country, have proved the efficiency of the pump to raise the material from the bottom of the rivers; have secured the good will of government officials and citizens; have surveyed and obtained guarantees of exclusive valuable grants; and have ascertained that mining operations can be carried on for the entire year with reasonable exemption from dangerous sickness. And we claim that we have laid the foundation for a mining enterprise, that may be confidently regarded as a safe business venture, promising immense profits, and have also opened up a prospect of other commercial transactions with that country which may sooner or later be of great importance.

The six months' contract between Mr. Sargent and the pioneer party has expired. It now devolves on the stockholders to determine the future operations of the company. We believe that no other country on the globe offers equal inducements for mining. We trust capitalists will appreciate the opportunity.

Among other needed appliances for future operations, we recommend the purchase of a small steamer to use between Cartagena and Quibdo to secure regular communications with the United States at short intervals. There has been voted by the national government and by the States of Bolivar and Cauca a subsidy that will nearly pay all running expenses, and with a fair proportion of the trade already established, a large percentage of profits will be realized, besides giving the company free transportation for its men and supplies.

With such a boat and with sufficient funds for other needs, such as the purchase of claims for hydraulic and quartz mines in connection with subaqueous mining, time, perseverance and good judgment cannot fail to secure immense profits on the capital invested and the larger the amount of funds available the greater will be the certainty and percentage of gain.

W. T. CURTIS,

Vice President *pro tem.* Atrato Mining Co.

LODES, LEADS AND VEINS.

KATAHDIN IRON WORKS.—The Katahdin Iron Works is now one of the busiest places to be found in Maine. The improvements to the smelting works have been completed and the furnace is running very successfully, turning out about 16 tons of very superior pig iron daily and it is expected in a few weeks the daily output will be increased to between 20 and 24 tons. Developments have demonstrated that the amount of ore is inexhaustible. One large pit is now 1500 feet in length and shows ore 8 to 10 feet in width for the entire length. A tunnel has been commenced into the mountain beneath the excavations where the ore is at present taken from. The Katahdin Iron Works have never been as prosperous as at the present time. The railroad to the Works is now being pushed with

vigor and its completion will give additional impetus to the iron industry of this section.

SILVER HILL.—A night crew has been put to work. A spacious platform has been erected near the mine to sort ore on. The Silver Hill has made its first shipment of ore to the New England Smelting Works at East Boston.

NORTH CASTINE.—Supt. Leavitt reports work progressing satisfactorily with no special changes to note. The shaft is about 63 feet in depth.

DEER ISLE.—A dispatch has been received by Secretary Gould from the mine stating that a large amount of native silver has just been encountered.

SUNBURST.—Secretary Donelan writes the vein has greatly improved in appearance during the last week, exceeding the expectations of the managers. Saturday the richest ore ever found in the mine was encountered. The ore was rich sulphurets and carbonates.

COPPEROPOLIS.—The Copperopolis is the scene of active operations. The mine continues to make the same brilliant showing that has characterized the property from the start. Work is progressing steadily and successfully.

ESSEX.—Recent advices from the Essex Gold Mine of Lyman, N. H., report the sinking of the shaft as progressing most favorably, and the vein matter increasing in richness. The depth of a hundred and fifty feet will be reached within a few days, and then will be commenced the running of drifts and chambers in all directions.

MASCOT.—The Argus says: "The Mascot Mining Company was organized in Portland last week. The officers are: President, R. S. Lawrence, Boston; Secretary and Treasurer, C. W. Hobbs, Portland; Directors, Col. Charles H. Lewis, Boston, Capt. Hanson Gregory, Jr., Rockland, Charles C. Lane, Boston, C. W. Hobbs, Portland, R. S. Lawrence, Boston. The company own a very valuable property in Gorham, N. H., about a half mile north of the village. During the summer the property has been thoroughly prospected, and a very large deposit of valuable ore has been exposed. The vein has been cut at a depth of seventy feet by a tunnel 75 feet in length. The same company has bonded two valuable properties adjoining the original prospect, and will very soon be making regular shipments of ore to the smelters. The ore from the Mascot is a massive galena, and carries a good percentage of silver, and is of a class of ores much sought after by smelters. The company has prosecuted the work entirely with their own capital, and no stock has been offered for sale. In this respect they have set a good example for mine owners in Maine, where it so often happened that the stock was sold first and the mine prospected afterward. The New Hampshire Reduction Company was organized last week with the same officers as above. This company will in the course of the coming year erect reduction works at Gorham, N. H., if the present prospect on Mascot properties is fulfilled. Their charter, however, gives them power to put up works at any other point in New Hampshire or Maine, where it may be for their interest to do so."

Blue Hill.

DOUGLASS.—Matters are progressing satisfactorily. The cupolas continue to do good work. The black copper furnace is a success and turns out an excellent product. The reverberatories require repairing and in the mean time the refinery is being used, not however as a refining furnace but to bring forward the high grade matte and black copper to ingot or blister copper; in other words the refining furnace is being used as a reverberatory furnace while the reverberatories are being put in repair.

MAMMOTH.—Supt. Duff pushes operations vigorously on the Mammoth. The ledge has been cleared for a width of about 40 feet and a length of about 80 feet. Several hundred tons of rich smelting ore have been blasted out and a large quantity has been removed to the Hersey Smelting Works for treatment. The ore is very high grade sulphurets. The magnificent showing at the Mammoth has created quite a sensation in the copper camp. The sinking of a shaft in the solid ledge has now been commenced. Matte from the Mammoth ore has already been produced in the Hersey smelter.

STEWART.—Supt. Dunn continues to make good progress on the Stewart. The two new shafts are being pushed downward rapidly and have already attained considerable depth. The showing of ore is very good.

BLUE HILL.—Developments are progressing in a highly satisfactory manner. Every department of the mine and works is in excellent condition and Supt. Moyle is conducting operations with his characteristic energy.

TWIN LEAD.—President Hersey has returned from a visit to the mine and reports developments progressing rapidly underground and the crosscut has entered the vein some eight feet. Good ore has been encountered. The Twin Lead Company was reorganized in this city on Wednesday. The new incorporation is known as the Twin Lead Mining and Smelting Company, with a capital of \$500,000, divided into 125,000 shares of a par value of \$4. The new company gives a share of the \$4 stock for every \$5 share outstanding, and is organized with 25,000 shares in the treasury, and on a basis which admits of assessments. The officers of the Twin Lead Mining and Smelting Company are as follows: President, Eugene M. Hersey; Vice-President, Samuel Sterns; Secretary and Treasurer, John R. Mason; Directors, Eugene M. Hersey, Samuel Sterns, John S. Jenness, Charles Duff, Jacob Stern, Frank H. Williams and Thomas N. Egery.

GRANGER.—Supt. Granger has shipped the 100 tons of desulphurized ore to the New England Smelting Works at East Boston. The vessel was detained on her passage considerably by fog. The developments at the Granger mine progress expeditiously and the winze is approaching the 200 level.

Sullivan.

SULLIVAN.—Under date of Aug. 17th, Supt. Cahill reports to us as follows: "The improvement in the ore vein and on the 4th level east for the last week has been very marked; the entire face of drift is all ore of good quality and getting larger as we drive east. It is the first time in the history of the mine that ore was found in quantity east of No. 1 shaft, but the vein was always well defined on levels 1, 2 and 3 east, carrying ore in bunches. On the 4th level it has formed into a fine chimney of ore, wider on the floor of the level, proving that the ore vein increases in width and becomes more regular as depth is attained; heretofore the ore shutes were west of No. 1 shaft on 1st, 2nd and 3d levels, now we have them east and west of it, establishing the fact that the entire vein will be mineralized at a greater depth. Our west drift, 3d level, is in 3 1-2 feet of excellent ore. Will commence west drift, 4th level, to-morrow. The boarding house for our men will be finished the latter part of next month. I have now over 50 men employed and work is progressing satisfactorily."

FANEUIL HALL & SULLIVAN.—Supt. Hayward reports to us under date of Aug. 17th as follows: "The crosscut from the one hundred and sixty foot level has now reached a distance of sixty-seven feet and is in excellent ground, and being driven ten feet per week. We have an excellent crew of men, and never since the mine was started, has the work been done so rapidly and well as at present. The machinery continues to give perfect satisfaction and does credit to its builders. We have just signed a contract for driving the crosscut 200 feet more and when this is completed we expect to have the true Sullivan lode. Cutting the pump station has been completed and when the mason and wood work is completed it will be the finest pump station in the State. The room will be 6 feet x 9 feet, and perfectly water tight so that the pumps will be kept in as good condition underground as on the surface. The company held their second annual meeting at their office in Sullivan on the 4th of August, Mr. C. H. North in the chair. The old board of Directors were elected for the ensuing year excepting Mr. Tuttle who was obliged to resign on account of his business. Seventy thousand shares of the stock were represented at the meeting by the holders in person. The company all expressed their entire satisfaction as regards the manner in which the money had been expended and the amount of developments which had been accomplished in so short a time and feel satisfied that the property which they have for the past year sustained from their own pockets will in the end pay a handsome return, and they are as determined to-day as the day they began to find out for themselves whether there is a dollar to be made in legitimate mining in Maine."

MILTON.—The Bulletin reports work progressing continuously and vigorously. During the week excellent progress has been made in the underground developments.

British Provinces.

The new Inverness Oil Co., are about to commence boring operations at Middle River, and have also put down a well on the farm of James McLean, East side of Lake Ainslie, a quarter of a mile south of where the Cape Breton Co., are now drilling. Indications at some of the older wells, it is said, are quite encouraging.

The Sackville (N. B.) Post says: "Manganese is being hunted for all over the county. Mr. G. D. Carter is working away at the mine on Mr. Newcomb's land, and says that he has hopes of getting much for his trouble. The Hill mine is not turning

out as expected. The men knocked off work last week but have commenced again. Mr. Merrill Robinson intends working a mine of this mineral, on his property after haying is over."

Any person visiting the mining districts of this country now, must notice the great contrast these districts present to that of the past five or six years. Everywhere there are evident indications of prosperity. New buildings are going up, and the old ones are being repaired and improved. Notwithstanding the output of coal daily, the demand at many of the mines is greater than the supply, and the miners are kept to work on extra time.—[North Sydney Herald.

The Halifax New Era says: "We notice our old friends of "Rose lode" fame—Mr. G. W. Stuart & Benson Gladwin—forwarding mining tools to Antigonish for operating in a most valuable discovery of iron ore which they have succeeded in making in the County of Guysboro. This ore is known as "Specular" and experts pronounce it of the very best quality. We look upon this as one of the most valuable discoveries that can possibly be made in our Province and trust this additional interest may induce Mr. Stuart, who has been contemplating going to Mexico, to remain here."

NOVA SCOTIA GOLD MINES.—Returns of the Sherbrooke gold fields for the month of June, 1881: Days labor, 2,444; quartz, 563 tons; gold, 212 oz. 16 dwt.—The Rose lead at Montague is now up to six inches, at a depth of 230 feet. This shows an increase of about two inches and the prospects are better than ever before.—Mr. Bell, of New York, a partner of Messrs. Foster & Sons, is here and has expressed himself as being more than satisfied with the prospects of his mine.—A very rich find of gold is reported from Cole Harbour Dyke and parties prospecting have been picking pure metal from the sand without the slightest difficulty.—A new lead has been discovered on range 13 by an American company, on areas recently purchased from Mr. G. W. Stuart, out of which some splendid specimens have been taken during the last few days.—Mr. Brady has some 50 workmen on his mine at Moose River, at good wages. Mr. Plunkett, one of the parties interested, is here on a visit, and has given a financial impetus to the work. This is a flourishing mine and the quality of the quartz is said to run high.—[Halifax New Era.

General Mining Notes.

The Atlantic & Pacific tunnel at Chihuahua, Colorado, is now in over 300 feet.

Hon. John B. Alley, of Boston, has been elected President of the Oriental Miller State Line mining properties.

Since 1859, Colorado has produced about \$110,000,000 in gold and silver. Nearly one-half of the value was in gold.

The Bellevue News of Wood River says W. A. Rooks is jubilant over the prospect in his North Star mine of Boyle Mountain.

There are in Shasta county, California, 720 miles of mining ditches, which supply an average daily run of 11,000 inches of water.

The mineral belt of Tombstone, Arizona, is about three miles wide and four miles long. The mineral generally lies between lime and porphyry.

The copper product of Lake Superior mines during the year 1880, amounted in value to \$9,947,673, an increase over any previous year.

There are, in round numbers, 40 producing mines at Leadville and 5 at Kokomo and vicinity. The aggregate daily output of the 45 is 1,258 tons.

The mines of Colorado required forty-eight thousand kegs of black powder and eight hundred thousand pounds of high explosives for blasting purposes last year.

The amount of gold produced in California during the first six months of the present year was \$9,418,373 and silver \$2,980,265. This is the biggest output since 1874.

The few Indians in and about the Bodie district sell every month about \$1000 worth of gold dust, which they find in places where white men never think of going.

In two days of last week claims to twenty gold prospects in Northern New York were filed with the Secretary of State at Albany. They were all located in Fulton, Hamilton and Saratoga counties.

The diamond drill employed in exploring the property of the Duncan silver mine on the north shore of Lake Superior, has reached a depth, in one direction of over 900 feet, with indifferent success.

"Boss" Shepherd's associates in Chihuahua, Mexico, write that he is rapidly rebuilding his fortune. He now has control of twenty-one mining properties, several of which are said to be yielding very rich ore.

The Upper Mississippi lead field includes 2,000,000 acres; 200,000 in Iowa, 400,000 in Northern Illinois, and 1,400,000 in Wisconsin. The gross amount of lead produced in this field since 1827 is about \$70,000,000.

Much excitement exists in the northern portion of Napa county, Cal., over recent extensive discoveries of chrome iron. Large numbers of people are continually out prospecting and locating claims wherever they find indications.

Norway furnishes about one-third of the nickel of commerce. The first mine was opened in 1846 by an English company. The nickel is largely shipped in the shape of ore but a part is smelted at the mines. About 465 workmen are employed in the nickel mine, of that far away land.

The Carson Appeal says that Col. Ned Byrne, formerly a well known and prominent citizen of San Francisco, is working a nickel mine near Columbus, Esmeralda county, Nevada, for New York parties. The mine is opening with exceedingly good prospects and will likely be sold in Europe.

A Las Vegas, New Mexico, special despatch says: "Very rich mineral is being brought here from the Las Vegas Range. The miners demand the removal of the Mescalero Indians in order to proceed with the development of the mines. Brown quartz, bearing free gold, has been discovered in the range west of this city."

The Salt Lake Tribune claims that Utah possesses the biggest iron mines and most extensive coal deposits on the face of the earth. It is somewhat singular that Nevada lying between California and Utah and possessing largely the geological characteristics of both, does not contain a coal mine or a reliable coal indication, while coal exists in quantities in both California and Utah.

The Lewiston Gold and Silver Mining Company is the name of a corporation owning valuable mining properties in Colorado, of which company Mr. James T. Small, of Lewiston, Me., is President. The property of the company embraces four mining sites, viz., The Lead Chief, the Laura, the Hidden Treasure, and the Carbonate. They are located in Gunnison County, near Gothic, and not far from Denver.

The London papers are full of advertisements of new mining companies. One of the latest is the "Sourbach and Catir Allen Mining Company," issue of £60,000 in £10 shares. The prospectus says: "This mine is in Egypt, and the company refers to Genesis I, 11 and 12, for a description of the property." The verses referred to read as follows: "The name of the first is Pison. That is it which compasseth the whole land of Havilah, where there is gold; and the gold of that land is good; there is bdellium and the onyx stone."

A despatch from San Francisco, August 12, says: "The ledge cut by the south header of the Sutro tunnel, at a depth of 1600 feet, is getting wider and richer. It is considered by very competent miners to be the most important prospect and the great bonanza discovery. Yellow Jacket claims the ledge as its own; but as it is a blind ledge, the Sutro Tunnel, which is in possession of it, will keep it. No trace whatever of this ledge was found in the new Yellow Jacket shaft at a depth of 3000 feet. Besides, the original location of the Yellow Jacket is over one mile distant from the new discovery."

—Another important railway enterprise for the Provinces is now projected by prominent Canadian and American capitalists. It is proposed to build a line (for which the Dominion government has already granted a charter), from some point in the Canadian territory on the Atlantic coast or Bay of Fundy, by way of Sherbrooke, Montreal and Ottawa to a point on the east side of Lake Superior. A telegraph line will also be constructed and steamers put on in connection with the road. The new corporation will have a capital of \$10,000,000 and will complete its organization on the 30th of the current month.

The Cedar Spring Gold Mining Company is composed largely of prominent Boston capitalists, and is organized under the laws of Maine, with a capital of \$500,000, for the development of valuable property in El Dorado county, California, about one mile east of Placerville. An examination by William O. Sleeper, a well-known assayer and mining expert of California, proves the property to be an exceedingly valuable one. The par value of the stock is \$2 per share, and the office of the company in Boston at room 14, No. 40 Water street. Wm. M. Jewett, Treasurer of the Blue Hill Copper Mining & Smelting Company, is Treasurer of the Cedar Spring.

The San Francisco Daily Report says: "The gold mines of California are being more energetically worked than ever before, though the general public are little the wiser for it. The bullion shipments of a majority of the mines which are worked privately are never given out for publication. A gentleman who recently received \$30,000 from a mine he has been developing for a year or more told the writer that the news of the shipment was not for the public and asked that no detailed facts be given. If the product of every gold mine in California for the past six months was given to the public we believe it would create a genuine sensation."

The annual meeting of the Calumet & Hecla Mining Company was held at 19 Pemberton square, Boston, on Wednesday, Hon. G. Washington Warren in the chair. Sixty-five thousand six hundred and seven shares were represented in the meeting. The Treasurer's report showed the net earnings for the financial year ended April 30 to have been \$2,882,876.14. The following gentlemen were re-elected directors: Alexander Agassiz, Quincy A. Shaw, George Higginson, II. Hollis Hunnewell and James N. Wright. At a meeting of the directors held subsequently, Mr. Agassiz was re-elected President, and Charles W. Seabury Treasurer and Secretary.

ARIZONA COPPER SHIPMENTS.—The Copper Queen mine shipped during the month of July 150 tons of bullion. This is less than the usual monthly shipment—the heavy rains having made the roads almost impassable. There has been a material falling off in the price of copper bullion in the market. It is said the shipment from Arizona will be materially diminished unless the price of copper advances. The Clifton Copper Company has determined to stop shipments, owing to the low prices prevailing. The Copper Queen will doubtless do the same until prices enhance. The copper companies prefer to hold their bullion rather than sell at the present prices.—[Arizona Daily Journal.

Improvements are steadily in progress in Utah's great mine, the Ontario. A tunnel is being, or is to be, run from the Ontario mills to the mines, a distance of 6,000 feet, or a little over a mile. The tunnel is intended to tap the main shaft of the mine at the 600 foot level. The object of this tunnel is to draw off water from mine, which will save pumping 600 feet from above and on line of tunnel. The shaft is down some 800 feet; therefore instead of having to pump water this distance, it will be necessary to pump it 200 feet only. The estimated cost is understood to be \$180,000, and when completed and ready for work, it is likely that \$225,000 will have been spent. In addition to running off of water from mine by this tunnel, it will be used for other purposes. It is to be six feet clear in the depth, and how wide is not stated. Cars will be run in it, drawn by horses, which will necessitate its being tolerably wide. It is reported that a short branch line of the Utah Eastern Railway is to be built from present depot up to the Ontario Mill. The fact that the Ontario spends its own money, pays for all improvements, and still declares a regular dividend, has had the effect of leaving in the minds of the public no doubt as to the accomplishment of what it has set about doing.

The first works erected in Europe for the treatment of silver ores by amalgamation, appear to have been those described by Schluter as having been put up at Kingsberg for the purpose of treating the stamped ores of that district. The apparatus consisted of 18 small cylindrical vessels arranged in a circle, in which the ores were mixed with mercury, and kept in a state of constant agitation by means of a verticle spindle in each tub, the whole being worked by a large toothed wheel in the centre. It was not, however, till the latter part of the century that the attention of mining engineers on the continent became particularly directed to the process of amalgamation. In the year 1780, Phillips says, the Baron de Borne suggested to the Austrian government the propriety of adopting this system in the mining district of Hungary, and at his solicitation some experiments were instituted at the Glashutte Works, near Schemnitz. Although these trials were not followed by the introduction of this system of amalgamation into the Hungarian mines, they nevertheless gave rise to many valuable discoveries, of which the Saxon government, which had deputed a commission to attend on De Born, availed itself in the erection of the works at Freiberg. The first works were erected at Freiberg, in the year 1790, under the direction of M. de Charpentier, but these were destroyed by fire shortly after completion. The amalgamating works, commenced immediately after the destruction of the former, were completed in 1794, and closed down in 1856. The amalgamating of silver ores was at one time more economically conducted at Halsbrucke Works, in the vicinity of Freiberg, than in any other European establishment.

Work in the Starr-Grove mine goes ahead briskly. The force has been increased, and they are now working as large a force

as can be placed with advantage. Drifts Nos. 2 and 3, south, are being sent ahead as fast as possible, and in both the ledge has widened as fast as possible, and in both the ledge has widened and shows increased strength. Drift No. 3, north, has been retimbered, and is being pushed with excellent speed, over 25 feet having been run for 6 days, ending July 31. Drifts Nos. 2 and 3, south, were run as follows during the last week in July: No. 2, 24 1-2 feet, in a fine body of ore; No. 3, 26 feet, with increased ledge of fair class of ore. In both of these drifts the ledge gives promise of proving to be better than ever looked for by its most sanguine friends. There is no waste in either of the drifts, as the whole ledge mills freely. The two mills—30 stamps—are kept at work day and night on ore taken from the stopes in drifts No. 2 and 3 south, at a point about 350 feet from the mouth of the main tunnel. This is all the ore that can be handled until the new 40 stamp mill is completed. The ore taken from the other portions of the mine is piled away in the ore house and in old stopes near the mouth of the tunnel and easy of access. The water in the deepest workings of the mine is handled with ease, the pump only having to run 11 hours out of the 24. The new boiler is being set in place and the engine room at the end of the main tunnel retimbered. At this point a new incline has been started, work on which is advancing finely. Taken altogether, the Starr-Grove may be considered one of the best mines on the coast and capable of earning dividends for an unlimited period. Work on the Eagle mine was started July 26. A contract was let for running 300 feet on the tunnel, which is already in a distance of 250 feet. When 300 feet are added to the 250 feet, the manager is confident of showing a first class mine. Considerable rich ore was taken out of the Eagle in its early days, and the ledge shows some very fine ore at its present workings. Everything in and around the mine has been put in first class shape for a long and prosperous run.

Nuggets.

—A silver vein has recently been discovered in the vicinity of the Katahdin Iron Works.

—One of the storehouses on the new steamboat wharf at Blue Hill is up and boarded.

—A vessel has arrived at Blue Hill with a load of soft coal from Nova Scotia for the Blue Hill smelting furnace.

—The Silver Lake Hotel at Katahdin Iron Works is now supplied with water from the lake by an aqueduct recently built.

—Stages between Bucksport and Blue Hill now make close connection with the trains over the Bucksport Railroad to this city.

—Copp's Land Owner, a monthly issued at Washington, D. C., is a very valuable publication and is an able exponent of mining law.

—The fall term of Blue Hill Academy will commence Sept. 5th. Mr. A. G. Pettengill, a recent graduate of Bowdoin College, will be principal.

—The steamer Henry Morrison, after August 31st, will make two trips per week each way instead of three between Rockland, Blue Hill and Ellsworth.

—The gold coinage of the San Francisco mint for the fiscal year ending June 30th, was \$39,960,000. It also coined \$11,460,000 in standard silver dollars.

—Mr. F. A. Darling, of Blue Hill, has purchased in that town the lot and buildings occupied by Warren & Hancock, S. M. Whittier & Son, and the Post Office.

—The N. Y. Daily Stock Report says the total sales of mining stocks in New York during last week are officially reported by the two Exchanges as 800,466 shares.

—The lobster factory at Camden has shut down for the season after putting up 48,000 cans of lobsters in about three months, and nearly the same number of mackerel.

—Herr Krupp's great steel works at Essen, Germany, are so busy just now that 4000 additional men have been engaged, thus bringing the total number of hands up to 13,000.

—The Deane Steam Pump Company, of Holyoke, Mass., are rushed with business and are receiving many orders for large pumps. The Company have recently opened ware-rooms in Chicago.

—It is rumored that the steamer City of Richmond will next season resume her trips between this city and Portland and that another steamer will take the Richmond's place on the Bar Harbor route.

—The current issue of the New Mexican Mining News contains another valuable contribution on "Treatment of Low Grade Ores" from the pen of R. A. Varden, the well known mining engineer and assayer.

—The Sullivan Bulletin understands that Lemuel Crabtree has again commenced work on his copper mine, located in Hancock near the forks of the road leading to South Hancock, the Ferry and Ellsworth.

—The steamer Queen City will, on Tuesday next at 8 A. M., leave her wharf in this city and make an excursion to the Bagaduce region. A large number have decided to participate in the trip and a pleasant occasion may be anticipated. An excellent opportunity will be presented our citizens to behold the great mineral resources of the Bagaduce district.

—Messrs. Hayford & Stetson, the enterprising lumbermen, have recently purchased of the Second National Bank and Merchants National Bank of this city 180,000 acres of timber land, located in the counties of Aroostook, Penobscot, Piscataquis and Somerset. These lands formerly belonged to the Jewett estate and are situated principally on the St. John river.

—The U. S. man-of-war Yantic on Saturday last steamed down the Penobscot to Fort Point. Upon dropping her anchor, Mr. Russel of the popular Fort Point House gave an appropriate salute by the discharge of cannon and the hoisting of colors. During Saturday evening a ball was given in the spacious hall of the Fort Point House in which the officers of the Yantic participated.

—A property adjacent to the Mammoth mine has been bonded by Bangor and Blue Hill parties. Prospecting is to be commenced at once and the parties expect to make a big showing. It will probably be known as the Eclipse. The property is located on the easterly side of the Douglass lake and good ore crops out on the surface. The gentlemen interested have no doubt but that it is an extension of the Mammoth lode.

—A new metal has been produced in England, by alloying, which is exceedingly plastic, useful for lining bearings, and for plumber's joints. It is of close, hard texture, and has great affinity for other metals. When once "pasted on" with a soldering iron it cannot be removed by abrasion. Its melting point is only 450 deg., and it can therefore be melted in an iron ladle over an ordinary fire. It is said to contain neither lead nor spelter.

—A correspondent of the Ellsworth American says a vein of copper ore has been discovered on the property of Kenny Grindle of North Brooksville. The copper shows in a white quartz vein about twelve feet wide and running N. E. and S. W. in a direct course for the Tapley belt. The mineral crops out for a distance of about one-eighth of a mile. Two blasts have been made with very satisfactory results. The property has been bonded by I. J. Cousins and E. C. Chatto.

—The new hotel at Campobello fast approaches completion, and well it may, with so vast an army of workmen as are employed. It is now but forty-five days since the first stake was driven on the island by the Company, and on Saturday next one of the most elegant hotels east of Boston will be open to guests. It will probably be a week or ten days longer before every room in the hotel may be occupied, but every effort will be made to accommodate those who wish to sojourn at "The Owen" from the above date.

—At the Sardine Factory they have had more fish than they could take care of most of the time since the first of July. They now employ 225 to 250 hands—pay out for help \$1200 to \$1500 a week, and \$400 or \$500 for fish. About two hundred cases are packed each day. Sardines are put up in three ways—in pure olive (not cotton seed) oil, in mustard and in vinegar; and mackerel in two ways—in tomato sauce and in mustard. A case contains 100 boxes of sardines or 24 large boxes of mackerel.—[Machias Republican.

—Two months ago the Arizona Citizen of Tucson, Arizona, was the victim of a conflagration and the newspaper office with all its appurtenances was annihilated. Since that time the Citizen has been issued regularly but in a much reduced size. Within the past few days, however, we have noticed an important transformation and the current issue of the Citizen is of greater size and contains more readable matter than ever before the visit of the fire fiend. The Citizen is now one of the neatest and best dailies of the far West.

—The Boston Traveller says samples of ore from a streak lying in shaft No. 1 of the Copperopolis mine were recently sent to the Boston Ore Milling Works for examination. Professor Holliday found the ore to contain silver sulphides, bismuth sulphides, lead sulphides and copper sulphides. The value per ton for such ore would be: Silver \$70, bismuth \$64,

and copper \$15. Copper is the thing the Copperopolis management are mining for, yet these singular streaks of high-grade ore of a different character are significant.

—The Fort Point House is unquestionably the finest summer hotel on the New England coast. The appointments are of the most complete nature and everything around the buildings and grounds is arranged in perfect order. Mr. Russel of the model landlord and under his efficient management the Fort Point House has gained widespread popularity. The house is now well thronged with guests and on Saturday evenings when the number is swelled by Bangor people a gay and animated scene is witnessed. Fort Point is one of the most desirable spots imaginable to pass a portion of the summer months.

—The Morning News, Portland's enterprising penny daily, is devoting some attention to the mining interest. It alludes to Deer Isle and says there has been quite a movement in the stock of this promising mine. A few days ago it sold at \$1 and as high as \$1.25 on 60 days. There has since been a slight reaction but 75c., 80c. and 85c. have been offered without obtaining any stock. Edgemoggin seems to be a favorite stock in Portland and is stronger. Not long ago it was selling for 23 cents but has now advanced to 32 and 33 cents. Strong efforts are being made by interested parties to discover the old Deer Isle vein on properties adjacent to Deer Isle mine. A company of experts are now on the ground and others will follow.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, AUG. 17, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Aituez	2½	3	2½	2¾	...	...	2½	3	2	2½	2½	3
Atlantic L. S.	1½	14	11	...	...	...	11	12	10	12	11	11½
Atlas	...	...	...	...	...	...	...	...	...	...	...	...
Aztec	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper	3½	4	3½	4	...	...	10	11	10	11	10½	11
Brunswick	216	220	217	220	...	...	218	220	218	220	217	219
Calumet & Hecla	1½	1½	1½	1½	...	...	1½	1½	1½	1½	1½	1½
Catalpa	...	...	...	...	...	...	...	...	...	...	...	...
Central	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls	5	7	4½	5½	...	...	...	...	4	6	4	5
Contentment	...	...	...	...	...	...	...	...	...	...	...	...
Douglass	2½	...	2½	2½	...	...	...	...	2½	3	2	...
Dana	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver	¾	1	¾	1	...	...	¾	1¼	¾	1	¾	¾
Empire	...	...	40c	50c	...	...	...	...	...	...	...	...
Franklin	11	11½	11	11½	...	...	10½	11½	10½	...	10½	11½
Harslow	7	7½	6¾	7	...	...	6¾	7	6¾	7	6¾	6¾
Huron	3½	3½	3	3½	...	...	2½	3	2½	3	3	3
Hanover	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt	...	...	...	...	...	...	...	...	...	...	...	...
International	...	...	...	...	...	...	...	...	...	...	...	...
National	...	...	29	30	...	...	29	30	29	30	...	...
Osceola	...	...	...	...	...	...	...	...	...	...	...	...
Pewabic	12	12½	12	12½	...	...	12	13	11	12	12	13
Phoenix	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac	...	...	...	...	...	...	...	...	...	...	...	...
Quincy	33	33½	33	33½	...	...	33	33½	32½	33	32	32½
Ridge	3½	3½	5	4	...	...	...	...	3½	4	3	4
Silver Islet	36	37	40	40½	46	47	43	44	46	47
Star
Sullivan	3½	4	3½	4	3½	4	3½	3½	3½	4

Copperopolis Mining Company.

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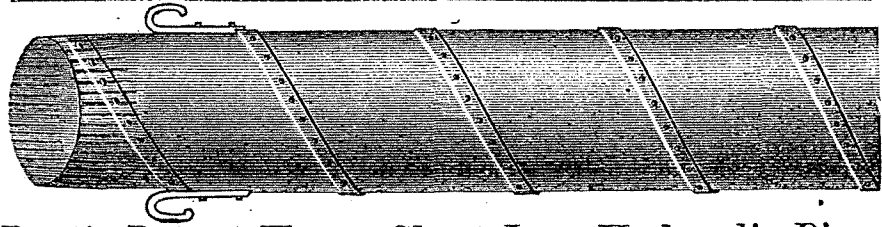
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Arrive Bangor,		7.03	11.15	6.00
Leave Bangor,	7.35		2.00	7.00
Arrive Bucksport,	8.40		3.15	8.07

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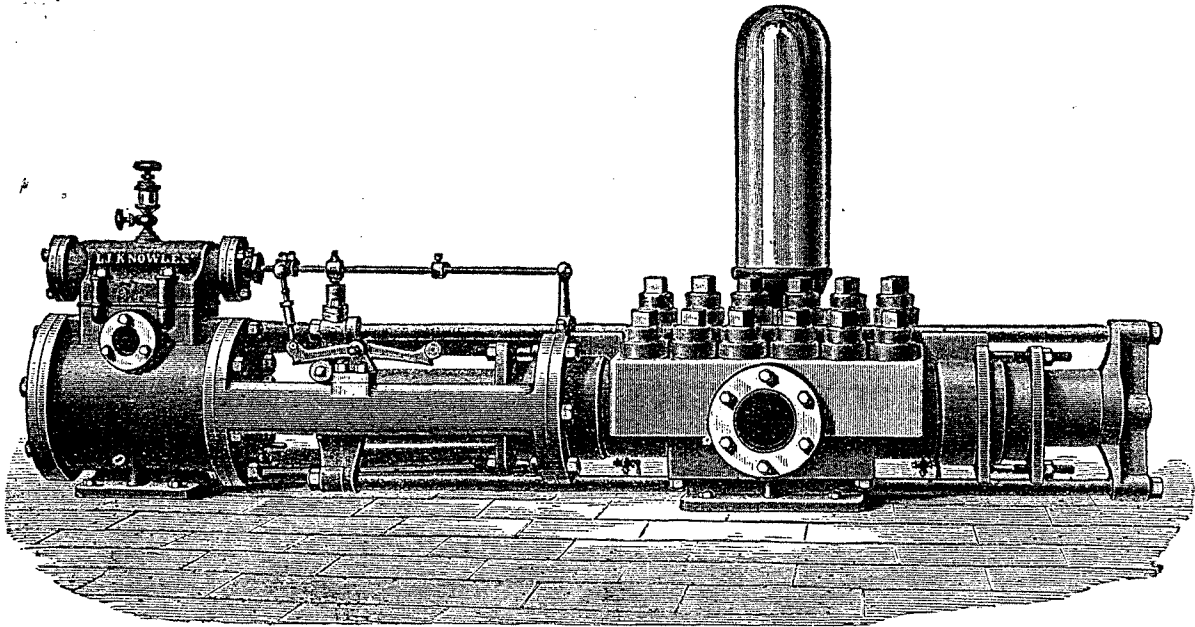
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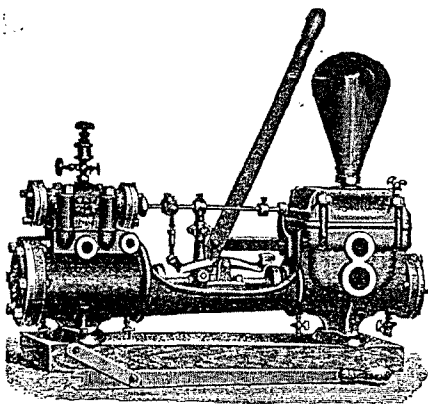
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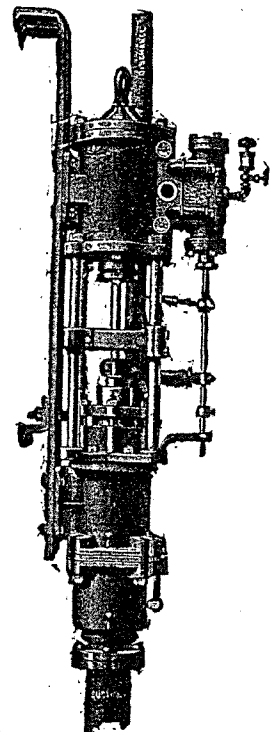


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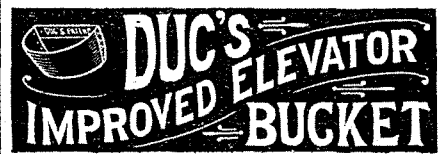
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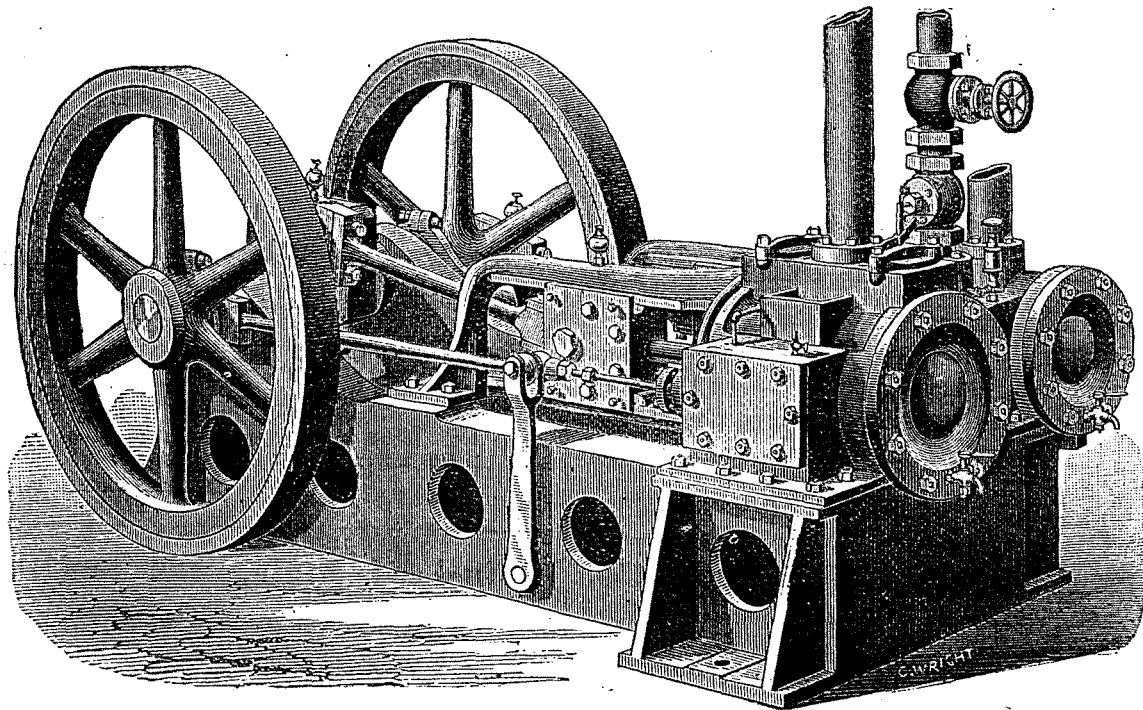


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Maine Mining Journal.

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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, AUGUST 26, 1881.

A large amount of gold is being shipped to America from Europe. The Bank of England has recently advanced the rate of discount with a view of preventing these shipments.

The Atlantic coast mines are attracting unusual attention. Experimental prospecting is giving way to practical work. Mine and stock manipulations may proceed, but the capitalists of the East are systematically and vigorously at work developing properties, which is proving the true test of value. Success in Eastern mining is more and more apparent.—[Economist.

There is very little business in the Boston stock market as nearly all the brokers are out of town either at the seaside or the mountains, and no improvement is looked for until September. Mining shares are especially neglected. At the Mining Exchange, on Wednesday, Copperopolis closed at \$1.88; Twin Lead 60 c, buyer 60 days 75 c; Milton 81 c, buyer 60 days 91 c; Empire 43 c. There have been no features of special interest during the week.

The Chicago Mining Review says: "Maine is one of the old States of the Union; yet her fields were cultivated by those who lived and died without a thought perhaps of any other wealth than that which year by year the harvests showed and measured. The hills were covered with flocks for a century, and the owners never dreamed of mines or minerals. At the present time mining in Maine has become a promising industry. A few years ago silver and copper were discovered and operations were commenced. Opposition and derision at home and abroad have met every move-

ment, but in the face of this, development has marched right on, and a change came. Mineral has been discovered in numerous locations. Capital has not been slow to comprehend the situation. A wisely conducted mining journal is firmly established, and extensive operations, with heavy machinery and all the necessary buildings and appliances, now show the confidence of the people in what has become an established business."

MAINE MINING.

The progress of the Maine mining industry is slow—terribly slow—unreasonably slow—and it is not surprising that parties at a distance who have been watching with interest the development of these eastern mines and waiting for practical results in the shape of bullion shipments and, possibly, dividends, should have become in a measure disgusted with the efforts made in this direction and be almost or quite ready to believe that the attempt to build up a legitimate and profitable mining industry in this and other eastern States has resulted in an ignominious failure.

But a failure it is not. We who are on the ground, however disappointed and chagrined we may be at the mistakes made by those who should know better, however impatient we may become at the snail-like pace with which things seem to creep along, can nevertheless see real, genuine progress in the right direction made from day to day and week to week; and so long as this be visible, even though, as is sometimes the case, it almost requires the aid of a microscope to perceive it, there is abundant cause for encouragement. As long as progress is not made backward, it is worse than folly to lose heart and view with apathy if not with derision the laudable efforts of the faithful few who are earnestly striving to overcome not only obstacles which are unavoidable but others which should not be there. We have repeatedly said, and it is true, that what is needed to make a grand success of this business in Maine is just that which has made it so successful in other states and other countries—not so much ores of fabulous richness, nor capital, nor even skilled labor and practical mining knowledge, but more SAND! With a little more cool, clear grit and a dogged determination to brook no obstacles, tempered by a due proportion of sound common sense, on the part of some of our mine managers, the other aids which are so essential to success may be secured without the asking.

The causes which have led to the subsidence of the excitement over mining affairs in Maine so universal a few months since, and which now amounts to an almost total stagnation of the interest in some districts of the State, will upon examination be found, in every instance, to be totally independent of the mines themselves; they have also been fully explained in this JOURNAL. It is not our intention to go over the ground again, at least at present. We merely wish to call attention to the fact that during the period referred to so many false and delusive hopes were held out and so many promises made which were not and never will be fulfilled that those who have continued in the business learned a lesson not easily forgotten; and as a consequence parties now engaged in operating mines do very little "blowing," but "more work and less talk" being their motto, they are devoting their energies to a quiet and steady de-

velopment of their properties, which ere long will be productive of results that will shake from their lethargic condition these same parties who, owing to the quiet manner in which the business is being conducted, have been led to think that mining in Maine was a thing of the past. It still lives, and more, it thrives and is now in a most healthful condition; but its growth is slow, slow, slow. More "sand" is what is wanted.

Personals.

CAPT. J. H. MOYLE, Supt. of the Blue Hill mine, was in the city over Sunday.

CAPT. DANIEL DUNN, Supt. of the Stewart mine, made a brief visit to Portland last week.

MR. A. W. PETERS, Chairman of the New York Mining Exchange, is rusticated in New Brunswick.

MR. M. S. SMITH, Supt. of the Harvey Eliot mine, was in the city on Tuesday last and favored us with a call.

F. H. WILLIAMS, ESQ., having fully recovered from his recent indisposition, returned to Boston on Monday last.

T. BRIGHAM BISHOP, of Boston, the well-known broker, paid a visit to the North Castine mine on Wednesday last.

F. R. NOURSE, ESQ., Treasurer of the Sullivan Mining Company, has been on a brief trip West as far as Detroit.

COL. CHARLES H. LEWIS, President of the Milton, is visiting the White Mountains, accompanied by his family.

B. P. PALMER, ESQ., managing editor of the Boston Daily Globe, visited Blue Hill last week and examined the mines.

MR. A. E. BARCLAY, Supt. of the Hersey Smelting Works at Blue Hill, was in the city early the present week and favored us with a call.

FRANK BLAKE, the miner so badly injured by a premature blast at the Cape Rosier mine some time since, has been removed to the Maine General Hospital at Portland.

MR. WM. D. LEWIS, of Boston, was in the city on Saturday and called on the MINING JOURNAL. He left for Fort Point to pass Sunday and it was his intention to visit Blue Hill before returning to the Hub.

FRANCIS WORCESTER, ESQ., says the Sullivan Bulletin, has returned to his beautiful summer residence at Sullivan, and is rapidly recovering from the effects of his severe illness during his recent visit to Boston.

S. DANA HAYES, formerly a State assayer of Massachusetts, whose mysterious disappearance some time since will be remembered, is said to be living in Denver. A former resident of Boston has met him twice, and says that he cannot be mistaken about his identity.

PROFESSOR W. F. STEWART spent the Sabbath at the Bangor House and was warmly greeted by his host of friends in this city. He made a hurried visit to Blue Hill and returned to Boston Tuesday evening, whence he leaves again for Denver next week.

A party of Boston gentlemen embracing GEO. E. HARRINGTON, President of the Copperopolis Mining Company, J. A. EVANS of the banking house of Evans & Doane, J. J.

McDAVITT and T. E. MAJOR, have visited the Milton and Copperopolis mines during the past week.

B. S. GRANT, ESQ., of Boston, a Director in the Sullivan Mining Company, passed through the city Wednesday evening on his return from a visit to the mine. Mr. Grant speaks in the highest terms of its present condition and is highly enthusiastic over its prospects for the future.

GEORGE DALY, well known in all the principal mining districts of the country, was shot and killed by the Apaches last week, near Lake Valley, New Mexico, while pursuing them with a company of soldiers and citizens. George Daly, says the Tribune, was 38 years of age, small in stature, of slight figure, and of almost boyish appearance. He was, however, full of enterprise, and brave almost to rashness. Originally a printer and newspaper writer, he was, in the early days of the Comstock, connected with the Territorial Enterprise, and then drifted into mining. From Virginia City he went to Aurora, Nev., as manager of the Del Monte mine, and was also afterward employed in Bodie, Cal., where his determined resistance to the demands of the miners' union, gave him a reputation throughout the mining camps of the West. He was manager of the Little Chief and Chrysolite mines in Leadville, Col., at the time of the miners' riot in 1880, and was a leading man in quelling the disturbances. After the killing of Lieut.-Gov. George B. Robinson, Mr. Daly was placed in charge of the Robison Consolidated mine, where, under his supervision, order was soon restored. Early in the present summer he went to New Mexico to take charge of the mines belonging to Col. George D. Roberts, Hon. J. B. Alley and associates of this city. He was a warmhearted and impulsive man, and his death adds another to the list of active young men killed by the Indians.

New Mexico Mines.

New Mexico has long been considered one of the richest mineral territories in the United States, but so many and serious have been the obstacles in the way of operating her mines profitably and to advantage that it is only recently she has attracted the attention from capitalists that her merits in this direction deserve.

The principal drawbacks have been inaccessibility and lack of transportation facilities, and the Indians. Now, however, several lines of railroad having been extended through the territory and many of her rich mineral regions thus brought within easy reach of the great commercial centres, there is every prospect that the rich and apparently inexhaustible deposits of the precious metals known to exist in her mountains will be speedily brought to light. The Indians, although somewhat troublesome just at present, confine their depredations to comparatively a small portion of the territory and it cannot be long, in view of the rapid rate of settlement, before all danger to life or property from this source will have ceased to exist.

Messrs. T. A. Holland and L. C. Friend, the former an oldtime resident of this State and both practical miners of many years' experience, are now in this city and are desirous of disposing of a portion of some valuable mineral lands to which they hold U. S. Government titles, for the purpose of bringing the remainder into notice and enabling them to secure the necessary funds for development. These gentlemen come well recommended, having the best of references, and the samples of ore (which may be seen at the Penobscot Exchange) are by all odds the finest which have ever been shown in this vicinity.

The claims owned by these gentlemen are thirty-seven in number, (three of which have already been sold to Lewiston parties) each 1500 x 600 feet or about 21 2-3 acres, situated in the San Andres mountains, Socorro county, New Mexico. They are in close proximity to railroad facilities, the most distant claim being but 27 miles and the nearest 8 miles from San Marcial station on the Atchison, Topeka and Santa Fe R. R. There are also excellent wagon roads to the mines and the country is well watered and has an abundance of good timber.

Twenty-three of these mines are lead and silver and the balance copper, gold and silver, the copper running upwards of 60 per cent. or over \$200 per ton. The copper vein is a true fissure with a streak of four feet solid ore, and has been traced for a distance of 2 1-2 miles. It is a contact vein, one wall being black granite and the other limestone. The ores, as shown by the samples, are of that class known as free smelting and contain no base metals whatever although the specimens were taken directly from the surface. The copper ores consist of red and black oxides and carbonates, carrying gold and minute particles of chloride of silver.

Messrs. Holland and Friend are desirous of disposing of alternate claims to parties who will proceed at once to develop them. Their object is, not to make money by the sale of these properties, but by *working* them. Consequently one of these claims can be bought for \$500 cash, with the understanding that two-fifths of the stock shall be given the parties selling, and another fifth placed in the treasury of the company for purposes of development. This is the proposition of these gentlemen, if we understand it correctly. If the properties are as represented, and we doubt not they are, this is a most favorable opportunity for the profitable investment of a small sum of money.

Messrs. Holland and Friend will remain at the Penobscot Exchange several days, where they will be pleased to meet all who may be interested in such matters and furnish any wished for information.

Dips, Spurs and Angles.

- The greatest show on earth—a perfect man.
- The sagacious few harvest the experience of the head-long many.
- Oleomargarine can't stand the heat like boarding-house butter. It is not strong enough.
- The Boston Star hears a rumor that a graphite mine has been discovered in Pencil-vania.
- The paying teller of a bank is a hand sum man.—[Rome Sentinel.] And the cashier often a non est man.—[Cambridge Tribune.]
- When a miss found out, the other day, that lime doesn't grow on the lime tree, she exclaimed, "Well, I never!" Now she wants to know where they dig pickled limes.
- A shift boss at the Richmond furnace, Eureka, Nev., threw a laborer into the feed-hole of the furnace. A heavy charge covered the flames, and the other workmen pulled the man out before he had sustained any injuries.
- Four years ago a young man, without a cent on his back, and only one suit of clothes to his name, entered Denver and begged his supper. Last week he eloped with his employer's wife and ten thousand of his cash. Close application to business coupled with pluck and industry, wins every time.—[Norrilstown Herald.]
- "Are you engaged?" said a gentleman to a young lady from Marysville at a ball the other evening. "I was; but if that Pete Johnson thinks I'm going to sit here and see him squeeze that freckled-faced Wilkins girl's hands all the evening he'll be mistaken, solitaire or no solitaire." The gentle-

man explained and went out to get air.—[Nevada Transcript.]

—"Pa," quoth Sammie to his sire, "why don't you go out West?" "Why do you ask, my boy?" "Because Bill Higgins's father went and he struck a banana?" "A bonanza, you mean, Sammie!" "Well, what's the difference?" "Why, when people strike a bonanza it sets them up, and when they strike a banana it sets them down, and very emphatically, too."

—We can safely report the output in the line of new babies at this camp as immense. Judging from surface indications there'll be several more new discoveries made soon of this valuable product. If the output of high grade ore from our mines were only correspondingly magnitudinous, we should have the most prolific camp in the world.—[Arkansas Mining Journal.]

—There is a mine in Colorado named the "Printer Boy" and another the "Printer Girl." If the claims were consolidated base bullion might probably be the result.—[Frisco Times.] That might depend upon how successful a run was made from the products of the consolidation. If properly concentrated there might be results that would "wake the natives."—[Arkansas Mining Journal.]

—Quang Long, an Erie Chinese laundryman, had just returned to his Flowery Land home. Altogether, his six years' sojourn in that city has been quite satisfactory. He has saved over \$2,500, can speak fair English for a Chinaman, can play euchre, has acquired catarrh, and goes back a Free-Will Baptist. Could an American in China hope to accomplish more in the same time.—[Chicago Tribune.]

—An esteemed friend of the Optic at Fort Sumner, L. W. Hale, has sent us the index finger of "Billy, the Kid," the one which has snapped many a man's life into eternity. It is well preserved in alcohol and has been viewed by many in our office to-day. If the rush continues we shall purchase a small tent and open a side show, to which complimentary tickets will be issued to our personal friends.—[Las Vegas Optic.]

On Smelting Blue Hill Copper Ores.

BY F. L. BARTLETT, STATE CHEMIST.

To the Editors of the Maine Mining Journal:

Now that smelting is fairly inaugurated at Blue Hill and, moreover, since so much depends upon making the business successful, it does not seem unjust or unfair to discuss the processes at present in use there; and if need be to criticise any part of the same. The public look upon this, the inception of smelting in Maine, with far more than usual interest, and our aim in this article is to describe somewhat in detail the methods used and familiarize the readers of your paper in some degree with the art of copper smelting; if we happily succeed in doing so they will then readily understand some of the many difficulties to be met in successfully smelting the Blue Hill ores.

FURNACES.

Copper smelting furnaces are of two kinds—viz.: blast or cupola furnaces and reverberatories or "wind" furnaces. The latter kind are used entirely in England and Wales and nowhere else to any extent; the former are in use in the United States, Sweden and Germany to the almost entire exclusion of the reverberatories; that is to say for the production of the first matte, or in other words for the first smelting of the raw ores. Undoubtedly the reverberatory furnace is capable of smelting the most complex and also the greatest variety of ores, and is made easier to manage and the cheapest to build; but unfortunately it is a great consumer of coal and it cannot be used with financial success in places where soft coal costs so much as with us. In England and Wales where coal only costs, delivered, from \$1 to \$2 per ton, it is unquestionably the best furnace to use, but here we must depend upon the blast furnace for obtaining our first matte in copper smelting.

Blast furnaces are built in several forms, rectangular, square, octagonal, and round. As a blast furnace is in its simplest form nothing but a fire box provided with apertures for forcing in air at more or less pressure thereby, burning the fuel at a furious rate and with intense heat, it stands to reason that

much depends upon the *form* of the furnace and the number of blow holes, or "tuyers" provided for the blast to enter. It is reasonable to suppose that the more equally the blast be divided the better the results. In operation, ore and fluxes are charged into the blast furnace along with the coke or other fuel as fast as the furnace will melt it. Now it is evident enough that if there are any corners or "eddies" in the furnace not reached by the blast, what ore enters those places will not melt so readily but will soon form a half melted bunch or "bear" which will either drop into the bottom of the furnace or remain, in either case the result being an accretion which will soon cause the furnace to stop running; when one side will have to be removed in order to get at the obstruction and remove it, thus causing much delay.

It follows then that it is almost vitally essential that there should be no corners and that the blast should be so subdivided as to reach all parts of the interior of a blast furnace and that the nearer the furnace shape approaches to a circle and the greater the subdivision of the tuyers the better the results must be. In Germany, where we may look for perfection in blast furnace smelting, all square, rectangular, and oblong furnaces have been discarded and either the round or octagonal ones, having not less than eight tuyers, are in use, which are found infinitely superior both as to quantity smelted and length of campaigns.

Now, unfortunately, through some one's advice probably not familiar with the ore and who certainly must have been sadly behind the times, the old-fashioned "square" three-tuyer furnaces have been adopted at Blue Hill. Four feet square inside furnished with a blast through three sides which enters by tuyers large enough for good sized cannons! These furnaces are expected to successfully cope with the silicious ores of the district. The exponents of this style of furnace claim that they have worked well enough at Capelton and Vershire, all of which may be true, but it does not follow that other kinds would not have worked much better. Yet the prime difference between these furnaces working at Blue Hill and the places mentioned is found in the composition of the ore. At Vershire a 7 per cent. copper ore contains only 10 to 15 per cent. of silica while the Capelton ores contain even less. A 7 per cent. Blue Hill ore contains from 40 to 60 per cent. of silica, "a cat of quite a different color;" consequently the Capelton process and furnace cannot be expected to work the same on Blue Hill ores as on the Capelton ores.

Now, following this criticism, if the style of furnace adopted is bad, the unscientific methods of smelting have been infinitely worse. The smelting of half roasted ores, of ores in huge pieces, raw ores fed in, gravel, and the addition of limestone *ad infinitum* cannot rank as scientific smelting and show an almost utter want of the knowledge of the simplest laws of chemistry on the part of those engaged in the work. "Practical" smelters seem to have been plenty enough but no "chemical" men have come to the front in smelting thus far at Blue Hill, and had the ores not been extremely tractable we should not have got as good results as seem to have been attained. There is no doubt but the Blue Hill ores can be smelted at a good profit. The quality of the ores now being raised in the district is all that can be asked and the quantity is very large and both quality and quantity are constantly improving and increasing with depth. When once the problem of smelting is understood thoroughly we have reason to expect a large output from the mines. There is a disposition on the part of the owners to see this problem successfully worked out and we have no doubt it soon will be.

SMELTING

Any ore successfully means the formation in the furnace of two definite *chemical* compounds, both fusible, one of which shall contain the worthless rocky material to be thrown away, the other to contain all the valuable metals in a concentrated form for further treatment. The science is one of exceeding chemical exactness and requires on the part of the smelter a thorough knowledge of the chemical combinations of metals and bases,—guess work and experiments are strictly inadmissible,—nothing but definite and true proportions will give good results in a blast furnace.

The Blue Hill ores consist essentially of Sulphur, Iron, Silica and Copper in about the following average proportions:

Silica.....	46.00
Sulphur.....	26.65
Iron.....	20.30
Copper.....	7.05

Thus we find the Silica predominates over either of the other elements, and if the ore be charged in the raw state into a furnace the sulphur, copper and iron will melt very easily and run away from the silica but no separation of the copper would take place and nothing would be gained. Now it is a fundamental law that oxide of iron and silica will unite at a moderately high temperature and form a silicate of iron in several defin-

ite proportions; also that sulphur has a greater affinity for copper than for iron, and if a certain quantity of sulphur, iron oxide and copper be charged together into a furnace the copper would first take up a definite quantity of sulphur, and if any excess should happen to be present it would then go to the iron. These two laws represent about all there is of the process of smelting the Blue Hill ores; bearing this in mind let us apply it to the reduction of the ores in question. First, then, we must get rid of the sulphur and reduce the iron to the state of an oxide. Roasting the ore in heaps will not answer for the Blue Hill ores on account of their easy fusibility when exposed to the natural draft of "pile" roasting. Kilns must be resorted to and these must absolutely be provided with means of regulating the draft to a nicety. The ore should be broken quite fine (egg size) for the double purpose of better roasting and preventing the passage of large lumps of silica into the blast furnace, (the writer has seen lumps of almost pure silica as large as the two fists fed into one of the blast furnaces at Blue Hill) as pieces will always be found in the ore which have escaped the eyes of those dressing the ores. So long as the ore contains above 30 per cent. of silica, "pile" burning will never be successful with the Blue Hill ores. In the first place the ore will sinter and melt together and not roast down to less than 12 per cent of sulphur, and in the second place a large part will roast into a *sulphate* instead of an oxide, and the first rain that comes will wash out fully 20 per cent. of all the copper contained in the ore. Actual test has shown this to be a fact. Some move has already been made towards kiln roasting at Blue Hill and it is a move in the right direction.

Allowing that our ore has been well roasted, so as not to contain a greater percentage of sulphur than there is copper,—for instance a 7 per cent. ore after roasting should not contain more than 7 or 8 per cent. of sulphur—what is next required? The silica and iron must be adjusted to each other. There is a large excess of silica present in the Blue Hill ores; two things will offset this, the addition of more oxide of iron or the addition of limestone. Of the two fluxes the iron oxide is really to be preferred, because it makes an easier flowing slag, it acts less on the linings of the furnaces and it makes a much cleaner slag. Limestone makes a stiff slag which prevents the matte from collecting so cleanly as from a "silicate of iron" slag. One thing must be remembered in this connection that unless the ore be properly roasted it is useless to add more iron as it would only make a bad matter worse, but if the ore can be properly roasted the addition of the proper amount of iron will give splendid results and no trouble will be found in producing a first matte of 40 to 45 per cent. From experiments tried at the Portland Smelting Works it was found that when 5 per cent. Blue Hill ore was roasted down to 5 per cent. of sulphur and smelted with the addition of 20 per cent. of roasted "mundic" (like the Capelton ores, 3 per cent. of copper, only 2 or 3 per cent. of silica and the rest oxide of iron) the results were all that could be desired (and just here we would take the liberty to state that there are thousands of tons of "fines" to be had at the Capelton mines which might be shipped to Blue Hill for about \$4.00 per ton); the addition of 17 to 20 per cent. of this ore to the Blue Hill ore, having it roasted together, would ensure a product that could not fail to smelt with the best of results. This fine ore contains 3 to 3 1-2 per cent. of copper so that the extra yield of copper would more than pay the first cost of the ore and the transportation from Canada. This would be far better than using limestone which is only so much dead material besides entailing waste and greater wear of the furnaces. If round or octagonal furnaces were in use at Blue Hill 10 or 12 per cent of this ore would be quite sufficient for good smelting.

Before closing we wish to state that the arguments used in this article are not *mere theories* but on the contrary are based on actual smelting experiments of the ores in question. We have also made analyses of the ores in all the different stages from raw ores to ingot copper in order to find what is required so nearly as may be possible.

In summing up it would then seem that what is most required at Blue Hill are:

1st, Furnaces containing a greater number of tuyers and to be run by pressure blowers instead of fan blowers.

2nd, A better system of roasting and that the ore be broken finer.

3rd, That "mundic," if possible to obtain, be mixed with the ores instead of limestone.

4th, The smelting mixture should be so prepared as to contain about as much sulphur as copper with the proportion of silica and oxide of iron about equal.

In smelting it must be remembered that you cannot *force* two elements to unite in a blast furnace and they will only unite on condition that the right proportions are used.

With all the advantages before us there is no reason why the Blue Hill mines may not put copper metal into the market at a lower rate than any other copper mining district in the world.

Treating Maine Ores in Europe.

To the Editors of the Maine Mining Journal:

DEER ISLE, Aug., 19, 1881.

It is known to the readers of the JOURNAL and many gentlemen who are interested in mining in Maine that I have recently returned from Europe where I obtained some information in regard to the treatment there of ores similar to the varieties which are found and being mined in this State. Some of the general details and results of my observations will I think be not only interesting to people here, but will I trust tend to do away with the feeling prevalent that Maine ores can not be profitably treated.

The process by which complex ores are now being treated at Swansea, at one establishment where about 250 tons per week are worked, is as follows:

- 1st, The ore is ground to a coarse powder.
- 2d, The ore is then calcined in muffled furnaces at a moderate heat, to drive off the sulphur, the sulphurous fumes being collected in leaden chambers and towers, for the manufacture of sulphuric acid in the usual way.
- 3d, The ore is then placed in a revolving pan (somewhat similar to a mortar mill) containing sulphuric acid diluted with hot water. The diluted sulphuric acid at once takes into solution nearly all the zinc and copper, leaving all the lead and silver undissolved in the ore. The latter is now in a suitable condition for smelting in the usual manner in cupolas or reverberatory furnaces.
- 4th, The solution of zinc and copper is then drawn off into tanks, where any fine particles of the ore settle as a mud, which latter contain lead and silver (being in fact the finer portions of the ore) and is suitable for smelting as above.
- 5th, The copper in solution is then precipitated in the customary way, by iron, forming a copper precipitate, at once suitable for the copper smelters.
- 6th, The remaining liquor, which contains the sulphate of zinc, is then drawn off into pans, and evaporated until it becomes a thick mud, when a certain quantity of raw or uncalcined blende (zinc ore) is added. The desiccation is carried still further until a dry mixture is obtained of sulphate of zinc and raw blende. The blende is added to decompose the sulphate of zinc in the next operation.
- 7th, The mixture is placed in close ovens and there heated to redness. The sulphate of zinc is disengaged (derived from the sulphate of zinc and added blende) and conveyed to leaden chambers for production of sulphuric acid, while the zinc remains in the state of oxide, suited for the production of metallic zinc in the usual manner.

Thus, from this brief description, it will be seen that all the metals contained in the ore are utilized and that the agent used for the purpose (viz., sulphuric acid) is obtained from the ore itself.

The company who are now working the above described process are desirous to purchase ores in any quantity and additional works are now being built so there is not much danger of any surplus of ores. They will buy the ores outright, and pay so much per unit for zinc, lead and copper, and per ounce for the silver and gold, the price paid being based upon the market value of the several metals. As an illustration, the allowance for an ore containing 30 per cent. zinc is now about £2 per ton, while by any other process for any silver ore containing zinc deduction is made for the presence of zinc.

I have tables which will enable me to estimate the value of any complex ore at Swansea, and if parties having or who can produce ores containing zinc, lead, copper, silver and gold will send to me an analysis of their ore, I will be most happy to give them the approximate value, and also to give such information as they may require in regard to shipping. The cost of shipping by cargo by sailing vessel will be about \$5 per ton of 2240 lbs.

The Deer Isle Company will ship all they can this season and next year I anticipate we shall be able to have a line of steamers running from here to Swansea, as one of the peculiarities of English navigation seems to be that they can carry freight as cheap by steamers as by sailing vessels.

At some future time I may ask to give your readers some features in regard to copper smelting both at Swansea and at Freiberg. At the latter place they have reached close to perfection in the absolute extraction of everything of value in the ores they treat.

CHARLES W. BRYANT.

—Four coast survey parties are at work in Maine. One is at Cape Split in Addison, under charge of C. H. Boyd; one at Harrington, under charge of William H. Dennis; one at Millbridge, under charge of A. W. Longfellow, and a fourth under charge of Mr. Charles Hosmer, who is surveying coast and islands in the bay below Millbridge.

The Nova Scotia Gold Fields.

[Extract from a Paper read before the Society of Arts, London, England, by J. Arthur Philips, M. E.]

The whole of the Atlantic shore of Nova Scotia is bordered in an unbroken line by strata of a metamorphic character, and probably of great geological antiquity, frequently broken through by eruptive rocks. These form a coast, in some places low and rugged, and in others boldly undulating. Their soil is generally rocky and sterile, although there are large tracts well covered with timber, and affording prosperous agricultural settlements. Along the Atlantic shore this district is generally low, gradually rising to a height of some three hundred feet as it advances northward. Its coast line has, according to Dr. Dawson, a general direction of south sixty-eight degrees west, whilst its inland boundary, although presenting some considerable undulations, has a direction of south eighty degrees west. The extreme breadth of this band at Cape Canseau, its northern extremity, is about eight miles; whilst in its extension westward it gradually increases until, at the west branch of St. Mary's river, eighty miles west of Cape Canseau, it is known to be thirty miles wide. In the western counties, its width has not yet been accurately ascertained, but here its entire breadth cannot be far short of fifty miles. Its total length corresponds with that of the peninsula of Nova Scotia. This band, in which almost the whole of the gold discovered has been found, chiefly consists of thick bands of slate and quartzite highly inclined, and having a general northeast and southwest strike. In different localities these rocks, which probably belong to the silurian epoch, have been penetrated by masses of granite, and in their vicinity the quartzite and clay slates usually present a highly metamorphosed appearance. *

* The most remarkable deposit of auriferous quartz hitherto found in Nova Scotia is undoubtedly that at Laidlaw's farm (now Waverly district). The principal workings are here situated near the summit of a hill composed of hard metamorphic shales, where openings have been made to a depth of some four or five feet upon a nearly horizontal bed of corrugated quartz of eight to ten inches in thickness. This auriferous deposit is entirely different from anything I had before seen, and when laid open presents the appearance of trees or logs of wood laid together side by side after the manner of an American corduroy road. From this circumstance the miners have applied the name of "barrel quartz" to the formation, which in many cases, presents an appearance not unlike a series of small casks laid together side by side and end to end.

The rock covering this remarkable horizontal vein is exceedingly hard, but beneath it for some little distance it is soft and somewhat more fissile. The quartz is itself foliated parallel to the lines of curvature, and exhibits a tendency to break in accordance with these stræ. The headings, and particularly the upper surfaces of the corrugations, are generally covered by a thin bark, like coating of brown oxide of iron, which is seen frequently to enclose numerous particles of coarse gold, and the quartz in the vicinity of this oxide of iron is itself often highly auriferous.

The other gold veins of the province present, generally speaking, few distinctive peculiarities, and very closely resemble those found in California and Australia. Their general course is north sixty degrees west, and their dip toward the south, but there are not infrequent exceptions to this rule. In addition to gold, the most auriferous veins of Nova Scotia contain variable quantities of iron pyrites, mispickel, galena, blende, and less frequently a small proportion of argentiferous and auriferous sulphide of copper. Here, as elsewhere, the presence of the sulphides, is regarded as a favorable indication of the richness of a vein, and leads containing much disseminated galena almost invariably yield a remunerative quantity of gold. The productive veins hitherto discovered have, as before stated, been found in the older rocks on the Atlantic shore, and commonly occur in parallel groups, near the centre of which, and parallel to the productive veins, a large reef of crystallized and comparatively unproductive quartz is in many instances found to run. These large courses are locally called "bull veins," and usually contain small quantities only of the precious metal.

The attention of the Nova Scotia gold miner has, contrary to the usual practice, been almost entirely directed to the exploration of the veins of gold quartz, and alluvial digging has consequently been all but entirely neglected. There is, however, every reason to believe that a careful examination of the alluvial deposits would lead to the discovery of large quantities of gold. * * * * *

The thickness of the auriferous veins is, perhaps, less than those of California and some other countries, but they are, generally speaking, richer in visible gold than the average of those I have seen in any other part of the world. It must also be taken into consideration that Nova Scotia possesses many de-

cided advantages over both California and Australia. Each of these countries is situated a great distance from Europe, and can only be reached after a long and expensive passage, and, as a natural consequence, wages were for a long time exceedingly high, and provisions proportionately dear. Nova Scotia, on the contrary, is within an easy distance, both from Europe and the United States of America, and possesses a considerable settled population of intelligent, industrious and sober people, eminently adapted, after a little experience, to become steady and efficient miners. The whole of the gold-bearing portion of the province also lies within a convenient distance from the coast, which abounds with magnificent harbors, affording ample security to shipping, whilst wood in large quantities is to be everywhere procured for all description of mining uses, and an abundant supply of water is generally to be met with for the purposes of washing and amalgamation.

LODES, LEADS AND VEINS.

MILFORD, MASS.—Advices from Milford, Mass., are as follows: "A geologist from Boston, who recently visited the gold mines in North Milford, states that, considering the indications, work should be pushed vigorously forward. Help is very scarce, owing to the building of the water-works, and the superintendent desires to put in a steam engine and push the excavations night and day. Rumors of 'indications' now reach us from all quarters, and considerable excitement prevails."

ELY.—At the great Ely mine in Vermont, three new tubular boilers have just been set with the Jarvis furnace. They were made at Fitchburg, Mass., by D. W. Dillon.

SILVER LAKE, N. H.—This mine, the controlling interest of which is held in New York, is now in good working order. A thirty-ton concentrator is at work, there being at present 16,000 tons of ore on the dump to be worked. A vein of pure galena has just been struck 3 feet thick at the bottom of the mine. For a silver, lead and zinc mine this is one of the finest properties in the United States. It is situated at Madison, New Hampshire. The stock is tied up in this city. The president is David L. Dodge, and the secretary, Judge A. G. Gilbert.—[Financial and Mining News.

MASCOT.—Mr. C. W. Hobbs, treasurer and general manager of the Mascot mines, Gorham, N. H., reports for the week ending August 20: "The tunnel has been driven west 11 feet during the week, the three shifts doing good work; total length of tunnel to date, 81 feet. Have also made a landing on the surface above on the vein, and begun the incline. The facing shows a handsome body of ore, laying in streaks, running toward the hanging wall. On the Galena King the upper No. 1 level, near the top of the cliff, has been advanced twenty feet, under the hanging wall, taking about half of the vein. The workings have yielded ten tons of fine ore. I calculate that in thirty days the mines will produce from twenty to thirty tons daily."

PORTERFIELD LEDGE.—The Rockland Opinion says the Porterfield Ledge Mining Company have secured space in the ore exhibition of the New England Mechanics' Fair, now being held in Boston, and have forwarded 400 pounds of ore from their mine to be placed among the exhibits. Work on the Porterfield Ledge mine is progressing rapidly on the main vein, which has recently been struck again and found to be very much richer than above or than was expected at the present depth.

DEER ISLE.—A special meeting of the Board of Directors of the Deer Isle Silver Mining Company was held last week at their office in Portland, at which Mr. C. W. Bryant gave a full report of the results of his investigations during his recent visit to Europe, and the following vote was taken: "That the Superintendent be directed to push the work of getting out and preparing ore for shipment as rapidly as possible, and that the President and Mr. C. W. Bryant be authorized to make all necessary contracts and arrangements to ship the ore to Swansea from the present time to Jan. 1, 1883, according to the time of the contract proposed by Messrs. Richards, Powell & Co." Supt. Dickson reports to Mr. Geo. F. Gould, Secretary of the Co., under date of Aug. 22, as follows: "We are sinking the winze on 130 feet level; it is all in solid ore of a superior grade. Our progress is not as rapid as it will be when the blower is in place, which will be on Wednesday of this week. We shall then commence stoping from the 180 level upwards. I am taking out and have sent you some very rich specimens of native silver from the stope on the 100 level."

CROSS ISLAND.—The copper lode on Cross Island, Machias Harbor, Me., which Captain Charles Deering of the steamer Leviston has owned for the past two years, has just been thoroughly explored, and it is claimed, found to extend for over

1500 feet across the island. Captain Deering states that while the richly mineralized vein is twelve feet wide, the pay streak starts at the surface, about nine inches wide, increasing in size and richness as it deepens. The assays from average specimens at the surface are said to show 34 per cent. metallic copper and very liberal parts of precious metals. The developments being made on this property have been and are a private enterprise.—[Advertiser.

SUNBURST.—Secretary Donelan of the Sunburst Copper and Silver Mining Co. writes that good progress is being made and the vein is constantly growing wider and better. The ore is coming in richer and in greater quantity. We acknowledge the receipt of some handsome specimens, sent by mail.

FRANKLIN.—At a meeting of the Directors of the Franklin Silver Mining Company, held in this city August 24, the following officers were chosen for the ensuing year: President, Jerry Wooster; Treasurer, Henry G. Wooster; Secretary, T. J. Hodgkins; Superintendent, Marcus Mullan; all of Hancock. It was voted to call a meeting of the stockholders for September 19, 1881, at the store of J. Wooster, Esq., in Hancock, for the purpose of taking measures to reorganize the Company upon an assessable basis. See notice in another column.

COPPEROPOLIS.—The Bulletin says work is going on steadily in both shafts, and a marked improvement is apparent in the quantity and quality of the ore on its downward course. The Copperopolis House water works and stables are being pushed to completion as rapidly as possible, and when finished will be of great and lasting benefit to the valuable mines in this locality, and to the travelling public in general.

HARVEY ELIOT.—The property now known under the above name is the easterly extension of the "Custer," now the property of the Copperopolis Mining Company. It is owned by Messrs. Barney Mullan and M. S. Smith, of Ellsworth, and several New York gentlemen of unlimited means. The showing is identical with that of the Copperopolis. A considerable amount of work has been done in a quiet way during the present season, and several shafts have been started and driven to a depth where the water has become too troublesome to be handled by the rude appliances at present in use. The results of the prospecting have been in the highest degree satisfactory and it is now proposed to erect buildings immediately and put on substantial machinery with capacity for sinking one or more of the present shafts to a depth of a thousand feet. The company are, as yet, a close corporation, but they have an abundance of capital and propose to work their mine for what there is in it.

Sullivan.

SULLIVAN.—Supt. Cahill reports, under date of Aug. 24, as follows: "Since my last report the ore vein in the west drift on the third level has widened from three and a half to six feet, all first-class ore. The chimney of ore in the east drift, fourth level, shows daily a continued improvement. We are making good progress sinking Waukeag, i. e. west shaft."

FANEUIL HALL & SULLIVAN.—Supt. Hayward's weekly report, dated Aug. 24, is as follows: "The crosscut from the 160 level has now reached a length of seventy-five feet. The rock in the heading has been harder than usual for the past week, which of course has retarded progress somewhat. Everything connected with the mine is in an excellent condition and giving good satisfaction, as usual."

PINE TREE.—Making necessary improvements on buildings, and when completed powerful machinery will be erected, and a large force of men employed to prosecute mining operations energetically.—[Bulletin, Aug. 20.

Blue Hill.

MAMMOTH.—A large amount of high grade ore has been removed from the surface of this valuable property and is now at the Hersey Smelting Works. A permanent shaft has been started and at present writing has reached a depth of ten feet. The work will be pushed vigorously.

ECLIPSE.—Work has been commenced upon this property the present week. As before stated it adjoins the Mammoth and is being operated by Bangor parties.

Bagaduce.

NORTH CASTINE.—The North Castine Mining Company have, at a depth of seventy feet, encountered a body of handsome ore similar to that found nearer the surface, and from present indications it appears to be a more permanent thing and is not likely to be lost again. The vein at this depth has materially changed its dip which is now slightly toward the west, and the

shaft is following the hanging wall. A fan blower is being put in to furnish the workmen with fresh air.

MANHATTAN.—Report comes from the Manhattan, operated by Messrs. Proctor & Taylor of Portland under the supervision of Wilkie Darling, that the drift from the bottom of the shaft has encountered a large body of high grade ore.

ABNER GRAY.—Work will soon be commenced on the Abner Gray property, on the Bagaduce River, opposite Castine. This property contains 150 acres and lies across the mineral belt of that section, between the Rosier Mining Co's property and the Hercules and others farther up on the "Duce." The average of nine assays of the ore, recently made, was 21.9-10 per cent. copper. It is well located for practical mining and will, we have no doubt, prove a valuable property.

CAPE ROSIER.—The work of development is progressing rapidly at the Cape Rosier, upon an extensive scale. Three vessel loads of ore have been shipped from the mine this summer, two to Portland and one to New York.

British Provinces.

It is understood the stock of the Satemo Gold Mining Company of Nova Scotia will soon be listed on the New York Mining Exchange.

Some time ago a party of miners from Nova Scotia started for Mexico to work in silver mines for a company in which some local miners are interested. Another party were to have started for the same place on Saturday, but have not done so, in consequence of information being received that the first party was broken up, many of them running away, while some were shot by Indians. The names of those shot are not yet known.—[St. John Telegraph.

NOVA SCOTIA GOLD MINES.—The Halifax New Era of Aug. 20th, contains the following: The British American mine at Montague has been bonded to a New York capitalist for \$150,000.—The Symonds-Kaye Lode at Montague is turning out fairly rich ore at a depth of 100 feet.—The DeWolfe mine at Montague has been disposed of to an American Co. for \$40,000.—A bar of gold weighing 10 oz. 17 dwt., was brought from Mount Uniacke this week. These mines are giving good encouragement to their owners.

The first shipment, of five hundred tons, of phosphates from the Buckingham Mines, Province of Quebec, the property of La Compagnie Francaise des Phosphates du Canada, to Bordeaux, France, will take place before the end of the month. Mr. Perrault, French Consul, representing the interest of the company in Canada, is looking for a sailing vessel to carry the phosphate. It is stated that a new use for Canadian apatite, which is a mineral phosphate of lime, has been discovered; namely, for purifying coal-gas in the process of manufacture. If this be true, it will materially improve the demand for this article, the mining of which has of late become a considerable industry in the Province of Quebec.

The Victoria Oil and Mining Company have received a letter from Mr. Baird, Superintendent of the Little River Coal Mine in Cape Breton, N. S., under date of Aug. 16, in which he says: "I have examined the three-foot vein and tried some of it in our forge. It is very clear, and gives excellent heat; there is no doubt about it being a good steam coal, and I feel satisfied we will have a third seam of it in the bottom of the basin, as I find ten inches of good coal about one foot from the three-foot vein, and the intervening foot is mixed with coal to a great extent. It will undoubtedly be all one clean seam in the basin, and I shall not be disappointed if the three-foot seam turns out to be the seven-foot seam we have heard some talk of."

CANADA CONSOLIDATED.—The Supt. of the Canada Consolidated Gold Mining Co., of the Province of Ontario, Canada, reports under date of Aug. 13th: Underground, three drifts are running, all in good ore. The deep shaft is sinking, also in good ore. The Tuttle shaft has been straightened, and is now sinking. The ore still holds out very good, and the vein seems to be getting still wider. The breaking of two air-drills causes some delay. On the surface, work goes slowly, owing largely to the scarcity of labor. The foundations for the engines and boilers are constructing. The preparatory work for the same was very tedious, as a great deal of blasting was necessary; still this work will be ready before the machinery arrives. All machinery contractors are behind with their work. All the framing for the mill is now completed, and on Monday, August 15th, we shall begin raising the building. All of the five blocks, of two each, of workmen's houses are under roof, and will soon be completed. The office (brick) is up to the second story.

SPRING HILL COAL MINES.—A number of the Directors of S. H. M. Co., paid a rather lengthy visit to Spring Hill last

week. They were accompanied by Chief Justice Sir Wm. Ritchie. The company are about to sell or lease a number of lots of land, and it is understood their visit was in this connection. With their usual good fortune the Spring Hill Mining Company have been fortunate in unearthing a splendid seam of coal. Sinking about 100 yards or thereby to the north of the north of the west slope the sinkers went through a seam of coal twelve feet six inches thick. The find is said to be the best coal yet discovered in the neighborhood, being brighter looking than the coal presently worked. It is said to be altogether free of slate or stone. The Spring Hill Mining Company have purchased two powerful engines from the Albert Mining Company, the one a pumping, the other a hoisting engine. It is said that both engines will be erected at the west slope; and that the hoisting engine will be employed in hoisting from the new thirteen foot seam, which it is thought will shortly be opened out. It is also said that the west slopes will be driven down four hundred feet further. If the expected operations are carried out the company will be able to point to the most extensive coal works in the Province.—[Spring Hill Trades Journal.

Newfoundland.

Dispatches from St. John's, dated Tuesday, Aug. 16, are as follows: The New York and Newfoundland Railway Company formally commenced the work of railroad construction in this Island to-day. Shortly before noon the first sod was turned under the management of Mr. Bolland, an engineer of European reputation, and several squads of navvies are now busily engaged in grading those sections of the road that had been previously located. The two termini of the road are St. John's on the south, and the north shore of Notre Dame Bay on the northerly end. Concurrently with the inauguration of the railway work in St. John's there is reported from undoubted sources a gold find of extraordinary promise at Mings Bight, close to the very spot where the New York company, at least for the present, purpose terminating their line. The proposed 400 miles of railroad now actually begun run through the whole of the principal metalliferous belts of the island, and the capitalists of New York, who have secured this golden contract with the Newfoundland Government, will daily discover to their extreme satisfaction, as the work progresses, that in their eight-mile alternate blocks along the whole line of railway they have secured mines of rich, rare and undoubted wealth, from which the means of building a half-dozen Newfoundland railroads such as the one contemplated can be obtained. The Premier of Newfoundland and Mr. Blackman, the manager of the New York Company, are now in London, and will leave for St. John's by the next Allan steamer. Mr. Blackman will then proceed without delay to New York, and there organize and dispatch to St. John's several corps of engineers for the immediate location of the whole line. The work of construction is now calculated to be brought to completion within two years.

General Mining Notes.

The Stormont mine produced \$31,000 in July.

The Michigan salt product is over 41 per cent. of all that is produced in the United States.

The Chrysolite Silver Mining Company announce another dividend of \$100,000, payable September 10th.

The office of the Tombstone Mining Company has been transferred to New York, and the stock is to be listed there.

The gross value of the bullion extracted from Eureka, Nev., mines during the quarter ending June 30th was \$738,095.38.

The lively mining town of Candelaria in the State of Nevada is being supplied with water from White Mountain, twenty miles distant, at a cost of \$400,000.

A very rich and curious specimen was recently found at Tombstone, Arizona. It is a mass of gold and silver melted down in which are sticking a number of nails. The owner has been offered \$75 for it.

A party of Chicago capitalists are about to ship the necessary machinery and commence operations upon a large scale on a recent discovery of rich and apparently inexhaustible beds of copper in Knox and King counties, Texas.

The immense combination pump on the Comstock is a complete success, and the speedy drainage of the 2,500 levels of the middle mines is looked for. Already the water has been removed from the 2,400 drifts of the Savage and active prospecting will commence immediately.

Reports of the geological and mineralogical condition of the property of the Boston Gold and Silver Mining Company pre-

pared by Prof. J. Alden Smith, State geologist of Colorado, Professor W. F. Stewart, mining engineer, and Professor E. E. Burlingame, chemist and metallurgist, have been put into a neat pamphlet form.

The Ruby Hill (Nev.) Mining News, always an enterprising sheet, has eclipsed all former efforts in its last issue. It consists of eight pages of solid matter relating to the mines of that district and presents an example which newspapers published in other mining localities might follow with benefit to themselves and to the district they represent.

A Western exchange says Park City, Utah, is probably the most active mining camp between Tombstone and Leadville. In the past year it has nearly doubled in size and population and still continues to grow. The Ontario is pouring forth a steady stream of bullion. There are other mines in the place which many regard as fully as promising as the Ontario. The Ontario has produced \$8,750,000. The hills surrounding the place may be said to be merely scratched for mineral.

A very interesting period in the history of Bodie, says the Bodie Free Press of Aug. 9th, seems close at hand. The Red Cloud is now crosscutting at the 600-foot level, and is in already 51 feet from the shaft. The Concordia vein will probably be cut at a distance of about 300 feet. The appearance of this vein on the 400-foot level above would render the discovery of a big silver mine on this level a matter not at all surprising. The Lent shaft also will soon be running its 700-foot level, which we have confidence will again make the Bodie a dividend paying mine. The Bechtel and Syndicate mines are both running mills to a profit at present, and we shall soon have another mill, the Bodie Tunnel, at work on good ore. The Standard reports an improvement in the south drift on the 1000-foot level, which is itself an encouraging circumstance. Of one thing the public can rest assured, and that is that the ledge is there.

Nuggets.

—J. A. Locke & Son, of New York, will cover the piping of the Nonotuck Paper Co.'s mill in Massachusetts with Reed's Sectional Covering.

—The excursion to the Bagaduce by steamer has been indefinitely postponed on account of the accident to the steamer City of Bangor.

—The last grand hop of the season at the Fort Point House will take place on Saturday evening next. A large number of invited guests are expected to be present and an enjoyable occasion is certain.

—Mr. Royal, the inventor of the Royal Rock Drill, started this morning with one of his machines for the Bagaduce, where he will operate upon the Dodge and Jones properties under direction of Mr. E. C. Smart.

—An elegant banking establishment is being fitted up in West Market Square directly opposite the MINING JOURNAL office. Workmen are engaged in excavating for what will be the largest bank vault in the city.

—Mr. C. J. Hall, of Belfast, has just opened at Otter Creek, Mt. Desert, a red granite quarry, said to be one of the finest of the kind in the country. Since July 23d, Mr. Hall has shipped and contracted to ship, eleven cargoes of granite.

—The Silver Lake Hotel, Katahdin Iron Works, has under its present management become a very popular resort. A large business has been done during the summer months, and rooms are already engaged ahead for September and October which, at this charming locality, are by far the pleasantest months of the year.

—Three artesian wells have been sunk at Fort Point during the present season, and a windmill is to be erected for pumping and supplying the hotel with pure water. One of the wells has encountered a mineral spring, furnishing water which, upon analysis, is found to be a most healthful beverage, and will hereafter constitute one of the principal attractions of this popular resort.

—The publishers of the Rutledge Monthly, in the prize puzzle department make the following offer: To the person telling us which is the middle chapter in the Bible by September 10th, 1881, we will give \$10.00 in gold as a prize. The money will be forwarded to the winner September 15th, 1881. Those who try for the prize must send 20 cents with their answer, for which they will receive the October number of the Monthly, an excellent Magazine of 32 pages, in which will be published the name and address of the winner of the prize, with the correct answer thereto. Address, Rutledge Publishing Company, Easton, Pa.

—The new telegraph company—the Eastern Telegraph Company—which was chartered by our last Legislature and organ-

ized in May, have commenced work. The company have contracted with John G. Moore & Co., to construct and extend five hundred miles of wire from Boston through the State of Maine to Bangor. The poles are now being distributed on the line of the Eastern Railroad and the line will be completed to Portland in thirty days, and extended through the State in six months. It is understood that the line will be operated in conjunction with the Mutual Union, which is fast extending its lines to all parts of the United States.

—Messrs. Chas. F. Rollins and D. Bickford, of Ellsworth Falls, have been operating for some time past upon what they have considered a promising prospect situated at the foot of Reed's Pond, on the Mariaville road, in Ellsworth, and about 6 1-2 miles from the city. The shaft is now down eight feet and will have to penetrate some four or five feet further before the vein is reached. We have just received a certificate of assay of specimens of this cap rock, signed by State Assayer Fisk, of Ellsworth, which gives the following result: Gold, a trace; silver, 3 4-10 ozs.; copper 2 3-10 per cent.; total value, \$12.19 per ton of 2000 pounds. This is highly encouraging to the owners and they will continue their explorations.

—In 1866 Mount Desert was nearly in a state of nature, there being but one small boarding house, kept by the late Tobias Roberts, for the accommodation of the few transient guests who might visit this locality. Capt. Deering, of the steamer Lewiston, perceiving the importance of Bar Harbor as a future place of resort, induced the E. R. R. Co. to purchase several acres of land for the building of a wharf, to accommodate the steamers which might visit this harbor, little dreaming that in a very few years the hum of thousands of voices would echo and re-echo along these mountain fastnesses, and the whole landscape be dotted with splendid palaces and innumerable cottages, to accommodate the moving and bustling throngs.—[Mount Desert Herald.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital
Thompson Min'g and Sulphate Process Co.,	Kittery,	Aug. 18,	\$500,000
Azure Mining Co., of Deer Isle,	Portland,	Aug. 23,	500,000
Griffin Mining Co.,	Kittery,	Aug. 20,	100,000

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, AUG. 24, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Amodez.....	2 1/2	3	2 1/2	3	2 1/2	3	2 1/2	3	2 1/2	3	2 1/2	3
Atlantic L. S.....	10	11	10	11	10	11	10	11	10	11	10	11
Atlas.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	...	...	...	...	...	...	...	...	...	...	...	...
B.ue Hill Copper.....	...	...	...	...	...	...	...	...	...	...	...	...
Brunswick.....	10	11	8 1/2	9 1/2	10	11	9	10	9	10	9	10
Calumet & Hecla.....	217	218	217	218	217	218	217	219	218	219	217	218
Catalpa.....	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Central.....	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls.....	4	5	4	5	4	5	4	5	4	5	4 1/2	5 1/2
Contentment.....	...	...	...	...	...	...	...	...	...	...	...	...
Douglass.....	2	...	2	...	2	2 1/2	2	2 1/2	2	2 1/2	2	2 1/2
Dana.....	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver.....	1/2	3/4	1/2	3/4	1/2	3/4	1/2	3/4	1/2	3/4	1/2	3/4
Empire.....	...	...	...	...	...	...	...	...	...	...	...	...
Franklin.....	10 1/2	11 1/2	10	11 1/2	10 1/2	11	10	11	10	10 1/2	10 1/2	11
Harshaw.....	6	6 1/2	6	6 1/2	6	6 1/2	6 1/2	6 1/2	5 1/2	6	6	6 1/2
Huron.....	3 1/2	2 1/2	4	3	4	3	4	3	3 1/2	3	3 1/2	3 1/2
Hanover.....	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt.....	...	...	...	...	...	...	...	...	...	...	...	...
International.....	...	...	...	...	...	...	...	...	...	...	...	...
National.....	...	...	...	...	...	...	...	...	...	...	2	2 1/2
Oscoda.....	30	29	30	29	30	...	30	28	30	28	30	30
Pewabic.....	10 1/2	11 1/2	10 1/2	11	10 1/2	11 1/2	10 1/2	11	10 1/2	11 1/2	11 1/2	13
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	32	33 1/2	32 1/2	33 1/2	33	32	33	32	33	32	32 1/2	33 1/2
Ridge.....	3 1/2	4	3	4	3 1/2	4	3	4	3	4	...	...
Silver Islet.....	46	47	45	46	45 1/2	44	40	42	41 1/2	40 1/2	40	45
Star.....	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan.....	3 1/2	4	3 1/2	4	3	3 1/2	3	3 1/2	3	...	3	3 1/2

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$5.00. Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, JR., Treasurer. W. OSCAR ARNOLD, Secretary.

Directors—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, JR., of New York.

NOTICE.

The stockholders of the Franklin Silver Mining Co., of Maine, are hereby notified that there will be a meeting of the stockholders of said company at the store of Jerry Wooster, in Hancock, Sept. 19, 1881, for the purpose of reorganizing said company and transacting any other business that may legally come before it.

Per order of the President and Directors of the Company.
N. P. DOR, Secretary, pro tem.
Bangor, Aug. 24, 1881.

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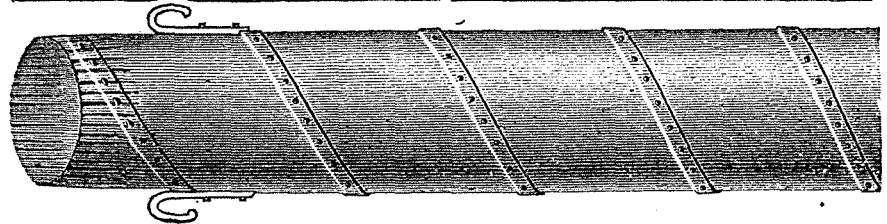
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For Boilers, Steam and Water Pipes.

It is cheap, durable, and the best non-conductor of heat of any covering made. It can be taken off and replaced on the pipes any number of times without injury to the covering. Any person can put it on the pipes. SEND FOR A CIRCULAR.

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Root's Patent Heavy Sheet Iron Hydraulic Pipe,

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of all Diameters; Strength or Thickness according to pressure required, for MILLS, MINES, and WATER WORKS, made of galvanized or black iron and dipped in coal-tar and asphalt. Furnished with slip joint, sleeve and nipple, or flange connections. In lengths of from 5 to 25 feet, each tested to required margin of safety.

BURSTING PRESSURE 300 TO 1000 LBS. PER SQUARE INCH, according to diameter and weight of pipe.

AVERAGE FIRST COST FROM 10 TO 60 PER CENT LESS than other tubing; the greatest difference being in the larger diameters.

AVERAGE WEIGHT 50 TO 75 PER CENT less than wrought or cast iron tubing.

AVERAGE SAVING IN COST OF TRANSPORTATION 50 TO 75 PER CENT.

The advantage of the spiral over the straight or longitudinal seam is that the Spiral Seam is the strongest while the straight seam is the weakest part of the pipe by about one half.

Where it is found inconvenient or undesirable to ship tubing already formed up we can supply punched and formed sheets nested and packed for shipment (which can be riveted into pipe at destination) in packages of any desired weight.

Estimates and Price list furnished on application. A full stock always on hand.

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APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erasmus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Lafan, Jeremiah Wooster.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.,
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 60,000 Shares.
President, Wm. F. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. F. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Roddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MC FARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

OSHKOSH CONSOLIDATED MINING CO.,
Lawson, Colorado. Organized under the laws of the State of Maine.
Capital, \$500,000. Shares, \$5 each, unassessable; 40,000 shares in the Treasury.
President, E. C. Nichols, of Bangor; Treasurer, C. T. Plympton, of Boston; Secretary, S. P. Johnson, of Bangor. Directors—E. C. Nichols, S. P. Johnson, Dr. W. K. Knowles and John R. Mason, Bangor; C. T. Plympton, Henry A. Piper and Geo. W. May, Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. InCorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett.
P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Masou, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

Silver Hill Mining Company.
Office, 11 CENTRAL STREET,
Room 4, Boston.
Mines at Garland, Me.
Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
25,000 Shares in Treasury.
President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge Portsmouth, N. H.
Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

BLUE HILL CENTRAL Mining and Smelting COMPANY.
OFFICE.....BANGOR, ME.
MINES AT.....BLUE HILL, ME.
CAPITAL, \$500,000.
100,000 Shares; Par Value, \$5.00.
Treasury Fund, 30,000 Shares.
Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

YOUNG HECLA Mining and Smelting COMPANY.
Office at Bangor, Me. Mines at Blue Hill, Me.
Capital, \$500,000.
100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.
President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

For Northport and Fort Point.

One of the steamers, RALPH ROSS or HOWELL, will leave Bangor for Fort Point and Northport every SATURDAY at 4 P. M., touching at all the river landings.
Returning will leave Northport every MONDAY morning at 6 o'clock.

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Arrive Bangor,		7.03	11.15	6.00
Leave Bangor,		7.35		2.00
Arrive Bucksport,		8.40		3.15

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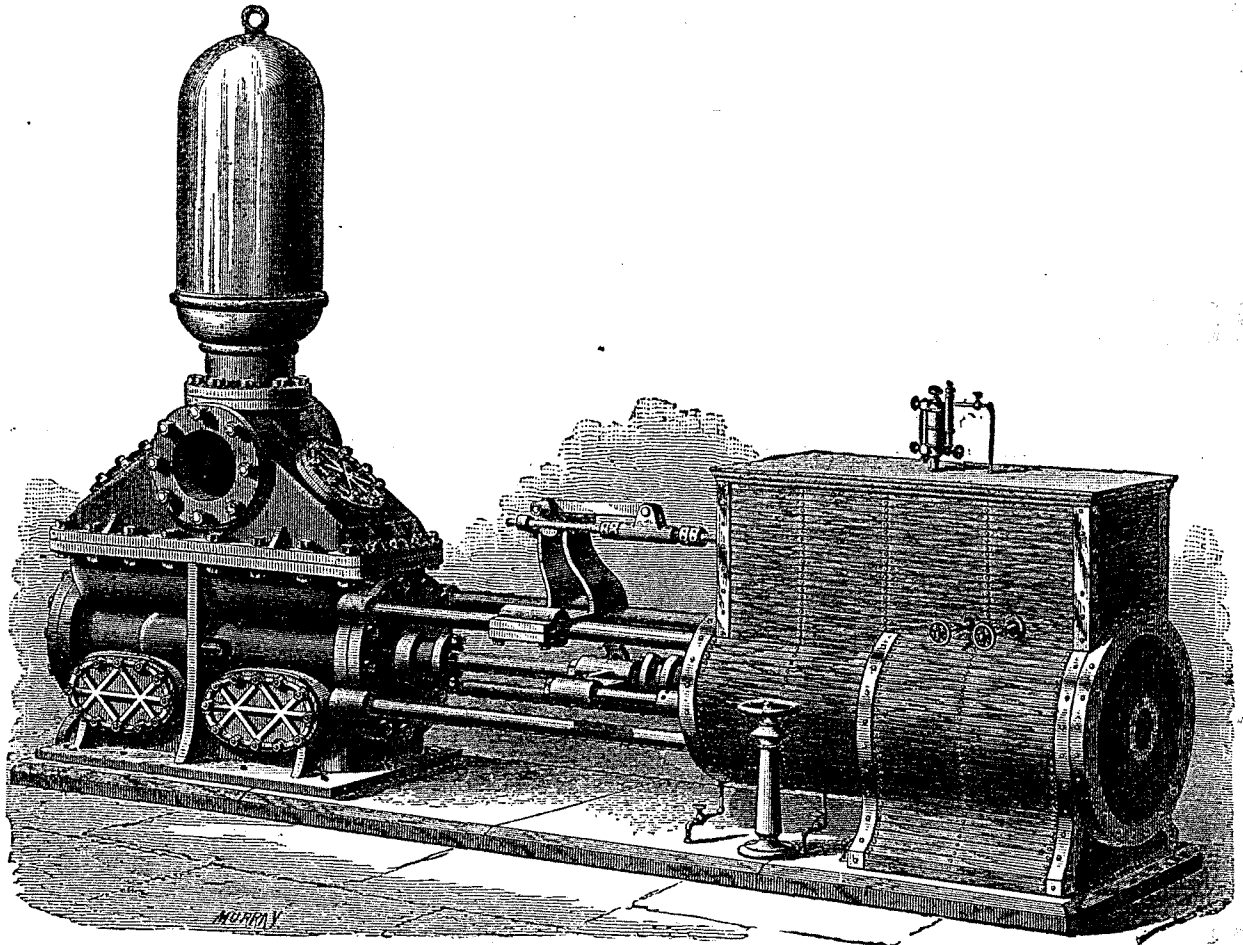
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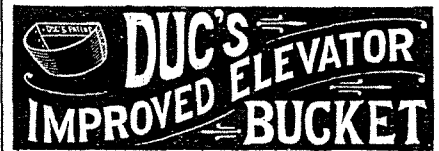
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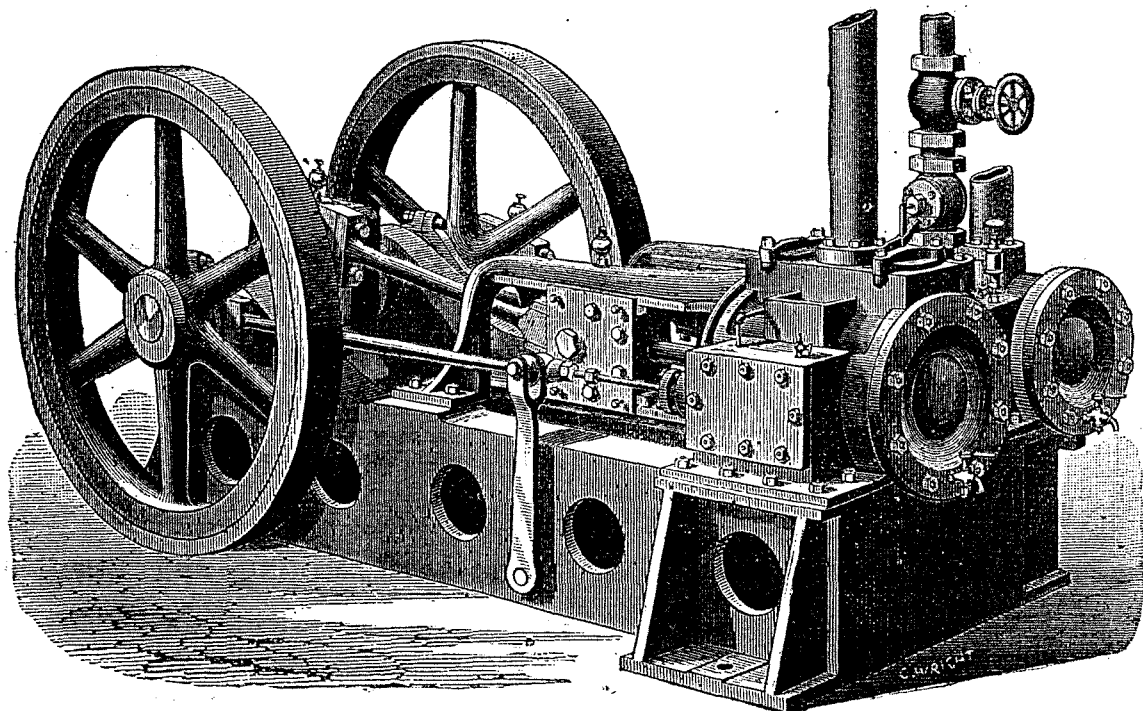


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E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, SEPTEMBER 2, 1881.

The Stockholder says: "Stock brokers in Philadelphia are much excited over a decision by Commissioner Raum, that they must be rated as bankers and pay taxes as such. The decision also holds that all money borrowed by brokers must be considered deposits and taxed. Also that the brokers must pay taxes for all of the past years when they were acting under a former decision by Commissioner Delano, that they were not subject to these taxes."

The past week has been a quiet one in stock circles and the Exchanges have been rather deserted. The quotations on the Boston Stock Exchange, Wednesday, were Blue Hill \$3 1-4 bid and \$3 1-2 asked, Douglass \$2 bid and \$2 1-4 asked and Sullivan \$3 1-4 bid and \$3 1-2 asked. On the Boston Mining and Stock Exchange the quoted sales, Wednesday, were as follows: Copperopolis \$1.95 to \$2.01, Milton 83c. to 87c. with 93c. buyer 60 days, Deer Isle 70c. and 72c. and Twin Lead 56c. Better prices are anticipated in a few days now.

The Boston Traveller says that a well known and very conservative banker in that city has recently visited several of the leading Maine mines and made a thorough inspection of their working and equipment. He went down having but little faith in their value, but returned enthusiastic in his praise of them. He is convinced that there is plenty of valuable ore there, and that a continuance of the present economical and wise management is all that is needed to put them on a solid basis in the opinion of capitalists and of the people. In referring to the Milton mine, he says that no mining property west of the Rocky Mountains is more thoroughly equipped or more systematically managed.

DESULPHURIZING BLUE HILL ORES.

A little more than a year ago, in an article descriptive of the Katahdin Iron Works, we gave a brief description of a new process for the desulphurization of iron ores, the result of a long series of careful and scientific experiments by Mr. O. W. Davis, Jr., of Bangor. Later, the process was more fully described in a paper read by Mr. Davis before the United States Association of Charcoal Iron Workers, at Chambersburg, Pa., and published in this JOURNAL December 20, 1880. This process is now and has been for a long time in most successful operation at the Works.

There seem to be no obvious reasons why this process, which has accomplished so much and worked such a revolution in the treatment of a certain class of iron ores, should not be equally applicable in expelling the sulphur from the Blue Hill ores; and we are glad to learn that, as a result of a visit to the Iron Works by President Gregory of the Douglass C. M. Co. during last week, arrangements have been made for the immediate erection of a kiln similar to the one described, at the Douglass mine in Blue Hill. Mr. George D. Colby, Agent of the Iron Works, goes to Blue Hill on Monday next to superintend its construction. The result will be awaited with interest.

WRECK OF THE RICHMOND.

The wreck of the Steamer City of Richmond on a ledge in Penobscot Bay on Tuesday of the present week is universally mourned. The Richmond has enjoyed exceptional popularity and was a general favorite among the travelling public.

The particulars of the disaster expressed in the briefest language are as follows: On Tuesday morning at the usual hour the Richmond steamed out of Rockland on her course to Mt. Desert. That dense fog which has hung over the waters of our bay so much of the time during the past season was especially thick and impenetrable on this occasion. The Richmond kept on her way and was speeding at a rapid rate when suddenly and without warning she struck with great force on the reef which makes out from Mark Island.

The Captain and officers acquitted themselves with great credit and no panic ensued. The passengers were soon safely landed on Mark Island which is uninhabited and everything possible was done for their convenience. Steamers, tugs and schooners came during the day and rendered what assistance was possible. The passengers returned to Rockland in safety. The baggage and freight was preserved in good condition. The early hopes were that the steamer could be hauled off and be repaired but these bright anticipations were soon dispelled and she is now rapidly going to pieces. Wreckers are on the way and it is expected that the furniture and machinery will be saved.

The Richmond was not insured and the loss will be about \$50,000. The company will not secure another steamer this season and the steamer Lewiston will do the business of the two the remainder of the year. It is probable that during the coming winter the line will build a steamer to take the place of the Richmond. For fifteen years the steamer which has now met her destruction has plied along

the coast of Maine and it is with feelings of deep regret that the public bid her a long farewell.

Persons unfamiliar with navigation along the rock bound shores of our State have no conception of the obstacles which have at times to be overcome by the brave commanders and efficient officers who have charge of the steamers in Maine waters. During the past month everything was much of the time enveloped in fog and for three successive weeks the Richmond did not encounter the sun at all.

This steamboat casualty is not therefore a surprise. It is more to be wondered that the past record of steamboating in our waters is so free from disasters. The unfortunate adventure of the Richmond is not due to carelessness of the officers and no blame attaches to them. Capt. Dennison and First Pilot Pollister have no superiors in Maine steamboat circles.

ALTAR GOLD AND SILVER MINING COMPANY.

Many of our citizens have occasion to remember the Altar Gold and Silver Mining Company, whose property was said to include the famous Santa Gertrudis mines, at Oguita, State of Sonora, Old Mexico.

A few years since a Portland gentleman, well known in this vicinity, visited Bangor and succeeded in disposing of several thousand shares of stock in the above named Company to various individuals.

The Company was capitalized at \$10,000,000, divided into one hundred thousand shares, par value \$100 each. These shares were sold at from \$3.50 to \$5 per share, and the funds received from the sale were supposed to go toward the development of the property. The mines were well-known to be valuable, and the Company was believed to be an honorable one, and just what the difficulty was and where the crookedness existed we are unable to say, as stockholders in this vicinity have never been able to procure any satisfactory information concerning their affairs; but certain it is that nothing of any consequence in the way of development was ever done, the property finally passed out of their hands, and the shares have, of course, since been considered utterly worthless.

In view of the above facts, stockholders will be gratified to learn that this rich mining property has again fallen into the hands of Mr. Gehricke, Superintendent for the former Company, who proposes to take steps immediately toward a reorganization of the old Company, and there is a prospect that Altar shareholders may, at last, realize something from their investments. The Tucson (Arizona) Daily Citizen, of Aug. 6, has the following:

The rich silver mines of Oguita, State of Sonora, on which work has been suspended by the Altar Gold and Silver Mining Company for over two years, are again being worked with renewed energy by Mr. Otto F. Gehricke, who has made a contract with Messrs. E. Wilber, John C. Gibson and J. W. Lively, of Tucson, to sink a working shaft on the Carmin lode. These gentlemen are expert miners and men of means. They entered into the contract on the 16th of July, in Tucson, to proceed to Altar and commence work immediately if the property was as represented. They declared before the prefect of Altar that the mines known as the Santa Gertrudis de Oguita, embracing the great Carmin lode, were the richest they had ever seen, and therefore approved the contract made, which compro-

mises them to complete the shaft, advancing the necessary funds for the work. The point selected for the working shaft is to follow the vein in an incline shaft already sunk to 30 feet, called Poso de Plata. We are informed that since abandonment of these mines by the Altar Gold and Silver Mining Company, the Mexicans who worked the same have extracted very rich ore from this shaft. Some fine specimens of ore were given to Mr. Raymond Durazo, of Altar, the well known merchant, who was offered one dollar per ounce for the specimens. Mr. Gehricke, who has again possession of these rich mines, will early leave for San Francisco and Boston, to reorganize the old company, with a view to obtaining the necessary capital for extensive developments.

"Assays."

[From Bullion.]

Labor alone produces value.

There is less talk and more bullion coming from the mines, which is a double blessing.

There is no doubt there will be a panic; it will be among the bears who are selling the country short.

Those who look for aid never have any to give. One who cannot help himself cannot help anyone else.

The people are rapidly giving the death blow to monopoly by becoming stockholders. There can be no monopoly when everyone is a part owner in the property.

Cornering stock and money will soon be one of the lost arts in this country. There is getting to be too large an amount of both for individuals or cliques to control.

Personals.

SUPT. PEARSON has been in Boston the past week.

A. W. CUSHMAN, Esq., of Ellsworth, made us a brief call on Friday last.

MR. W. H. ADAMS, of Boston, has been in the city during the present week.

COL. CHARLES H. LEWIS, President of the Milton, was in Bangor on Tuesday.

MR. GEO. D. HOLT, the well known Superintendent, is visiting friends at East Boston.

THOMAS WHITE, Esq., of this city, has returned from a trip through the Western States.

ROBERT L. CUTTING, JR., is interested in Maine mines.— [N. Y. Financial and Mining News.]

T. BRIGHAM BISHOP, Esq., of Boston, is visiting the Maine mining districts, in his private team.

GEN. B. F. BUTLER has been visiting the oil regions of Cape Breton, and is expected to visit Bangor on his return.

J. M. MERRILL, Assistant foreman of the Blue Hill mine, has been on a cruise to Bar Harbor in the yacht "Haze."

ROBERT M. THOMPSON, Esq., of Boston, Treasurer of the Orford Nickel and Copper Company, visited the mining district of Blue Hill during last week.

MR. F. H. C. REYNOLDS, of the brokerage firm of Mason & Reynolds, left Wednesday on a trip to Canada, where he will visit Quebec, Montreal, Toronto and Niagara Falls.

E. M. HERSEY, Esq., President of the Twin Lead, has gone on a business trip to Stillwater, Minnesota, where he

has large interests in timber lands. He will be absent from Maine several weeks.

MR. C. H. LEADBETTER, of Cincinnati, a former resident of Maine, favored us with a call on Saturday last. Mr. Leadbetter is in charge of the illustration department of the proposed history of Penobscot County.

HERBERT WEBB, of Lewiston, who went West with a shooting gallery some two or three years ago, says the Journal, has recently made some \$10,000 by investments in Colorado mines, and has abandoned his air guns.

THE EARL OF AIRLIE, who is now on his way to this country, has purchased a well stocked cattle ranch in Colorado for one of his sons. The young man is said to have been behaving rather wildly at home, causing his parents much grief. Hence these steers.

A. D. BREED, of Caribou, Me., is at Aspen, Colorado, with his family, personally supervising the development of the great Spar mine. The new and commodious tunnel commenced by him at the foot of the mountain, is already in 150 feet and work still vigorously going on.—[Denver Mining Review.

HENRY MURAT, Count of Colorado, at one time a millionaire and the leader of fashion in the West, and who spent \$60,000 in one brief visit to Europe, slept the other night on the floor of a Blake-street barber shop, in Denver, because the proprietor could not find it in his heart to eject the now shattered old man.

MR. JAMES M. SMITH, of Chloride, New Mexico, made us a pleasant call on Monday last. Mr. Smith has numerous mining interests in the Black Range, Socorro County, and was the first locator of the lead upon which is located the now famous Ivanhoe mine, owned by Bob Ingersoll and others. He intends to pass a few weeks at his old home in Orland, which he has not visited for twenty years.

FRANK FOSSETT, author of many admirable works on Colorado, and later mining editor of the New York Daily Indicator, died of consumption at Denver on the 26th inst. Mr. Fossett was a young man, a thorough gentleman, and an able and brilliant writer. His untimely death is a severe loss not only to his host of friends but to the growing interests of the young and prosperous State he loved so well.

REV. M. J. KELLEY, a Baptist clergyman in Damariscotta, Me., was fined \$5 and costs for laying violent hands on one Foster F. Harvey, who, after a recent relapse of the President, expressed himself as being glad and hoped that he might die. We suggest that Mr. Kelley's parishioners increase his salary and that the people of Maine pay his fines by penny subscriptions as in a similar instance which occurred in Ohio.

JOHNNY SKAE, for many years identified with the mining interests of the Comstock, and who at the time of the Sierra Nevada boom could have sold out for millions, went on a glorious drunk in San Francisco, says the Chronicle, and made himself so hilarious on Kearney street that officer Rainsbury was compelled to arrest him on a charge of intoxication. The only property in the fallen Comstock King's pocket was a bunch of keys, and so utterly poverty-stricken was he that he was unable to produce \$5 bail, and was com-

pelled to doze off the effects of his potations until some sympathizing friend, who heard of his misfortune, appeared and bailed him out. Checkered as the typical life in the West is, it furnishes few such examples of misadventure as that of a man who, in two years, reached such extremes of affluence and poverty that he might have written his check for ten millions, and could not pay \$5.

Dips, Spurs and Angles.

—A celebrated case—Sweitzer Kase.

—The steeple's motto—"Ever aspire."

—Tall soft hats supply a long felt want.

—What tree in the forest would be most likely to be known by its bark? The dog wood.

—"New Jersey peaches." Does, eh? Well, it is to be hoped the other rogues will be apprehended.

—Every man in St. Louis owns a dog. The object is to increase the puppylation until it rivals that of Chicago.

—The prevalence of broad-brimmed felt hats is a sure sign that Boston is becoming deeply interested in Western mines.—[Boston Globe.

—Take life easy, and don't always be trying to beat the sun up. You may win for a while, but in the long run you are sure to be beaten, and some morning he will rise when you don't.

—The people of Cloud City, near Crested Butte, Colorado, having a wholesome fear of endless and expensive litigation, have posted the following notice: "No lawyers allowed within the city limits."

—An Arizona exchange says the dams on the San Pedro river are being repaired. Eastern investors, it seems, have begun damming Arizona rivers; they will soon commence damming the Arizona mines.—[Northwestern Mining Journal.

—She was our washwoman, and she is dead. She had much to wringer heart and soak her ambition. She hung out resolutely on the line of duty and stood firmly upon her pins. She was not polished, but we seldom aroused her ire'n when we did the foam was transient. Let's 'ope she's passed safely over the billows into the blue waters beyond.—[Boston Evening Star.

—It was dinner time in a select boarding house when the new boarder arrived. He was a venerable looking gentleman with silver hair, and his face beamed with a sweet repose betokening a pure and holy life. As he joined the table the landlady said,—“Would you ask a blessing sir?” The venerable stranger shouted. “You'll have to talk louder marm—I'm so damned deaf.”

—A miserable shoemaker was brought up before a Western court the other day, charged with bigamy. It transpired in the evidence that the knight of the last had married eight wives, all of whom are living. The judge, who is an aesthete, besides sending the man up for trial, commented severely upon the case, declaring the conduct of the offender to be “too utterly Utah!”—[Somerville Journal.

—The purser of one the Pacific Mail Co.'s steamers tells the following story: “I was in Portland, Oregon, some years ago, attached to Ben Holladay's steamer, the old Ajax. One day while lying at the wharf I heard one Web-footer say to another native: ‘Bill, what in thunder does the name of that boat Ajax mean?’ ‘Why, you durned fool,’ responded Bill, ‘Ajax is short for Andrew Jackson.’”

—Old Tenpercent went to church last Sunday. The minister, he says, had a good deal to say about the pool of

Bethesda. Tenpercent didn't wait to hear the whole of the sermon, but rushed home to look over his securities. He got stuck by the Jersey pool and the pool in the Union Pacific, and didn't mean to get caught again, not if he knew himself. Fortunately, however, he didn't have any Bethesda.

—The high price of toughened glass and the scare about its explosion in the form of chimneys, tumblers, etc., has hindered its progress. Now Mr. Siemens proposes to adapt it to lamp-posts, water mains, etc. He claims that it is stronger than iron castings, imperishable and incorrodible. The cost per pound is double that of iron, but the specific gravity is so much less that the average of goods will come one-third cheaper.

—Anticipating a stock boom and a consequent lively time on the "Alley," some philanthropist has macadamized a large chuck-hole at the corner of Liedesdorff and Pine streets with ore carrying a high percentage of copper. When the archeologist of the future is making excavations among the ruins of the Sodom of the Pacific and comes to this deposit, he will assay the material and write a book setting forth that the streets of the city were paved with copper.—[San Francisco Daily Report.

—When the learned mineralogist of the East visits the Western mining camp he is known as the rock sharp, and the boys are apt to make fun of him. The Virginia City Chronicle says of a Boston mineralogist who visited Bodie recently: "His costume was a cross between that of a Carribean pirate and a Wood River emigrant. It consisted of a suit of white corduroy, cork helmet, and top boots laced in front, with ponderous soles, red fronts, and reaching nearly to his waist." His manner was one of a fearful expectancy.

—Jack Harris, a road agent and a friend of Billy the Kid, was mortally wounded yesterday in Arizona. The harvest is evidently ripe in that country, and the Reaper is beginning to get his work in. It is a holy and a wholesome job gathering those cowboys and road agents into the great fold, and laying their weary bones to rest in the kind and generous soil, where the winds will blow soft above them, and the waving cactus lean sadly over their graves, and the heartbroken rattlesnake and stricken tarantula sing their mournful requiem.—[San Francisco Exchange.

—Nothing is so easy as to become rich. It is only necessary to trust nobody, to befriend none, to get all you can and save all you get, to stint yourself and everybody belonging to you, to be the friend of no man, and have nobody for your friend, to heap interest upon interest, cent upon cent, to be miserable and despised for some twenty or thirty years, and riches will come as sure as disease and disappointment. And when pretty near enough wealth is collected by a disregard of all charities of the human heart, and at all expense of every enjoyment, death comes to finish the work—the body is buried in a hole, heirs dance over it, and the spirit goes—where?

—A mine mule doesn't go much on appearance but is generally able to take care of his interests. Drivers are generally aware of the last mentioned circumstance, but sometimes allow their temper to get the better of their judgment. A driver in a certain mine located not far from Pottsville, so far forgot himself the other day as to give his mule a welt on the flank. A car was coming down the grade at the time and the driver wanted the mule to make better time. The mule stopped short, when struck, tramped on the driver's foot and stayed there until the car arrived. The driver will probably recover from the effect of the collision in about two weeks. The car and mule are still attending to business.

—A dispatch from Portland says that "Matthew Mackay, who was badly injured a few days ago by a bar of iron falling on his head and fracturing his skull," died yesterday at

the hospital. The Portlanders will have to send for a few Comstock miners to do their dangerous work. They don't mind being hit by a crowbar falling from a height of 500 or 600 feet, and are accustomed to falling down shafts, and passing through one or two-inch board platforms *in transitu*. Sometimes, by bad luck, they get hurt. We remember an instance once where a miner fell 1,600 feet down a shaft, and his friends on the surface deemed it necessary to send post haste for a doctor. But such things are rare.—[S. F. Daily Report.

—One day last week, a son of the mountains walked into one of our blacksmith shops and asked if they had any "tramways" on hand. "Any which?" asked the youth who blows the first fire. "Any tramways?" answered the s. of the m. "Beg pardon stranger, but don't believe I've been in this country long enough to catch on to that; ask the old man," replied the youth. The old man "never heard of such a thing." "Well, you are the worst set of stiff I've seen," murmured the would-be purchaser, as he started to go out. "What does it look like, and what do you use it for?" asked the youth at the forge. "Why they use it to haul ore out of the mines; what did you reckon?" came the answer. He wanted a tunnel car.—[Colorado Miner.

—A few days ago, when the excitement about infernal machines was at its height, Mr. Vennor received a strange looking box by mail. Handling it carefully, he undid the fastenings and gently removed papers and sawdust until a pasty looking substance, bearing a close resemblance to dynamite, became visible. Then the terrors of the situation flashed upon his mind, but, being a man of decision, he quickly removed the box to an outer room, and, placing it where it could not be disturbed, waited for further developments. To-day brought the denouement in the shape of a letter informing him that the writer had sent him a beautiful specimen of kaolin, which is used in the manufacture of French porcelain. It came from the neighborhood of Dalhousie and Bathurst, on the Bay of Chaleur, New Brunswick.—[Montreal Witness.

—Mrs. Julius Brown's husband was one of the passengers on the State of California during its last trip, in which it was detained four days over time. Mrs. B. bore her anxiety with commendable fortitude until the third day. She was taking lunch with some friends at a restaurant, where the waiter helped her to some shrimp salad in a glass that contained a small portion of whiskey. She had only eaten a few mouthfuls, when she burst into tears. "What's the matter, Mrs. Brown?" said the company, much surprised. "Why," sobbed the poor woman, "m-m-my worst fears are realized. I know now that poor Julius has been drowned. Just taste these shrimps." And as there was no denying that they tasted just exactly like old Brown, the widow was conducted home. She had just decided that she would look exceedingly well in black when the steamer arrived.—[San Francisco Post.

Gold Mining in Nova Scotia.

[Halifax Mining Review and Maritime Journal.]

The gold yield of our mines from 1862 to 1880 inclusive was, by the official reports, 310,606 ozs., 5 dwts., 5 grs.; value, at \$20 per ounce, \$6,212,125; the labor was 3,030,883 days at \$1.25, equal to \$3,788,604; the royalty, 2 per cent. on the oz. at \$18, was less than \$124,242, as many gold claims are free; we have, therefore, a balance of \$2,299,279 to represent returns on capital, wear and tear on machinery and supplies, and as these two last items would amount to a mere trifle of the sums stolen in the days when a lax system prevailed, while the labor on machinery was assessed in the days' labor, we may assume fairly that the whole \$2,299,279 belonged and went to capital.

The capital of the companies or associations engaged

actually or nominally in gold mining in this province, was in 1870, (at which time the speculative mania ceased) according to an article read before the Geological Society of London by Professor Hind, \$2,124,000, and all who know anything of the history of the working of these companies are well aware that the most of this capital represents not only extravagance and blunders, but also fictitious stock values, and that the real work of extracting the precious metals has been done by small men whose limited means permitted only the employment of energy, prudence and practical knowledge unassisted by the large capital which should be their necessary complement in the work of developing the gold of Nova Scotia. Since 1870, the capital that has come in consists in great part of a transfer at low value of property held by the old capital, so that the nominal capital of \$2,124,000 remains still the more than high test of remunerativeness in our mines. Yet the amount realized by the imperfect means applied reaches 108 per cent. of all the capital, real and unreal, that makes the descriptive statistics of this industry.

We are now entering on a new period of active development and the conditions are favorable to a solid and widespread prosperity of our gold mines. Men of moderate means uniting with practical miners whose knowledge is not, as in the past, derived from foreign gold fields only, are opening up districts and tracing lodes to the point of successful demonstration of value; they have gone to work deliberately in a small way keeping on the hither side of fixed expenditure of capital which, though it might be wisely laid out by a large concern, would in their case result in a crippling of resources, fatal to further progress. At the point of demonstrated value which they reach they are able to show good reasons for the accession of capital from the great mining-stock Exchanges of New York and Boston and England. The bricks of gold that they bring into the market, the returns of labor expended, the amount of quartz crushed, all the figures required for statistics by the mines department, give the evidence on which to found an estimate of selling value, and the purchase of a mineral property in this province is no more hazardous or uncertain in its assured profit than the organization of a private manufacturing concern into an incorporated company with largely increased capital. The gambling phase of the life of mining-stocks has gone by and the same attention that is given to ordinary enterprises will produce as favorable results; the question is no longer one of a great fortune or a great loss, but of an investment *certain* to pay a reasonable return and *likely* to yield very large dividends.

Conducted on business principles, gold mining is to-day on the same level of venture as any other legitimate employment of capital; its risks are not those of lumbering and shipping such as an uncertain market creates for the products of these; it is not liable to the crippling assaults of competition from improved mechanisms as the manufacturer is; it has no cycles of expansion and contraction, of prosperity and insolvency, as the merchant's history records; it is an industry certain of a moderate return if the worst comes, and of a return of the capital with some increment, if not with a fivefold profit.

We consider then that the mineral resources of Nova Scotia are before the world in a favorable aspect; they have evidently not sunk capital on an average view of the results throughout their history; they are only now in the first stage of real development and the returns have so far been highly profitable in every instance where common prudence and economy were exercised. The next chapter of their history will record the formation of powerful companies on the foundations solidly laid by the working concerns of the present.

—Five hundred thousand bricks will be required in the construction of the Bangor Opera House.

Hank Monk.

THE FAMOUS STAGE-DRIVER COMES TO GRIEF AT LAST.—
HIS FIRST UPSET.

[Territorial Enterprise, Aug. 10th.]

Hank Monk is inconsolable. Last evening, in driving down from Lake Tahoe to Carson, he experienced the first upset of his life. He left the Lake half an hour behind time (the steamer being delayed in crossing the lake by a heavy wind), and was driving at a very rapid rate when the mishap occurred. He had aboard his coach as passengers twelve adults and two children. Eight adults were on top of the coach and the rest, with the children, inside.

Among the passengers were Ex-Attorney General Devens and daughter, Rev. E. F. Walker and Professor Jack Hallinan, of this city. The upset occurred at a rough place just this side of the Summit. Miss Devens was seated beside Hank when the coach went over. Hank held to the lines like grim death, and, though going at a rapid gait, stopped the team almost instantly; the coach not moving a foot after it went over.

As Hank Monk rose from mother earth he spat out a mouthful of dust and mournfully remarked: "That's the first time it ever happened to me." General Devens said to his daughter: "There, you've always wanted to have a ride with Hank Monk—now you've had it!" In five minutes' time Hank again had his coach right side up and was spinning down the mountain, but not gaily. He felt sore. He said he once upset a bullion wagon, with no one aboard, but never before in his life had he upset a passenger coach.

The only thing that appeared to at all console him was the fact that he got through to Carson "on time," as he did when he landed Horace Greeley at Placerville. This, and the fact that no one was hurt (except a few slight bruises), was all he had with which to salve his wounded pride. His passengers rather enjoyed the affair after it was all over, and to the end of their lives will pride themselves on having participated in Hank Monk's first upset.

LODES, LEADS AND VEINS.

AZURE.—The Azure Mining Company of Deer Isle was recently organized in Portland for the purpose of acquiring, developing and working mining rights and properties on Little Deer Island and elsewhere in the State of Maine.

DEER ISLE.—Under date of Aug. 29, Supt. Dickson reports to Geo. F. Gould, Esq., Treasurer of the Company, as follows: "Our blower works to perfection and will supply sufficient air for all the men we can work. We shall commence stoping from the 130 level at once. The winze is down 15 feet, and the ore-body is widening at every foot; it is now wider than the winze. There is a change in the ore—that which lies nearest the hanging wall will run 10 per cent in copper."

BAKEMAN.—It is announced that a company has been organized at Brooksville under the name of the Bakeman Mining Company of Cape Rosier. It is composed almost entirely of ladies. The capital is \$500,000, par value of the shares \$5. The officers are as follows: President, Hannah Mayo; Secretary, Sarah M. Bakeman; Directors, Alice R. Johnson, Celia A. Smith, Sarah M. Bakeman, Hannah M. Mayo, Addie A. Bakeman, Lavinia D. Eaton, W. R. Johnson.

NORTH CASTINE.—Developments at the mine are progressing expeditiously and the shaft has now reached a depth of nearly eighty feet. An improvement in the ore recently encountered is noticeable as increased depth is reached. At a recent meeting of the Board of Directors of the North Castine Mining & Smelting Company an assessment of five cents per share was levied on every share of the stock, to be paid in installments as follows: two cents per share to be paid on or before the 5th day of September, and the balance in three equal installments payable on or before the 30th days of September, October and November.

NEW HAMPSHIRE.—A correspondent of the Boston Evening Star says that renewed activity is manifested in the mining interest throughout the State. The gold mine in Lyman was reopened last week for the first time for several years. The Surry mines are being operated with renewed vigor and paying returns are made. A new mining company has just been organ-

ized at Winchester with a capital of \$400,000 to work valuable deposits of ore in that town. The copper mine upon Storr's Hill in Lebanon is yielding ore equal in value to that of the famous Ely copper mines, and a large force of workmen are engaged in working the mine.

MASCOT.—Mr. Johnson, Superintendent of the Mascot mines, furnishes the Gorham Mountaineer with a detailed statement of operations for the week ending August 26th, from which the following is extracted: "The developments of the Mascot mines during the past week have been very encouraging in every way. On the Galena King a very large amount of work has been done. The opening of the top of the cliff has been advanced twenty feet, and every shot turns out a handsome quantity of heavy, glistening galena, varied by frequent streaks of copper. On the surface is piled about fifteen tons of ore, which will be sent to Boston as soon as arrangements for lowering it to the foot of the cliff are completed. This opening is 300 feet above the pond. At 150 feet another level has been started, which has already exposed both walls of the vein, and the developments thus far made prove that the ore body, which shows so finely above, holds good to this point, and without doubt to the very base of the cliff. Platforms are being put in at each of these openings, and at the base of the cliff a substantial ore-house and office are being constructed. A slide will be built from the platforms to the ore-house for lowering the ore, which will be shipped as fast as mined. The road to the Galena King will be completed Saturday."

COPPEROPOLIS.—Work is progressing as heretofore, and good headway is being made in the sinking of shafts Nos. 1 and 2, both of which are now making an excellent showing of high grade ore.—[Bulletin, Aug. 27.

Sullivan.

SULLIVAN.—Supt. Cahill reports under date of Aug. 31st as follows: "The improvement in our east and west drifts on the 4th level for the last week has been very encouraging and the ore vein is very regular and of an excellent grade, carrying ruby and chloride of silver in greater quantities than usual. The face of the west drift on the 3d level is all first class milling ore. We have a large force of men in the mine, and making the necessary surface improvements."

MILTON.—The easterly and westerly drifts from the southerly crosscut of the 160 foot station from shaft No. 1, are being driven energetically. The level running south from the 180 foot station of shaft No. 2 is progressing in a satisfactory manner, and everything about the property looks lively and prosperous.—[Bulletin, Aug. 27.

FANEUIL HALL & SULLIVAN.—Supt. Hayward reports under date of Sept. 1st, as follows: "Everything at the mine continues to give satisfaction. The crosscut from the 160 foot level was driven five feet during the week. The rock is extremely hard. The total length to date of crosscut is 80 feet. The new pumps will be started Monday."

GOLDEN CIRCLE.—A meeting of the stockholders of the Golden Circle Mining and Milling Company was held in Portland on Wednesday last, to devise some means for resuming work upon their property. The result of the meeting we have not ascertained.

Blue Hill.

BLUE HILL.—Under Supt. Moyle, operations at the Blue Hill continue to progress satisfactorily and the mine is making a splendid exhibit of superior ore.

TWIN LEAD.—Supt. Duff is pushing work. The ore has increased in quantity and richness as the crosscut has entered the vein.

STEWART.—Developments progress continuously and the two shafts are steadily increasing in depth and making a good showing of ore.

DOUGLASS.—The mine shows no material change and the smelters are running steadily. On Saturday last the first refined copper was made on the Douglass grounds. The run consisted of 160 ingots or bricks weighing from 16 to 18 pounds. Each ingot has the name Douglass on the bottom.

MANMOTH.—Work is being prosecuted under the direction of Supt. Duff. A shaft is now being sunk in the ledge.

GRANGER.—A communication from President Stone, dated Aug. 25, and received just too late for publication in our last issue, contains the following items of information: "The New England Smelting Company, at East Boston, have just commenced firing up their reverberatory furnaces, and on Monday next (29th inst.) will commence pouring matte copper from the Granger ore. The cargo turned out to be not over 75 tons. At

the mine, the incline is now about 75 feet below the 100 level. The east drift was in 47 feet a week ago. The ore at the bottom of the incline was some of the best we have ever had." Under the date of Aug. 31st, we are in receipt of additional correspondence from the President in which he says: "The New England Smelting Company, at East Boston, poured the first run of matte from Granger ore last evening. I have a specimen of the matte which is quite porous and consequently contains but little iron. It will average about 24 per cent. for the first run. The second run will probably give 35 per cent., 3rd run 45 per cent., 4th run 75 per cent. and 5th run 90 to 95 per cent. Those who thought a reverberatory smelter would not melt the ore were mistaken. The smelter affirms in his experience of many years he never saw better heat in a furnace. The ore runs well in copper."

British Provinces.

A Halifax dispatch, dated Aug. 24, announces the discovery of a valuable gold lead, 14 inches wide, at Chezzetcook. It is owned by Johnson Hunt and his brother, Aubrey Hunt.

A Sandstone quarry has been opened at Baie de Chaleurs, N. B. Seven hundred ton vessels have been loaded and sent to Montreal this season with grindstones from it. It is stated that the quality of the stones is far superior to those from Ohio.

The New Glasgow Plain Dealer says:—Messrs. Duncan Rankin, of Hardwood Hill, and James Conn, of Westville, have discovered a valuable seam of ore in the vicinity of Tatamagouche. A sample of it sent to New York assayed \$2.62 in silver per ton (2000 lbs), besides 66.44 per cent. of copper.

The Maple Leaf, published at Hopewell Corner, New Brunswick, says:—Messrs. Freeze & Goodfellow's silver, copper and lead mine in this place, gives every indication of turning out well. They have discovered three leads of rich mineral, one of silver, one of copper and one of lead. It is said that a gentleman at Sussex offered the Doctor \$8,000 for 1-16 of the mine, but was refused at once.

The Directors of the Beliveau Albertite and Oil Company met at Moncton, N. B., on Wednesday, 17th inst., to discuss the propriety of undertaking the manufacture of oil from shale, and a good deal of information bearing on the question was submitted by E. B. Chandler, Esq. Further information was needed and the passing of an order to collect unpaid assessments on stock to enable the Directors to pay off liabilities, was the only business done.

The Monetary Times says that the visit to Cape Breton of Mr. Desjardins and other directors of La Banque Jacques Cartier resulted in the sale of the International Mines at Bridgeport, (long the property of the bank) to New York parties, whose representative among our Bluenose friends is Mr. Robert Belloni, who was the lessee of the mine. The purchasers are, it is understood, the same parties who own the Block House mine, which Mr. Belloni is now working.

The St. John Daily Sun, of August 25th, says that Mr. Markham, of Markhamville, has sent to Boston by rail this summer some twelve car loads of manganese, and some eight cars for Milo, Me. The ore is loaded on the cars at Sussex Station and has to be hauled across the ferry to Carleton and reloaded there. It costs \$6 a car load for teaming, for want of a railway bridge across the St. John.—Ten car loads (100 tons) manganese are coming from Sussex for shipment by the bark "Eurydice," now discharging salt here, to Liverpool.

LAKE GEORGE ANTIMONY.—On account of the default of the Lake George Antimony Mining and Smelting Company in carrying out their agreement with the owners of the mine, B. R. Lawrence, on the 18th instant, entered upon the mining premises occupied by the company, and took possession of the same, leaving Mr. W. Boddy in charge for the owners. We suppose that this valuable property will not remain long idle, as we are assured by Mr. Jaek that it is as valuable, if not more so, than any of the mining properties in the vicinity, and that the ore which has already been raised is richer, for the same quantity, than any that he has seen obtained from the several veins on the other properties.—[Fredericton Capital.

ITEMS FROM THE HALIFAX NEW ERA.—Men are wanted at the Gold mines. Managers are obliged to import men from abroad. There is plenty of work at fair wages.—Gold has been discovered in Purcell's Hill, Sheet Harbor, and a few men are now engaged in mining.—A new company is about commencing operations at the gold mining region, Beaver Dam, Sheet Harbor.—Mining operations are being rapidly pushed in our Eastern Gold Fields. Several gentlemen of Nova Scotia and Cape Breton visited Halifax recently, to obtain licenses for newly discovered fields.—Mr. William Cole brought to the city this week from his gold mine at Moose River, several

wedges of gold of the aggregate value of \$470. He reports gold mining in that district as active, with encouraging prospects.

The St. Croix Courier says: "Considerable talk has been created in mining circles lately by the alleged discovery of a vein of magnetic iron at the Union. The discovery is not a new one at all, rock from the vein having been analyzed as many as 30 yrs. ago. About two years ago, Mr. Dick of Mascarene, took out a quantity of the rock, but nothing was done, in either of these cases, to work the vein. Within the past week or two, attention has again been directed to it. The vein to the width of 18 feet has been uncovered. Of this about 6 feet contains a large amount of sulphuret of copper while in the remaining uncovered portion a mixture of magnetic iron and copper seems to predominate. No company has been formed as yet, but steps are being taken to have the rock assayed in order to find whether or not the mine can be profitably worked.

Several mining licenses in Restigouche and Gloucester Counties, New Brunswick, were sold at the Crown Land Office in Fredericton, Aug. 24th. Two square miles in Restigouche were sold to Mr. Samuel Adams, of Leadville, Colorado, and Mr. Sadler, of Chatham, N. B., at \$20 and \$25, respectively. For the first square mile in Gloucester County there was some very lively bidding, and it was finally purchased by Messrs. Adams & Sadler for \$3,350. They were opposed by Mr. F. E. Winslow, of Chatham. The same parties also bought two more square miles in the same county. The total sales amounted to \$3,435. It is understood that Messrs. Adams & Sadler intend forming a company for mining in these counties. It is evident that the purchasers believe they have discovered some rich mining country in Gloucester. Mr. Adams has been quite extensively engaged in silver mining in Colorado.

SHERBROOKE.—The New Glasgow Chronicle gives the returns for July as follows: Days' labor, 2,340; tons crushed, 676 1-2; gold yield, 263 ozs. 5 dwts. The greater part of the quantity crushed consists of earth mixed with broken slate and quartz, which, though not yielding so much gold per ton as the quartz leads, is much more cheaply worked and crushed, and found to return gold enough to overpay the working. The Dewar Lead on the Wellington property continues to hold its own admirably, giving three ounces per ton from a nine-inch lead, and is now, as it has long been, the "backbone" of the mines. Considerable prospecting is carried on and a new lead of ten to twelve-inch quartz has been opened on the Springfield property which promises to be fairly paying. On Saturday, 6th inst., a small lead on the Caledonia property, owned by Messrs. Hattie of Sherbrooke and Ross of Halifax, was discovered, which promises unusually well, being rated by the specimens obtained as high as 10 to 15 ounces per ton. The discovery is no doubt valuable from its intrinsic richness and as furnishing an incentive to further prospecting.

General Mining Notes.

The mill at the Chapparral mine is about to start up.

The ore body struck in the south lateral drift of the Sutor tunnel is widening, and promises to become a bonanza.

The Leadville Circular says a mine of Epsom salts, or sulphate of magnesium, has been discovered on North Fork.

It is said that the mines of the American Antimony Company, in Grass Valley, Iron County, Utah, are yielding pure sulphuret of antimony in large quantities.

CHAPPARAL.—The latest advices state that everything around the mine is moving along well; awaiting return of contractor to commence taking out ore and starting mill. Ledge same as last reported.

The Atlanta Constitution learns that a company has been formed in Boston with \$2,500,000 capital to work the river beds of the Georgia gold belt, with boats made on the International Vacuum Dredging Company's patent.

Of the one hundred and eighteen millions of gold produced by the World last year, nearly half was mined in the United States, and \$70,000,000 of the \$90,000,000 worth of silver produced in that year was from American soil.

The famous Morning Star mine, at Leadville, has recently been sold to the principal owners of the Evening Star for a million and a quarter dollars. The property is said to be one of the finest in Leadville and is believed to be cheap at the price paid.

Another rich strike is reported in the already famous Robinson mine, which, it is said, will add millions to the mine and double the value of the property. Superintendent Ewing thinks

the Robinson the greatest property in America, beyond question.

Les Mondes directs attention to a new source of selenium. At Cachenta, in the Province of Mendoza, in the Argentine Republic, there is found an ore containing 28 per cent. of selenium. It is said to be associated with silver, copper, lead, iron, tellurium and sulphur.

People are flocking in large numbers to the scene of the new "carbonate" excitement in the Black Hills. The Deadwood Pioneer says the excitement is based upon something more substantial than "float," and that during the past week innumerable ore bodies were uncovered, all of very high grade, and as work progresses, these widen and give greater assurance that the carbonate district is to develop into the most valuable in the Hills.

The Salisbury Watchman says the mountains of Western North Carolina present one of the finest fields for the production of mineral wealth on this side of the globe. The country has never been prospected. Mica and precious stones are in great abundance. The casual observer is everywhere reminded of the existence of minerals. Fine specimens of mica, iron ore, &c., are to be picked up on almost any hill, while in the valleys the red garnet, amethyst, topaz and limpid crystals are abundant.

THE CALIFORNIA MINE.—The publication of the California Mining Company's delinquent list concentrates attention upon that corporation, and many inquiries are being made about the history of the mine and stock. The San Francisco Daily Report gives its history: "The mine was segregated from the Con. Virginia in 1874, and was called in the Board for the first time in September of that year. During September it ranged from \$37 to \$63 per share. In October it sold as high as \$69 and as low as \$52. In November the range was from \$55 to \$115. In December the excitement over the bonanzas increased and the price advanced to \$520 per share, \$120 being the lowest price the stock sold for during the month. The month of January, 1875, witnessed the culmination of the great bonanza sensation. Under an almost irrepensible demand, California stock advanced to \$780 per share. At this time Con. Virginia was selling for \$700 per share. In the same month—January, 1875—California receded to \$240 per share and Con. Virginia to \$497. In the month of February California sold as high as \$404 and as low as \$46, the lowest point reached by the stock during the year 1875. December of '75 saw the stock fluctuating from \$63.50 to \$77.75. The stock did not reach the \$100 mark after 1875. At the time the stock sold above the \$100 mark the shares in the corporation numbered 108,000. The lowest figure reached by California on the 540,000 share basis is 65 cents, the bed-rock price last month.

NORTH CAROLINA MICA MINES.—The Clarissa mica mines are located three and a half miles east of Bakersville, Mitchell county, owned and worked by private parties, Mr. J. G. Heap and Mrs. Clapp. The mica is found in a feldspar vein, bound by hard micaceous gneiss. The average width of vein is about four feet. They are down 325 feet; the yield at this depth being fully as good as that nearer the surface. They have six shafts; the deepest 325 feet, and the most shallow, twenty-five feet. The latter is a new shaft—the average depth being 200 feet. These are all connected by winze and stoping—each shaft being sunk on the vein. They use horse whims for hoisting both mica and water, in addition to which, they have one steam hoist; the engine by which it is run has not ceased its steady stroke for over eighteen months—its stoppage for one day would require several days time to clear the mine of water. Mr. Heap informed us that this was a paying mine—his exact language being: "We are making some money." The mica as it is taken from the mine is not marketable, but must be divided and sub-divided, marked out in "shapes" or squares, and cut; then wrapped in pound packages, when it is ready for market. An establishment in the town of Bakersville keeps a corps of hands steadily engaged in preparing the mica for shipment. The Cloudland mica, two miles beyond the Clarissa, is owned and worked by same parties. It is a drift, or open cut into the side of the mountain and has worked as deep as 500 feet and driving. The Sink Hole Mica, five miles from Bakersville, is also owned and worked by the same parties. They are down 100 feet, six shafts—average depth, eighty-five feet. There is one large vein, about four feet wide, on which all these shafts are sunk; and they are also connected by tunnels. The Cook mica, owned and worked by same parties, lies twelve miles from Bakersville. They have sunk five shafts, average depth, forty feet. The vein dips at an angle of about twenty degrees—almost parallel with the surface.—[Salisbury Watchman.

—Copper has been found at the Kataldin Iron Works.

Nuggets.

—There is a scarcity of coke at some of the smelting works at Blue Hill.

—The large boarding house of the Sullivan Mining Company will be completed early this month.

—The two storehouses on the new Blue Hill Steamboat Wharf are about completed and are large and thoroughly constructed buildings.

—The steamer Henry Morrison excursionizes from Rockland to Blue Hill to-day (Friday.) The Singhi Band will accompany the excursionists.

—Katahdin Iron Works is getting to be a very popular place of resort and the Silver Lake Hotel has its rooms all engaged throughout September.

—The Boston Traveller says the surface specimens from the silver mine recently discovered at Middlesex Fells, Mass., assay from \$9 to \$200 per ton.

—N. Parker Doc, Esq., is devoting himself to engraving and has opened an office in this city. Mr. Doc is a very skillful engraver and is getting considerable business.

—The Thompson Mining & Sulphate Process Company was recently organized in Kittery for the purpose of mining and treatment of gold and silver ores by Thompson's process so called.

—The Penobscot Savings Bank will locate over the Kenduskeag National Bank in the handsome banking block now being fitted up on West Market Square directly opposite the MINING JOURNAL office.

—We gratefully acknowledge the receipt, from the editor of the Cape Breton Advocate, of a copy of "The Mines and Mineral Lands of Nova Scotia," by Edward Gilpin, Jr., A. M., F. G. S., Inspector of Mines for that Province.

—The Belfast Age says two large steam boilers for the Rosier Mining Company arrived there by rail from New York, on Monday of last week. The boilers are 15 feet long, 8 feet in diameter and contain 43 three-inch tubes each.

—After this week, the Steamer Henry Morrison will make two trips each week between Rockland, Blue Hill and Ellsworth, leaving Rockland every Wednesday and Saturday morning and Ellsworth every Thursday and Monday morning.

—The front of the old steamboat wharf at Blue Hill is being extended some 12 feet into the water by W. E. Grindle, Esq., who is the principle owner of the privilege. He is to build extensive coal sheds and proposes to keep a first-class coal yard.

—For some weeks shipping interests have been quiescent in this vicinity owing to a scarcity of vessels. During the past week there have been a large number of vessel arrivals in our port and our wharves and docks now present an animated appearance.

—At the office of Mason & Reynolds of this city are some very handsome specimens of copper ore from the Eclipse property in Blue Hill. This property is now being placed on the market and it is understood that quite a portion of the stock is already taken.

—Yesterday, the steamer "Queen City" took a good number of excursionists and made a trip from this city to the Bagaduce to give our people an opportunity of beholding the mineral wealth of that highly metalliferous region. A report of the excursion will appear in the next issue of the MINING JOURNAL.

—The closing ball of the season at Fort Point occurred on Saturday night last. It was an especially interesting affair, the occasion being the birthday of Miss Jessie Lewis, the charming daughter of Wm. D. Lewis, Esq., proprietor of the Fort Point House. The attendance was large, the costumes

elegant, the music spirited and it proved in every way the most enjoyable and brilliant hop of the season.

—Summer tourists are now leaving the seaside resorts and wending their footsteps homeward. Notwithstanding the unfavorable season, the myriad of public houses which dot the Maine coast from Passamaquoddy to the Piscataqua, have been well patronized during the present season and the landlords have reaped generally golden harvests.

—Mr. John Lowell called at our office on Monday last and showed us a certificate of assay, made by Prof. F. L. Bartlett, of ore from his farm in the town of Concord, Somerset County. The sample was galena and iron, and contained silver to the amount of 30 7-10 ozs., or \$34.27, per ton. Mr. Lowell states that the lead has been traced for a long distance, and he is desirous that some one having capital should examine the property, as he believes it is to be one of great value.

—The MINING JOURNAL recently announced the death by accident, while working in a New Mexican mine, of James Cannon, formerly a resident of Bangor. The current issue of the Mining World, of Las Vegas, N. M., alludes to the accident as follows: "A singular and fatal accident occurred in the Cerillos mining camp on the afternoon of the 4th instant. A number of hands were working on the Bonanza mine and while some were engaged adjusting a speaking tube a joint of piping 8 feet long by 1 1-4 inches in diameter fell from the mouth of the shaft. At two-thirds down it passed through a one inch pine board and then struck James Cannon on the top of the back part of the head, passed through and came out just below his left shoulder blade. The miners throughout the camp are deeply sorrow-stricken. Cannon was a kind-hearted, hard-working man and held in high esteem by all who knew him. The deceased is a native of Maine."

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, AUG. 31, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Attouez.....	2 1/2	3	2 1/2	3	...	...	2 1/2	3	2 1/2	3	2 1/2	2 1/2
Atlantic L. S.....	11	13	11 1/2	...	...	...	12	...	12	15	12	14
Atlas.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper..	3	...	3	3 1/2	...	...	3	...	3 1/2	...	3 1/2	3 1/2
Brunswick.....	9	10	9	10	...	...	8 1/2	9	8 1/2	9 1/2	...	...
Calumet & Hecla.	215	219	216	217	...	...	216	216 1/2	216	217	215	216
Catalpa.....	1 1/2	1 1/2	1 1/2	1 1/2	...	...	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Central.....	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls.....	4	5	4	5	...	...	4	5	3 1/2	4	2 1/2	2 1/2
Contentment.....	...	...	...	...	...	...	...	...	...	...	...	...
Douglass.....	2	...	2	...	...	...	2 1/2	2 1/2	2	...	2	2 1/2
Dana.....	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver.....	...	...	...	...	...	...	...	...	...	...	...	...
Empire.....	...	...	...	...	...	...	...	...	...	...	...	...
Franklin.....	10	11	10 1/2	11	...	...	10 1/2	11	11	11 1/2	11	11 1/2
Harshaw.....	6	6 1/2	5 1/2	6 1/2	...	...	6	6 1/2	5 1/2	6 1/2	6	6 1/2
Huron.....	3	3 1/2	2 1/2	3 1/2	...	...	3	3 1/2	3	3 1/2	3	3 1/2
Hanover.....	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt.....	...	...	...	...	...	...	...	...	...	...	...	...
International.....	...	...	...	...	...	...	...	...	...	...	...	...
National.....	2	2 1/2	2	2 1/2	...	...	...	...	2	2 1/2	2	2 1/2
Osceola.....	...	...	30	30	...	...	...	30	29	30	29	30
Osceola.....	...	...	...	...	...	...	...	...	...	...	...	...
Pewabic.....	11 1/2	12	11	13	...	...	12	13	12	14	12	14
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	32 1/2	33	32 1/2	33	...	...	33	33 1/2	33	33 1/2	32 1/2	33
Ridge.....	3	4	3	4	...	...	3	4	3	3 1/2	3	4
Silver Islet.....	43	44	43	45	...	...	42 1/2	44	43	45	41	43
Star.....	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan.....	3	...	...	...	...	...	3	...	3 1/2	4	3 1/2	3 1/2

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$5.00. Unassessable.

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Directors—Col. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, JR., of New York.

ASSESSMENT NOTICE.

North Castine Mining & Smelting Company.

BANGOR, Me., August 27, 1881.
 Notice is hereby given to the Stockholders of the North Castine Mining and Smelting Company, that at a legal meeting of the Board of Directors of said Company, held on the 17th inst., an assessment was voted to be laid, and was laid, upon the entire capital stock of said Company, in conformity with the laws of this State and the by-laws of the Company, as follows: Five cents per share upon every share of said capital stock, which by vote of the Directors is ordered paid to the Treasurer of the Company as follows, viz: Two cents per share to be paid on or before the 5th day of September, 1881; and the balance in three equal installments payable on or before the 30th days of September, October and November, 1881.

Per order of the Board of Directors,
 S. P. JOHNSON, Treasurer.
 P. S.—Certificates of Stock will be issued upon call.

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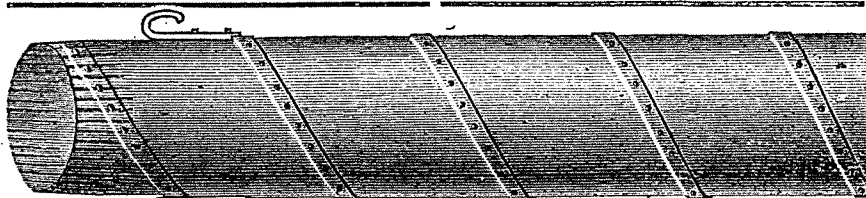
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of all Diameters; Strength or Thickness according to pressure required, for MILLS, MINES, and WATER WORKS, made of galvanized or black iron and dipped in coal-tar and asphalt. Furnished with slip joint, sleeve and nipple, or flange connections. In lengths of from 5 to 25 feet, each tested to required margin of safety.

BURSTING PRESSURE 300 TO 1000 LBS. PER SQUARE INCH. according to diameter and weight of pipe.

AVERAGE FIRST COST FROM 10 TO 60 PER CENT LESS than other tubing; the greatest difference being in the larger diameters.

AVERAGE WEIGHT 50 TO 75 PER CENT less than wrought or cast iron tubing.

AVERAGE SAVING IN COST OF TRANSPORTATION 50 TO 75 PER CENT. The advantage of the spiral over the straight or longitudinal seam is that the Spiral Seam is the strongest while the straight seam is the weakest part of the pipe by about one half.

Where it is found inconvenient or undesirable to ship tubing already formed up we can supply punched and formed sheets nested and packed for shipment (which can be riveted into pipe at destination) in packages of any desired weight.

Estimates and Price list furnished on application. A full stock always on hand.
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Appleton, Me. Incorporated Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinth.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., '880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Lafan, Jeremiah Wooster.

FRANEUL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Hoynton, Henry Farnum, F. W. Morrill and P. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me. A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffin, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Rediff, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

McFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

OSHKOSH CONSOLIDATED MINING CO.,
Lawson, Colorado. Organized under the laws of the State of Maine.
Capital, \$500,000. Shares, \$5 each, unassessable; 40,000 shares in the Treasury.
President, E. C. Nichols, of Bangor; Treasurer, C. T. Plympton, of Boston; Secretary, S. P. Johnson, of Bangor. Directors—E. C. Nichols, S. P. Johnson, Dr. W. K. Knowles and John R. Mason, Bangor; C. T. Plympton, Henry A. Piper and Geo. W. May, Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett.
P. MULLAN, Supt.

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Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. T. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

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Gouldsboro, Me.
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W. I. VALENTINE, Supt.

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Office, 11 CENTRAL STREET,
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Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

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OFFICE..... BANGOR, ME.
MINES AT..... BLUE HILL, ME.
CAPITAL, \$500,000.
100,000 Shares: Par Value, \$5.00.
Treasury Fund, 30,000 Shares.
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YOUNG HECLA Mining and Smelting COMPANY.
Office at Bangor, Me. Mines at Blue Hill, Me.
Capital, \$500,000.
100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.
President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

NOTICE.

The stockholders of the Franklin Silver Mining Co., of Maine, are hereby notified that there will be a meeting of the stockholders of said company at the store of Jerry Wooster, in Hancock, Sept. 19, 1881, for the purpose of reorganizing said company and transacting any other business that may legally come before it.
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N. P. DOB, Secretary, pro tem.
Bangor, Aug. 24, 1881.

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Leave Bucksport, 6.00 10.00 5.03
Arrive Bangor, 7.03 11.15 6.00
Leave Bangor, 7.35 2.00 7.00
Arrive Bucksport, 8.40 3.15 8.07
The 6.00 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
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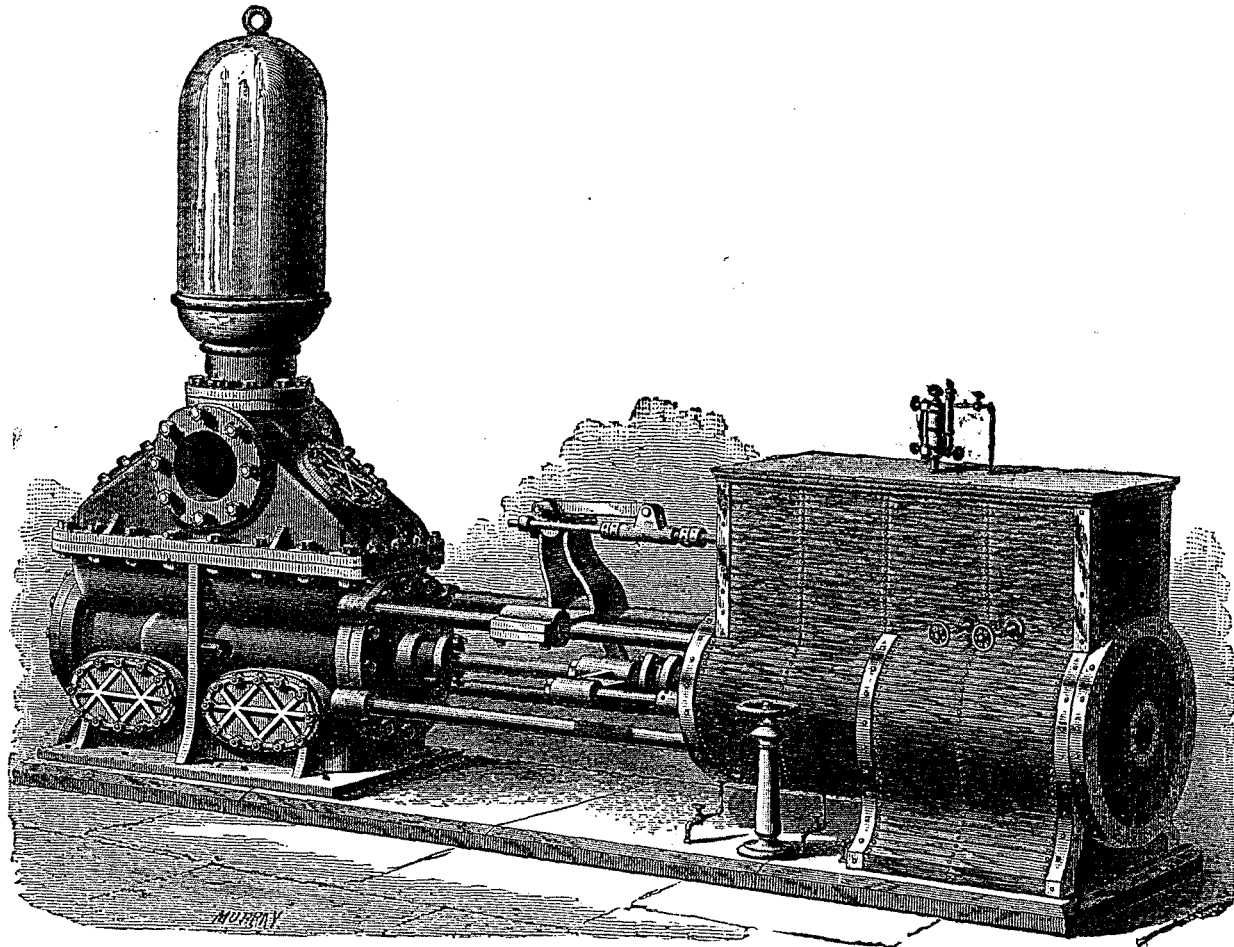
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J. B. REDMAN, Sec'y. FRANCIS WORCESTER, Manager.

DIRECTORS—A. P. Wiswell, C. C. Burrill and Eugene Hale, all of Ellsworth.

W. I. VALENTINE, Superintendent.

Granger Copper Mining Co.

OFFICE, 1 Pemberton Square, Room 4, BOSTON, MASS.
MINES, BLUE HILL, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00

HENRY N. STONE, Pres't. DEXTER H. FOLLETT, Treas.

BROWNELL GRANGER, Secretary.

DIRECTORS—Henry N. Stone, Dexter H. Follett, Brownell Granger, Willard J. Humphrey, John G. Blood, B. S. Grant and C. R. Aldrich, all of Boston.

BROWNELL GRANGER, Superintendent.

Milton Mining and Milling Co.

OFFICE, 4 SEARS BUILDING, BOSTON, MASS.

MINES, SULLIVAN, ME.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50

CHAS. H. LEWIS, Pres't. GEO. E. HARRINGTON, Treas.

W. O. ARNOLD, Secretary.

DIRECTORS—Chas. H. Lewis, Geo. E. Harrington, Geo. West, J. D. Prescott, W. O. Arnold.

JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE.

Capital, \$500,000. Par Value of Shares \$5.00.

Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, JR., Treasurer.

W. OSCAR ARNOLD, Secretary.

DIRECTORS—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, JR., of New York.

Revere Silver Mining Company.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

F. O. BEAL, President. WM. E. BROWN, Treasurer.

WM. E. BROWN, Secretary.

DIRECTORS—F. O. Beal, W. J. Webb, George W. Knight, Ezra L. Sterns, A. H. Thaxter, Bangor.

JAMES MITCHELL, Superintendent.

Stewart Copper Mining Com'y.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

HON. FREDERICK M. LAUGHTON, President. C. F. BRAGG, Treasurer.

C. F. BRAGG, Secretary.

DIRECTORS—Frederick M. Loughton, F. W. Hill, C. F. Bragg and Thomas White, of Bangor; S. N. Stockwell and G. B. Putnam, of Boston.

DANIEL DUNN, Superintendent.

Sullivan Mining Company.

OFFICE, 17 Tremont Bank Building, BOSTON, MASS.,
MINES, SULLIVAN, ME.

Capital, \$500,000. 100,000 Shares. Par value, \$5.00.

GEORGE B. BROWN, President. F. R. NOURSE, Treasurer.
CHARLES L. PERRIN, Secretary.

DIRECTORS—Geo. B. Brown, B. S. Grant, C. F. Farrington, J. G. Russell, Dudley R. Child, E. A. Birchard and Frederic R. Nourse.

THOMAS CAHILL, Superintendent.

Twin-Lead Mining and Smelting Co.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 125,000 Shares. Par Value, \$4.00.

EUGENE M. HERSEY, President. SAMUEL STERNS, Vice President.

JOHN R. MASON, Secretary and Treasurer.

DIRECTORS—E. M. Hersey, Samuel Sterns, John S. Jenness, Jacob Stern, F. H. Williams and Thomas N. Egery, of Bangor; Charles Duff, of Blue Hill.

CHARLES DUFF, Superintendent.

[ESTABLISHED 1848.]

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U. S. Deputy Mineral Surveyor for the territory of New Mexico.

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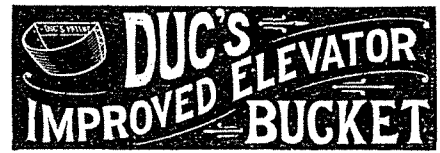
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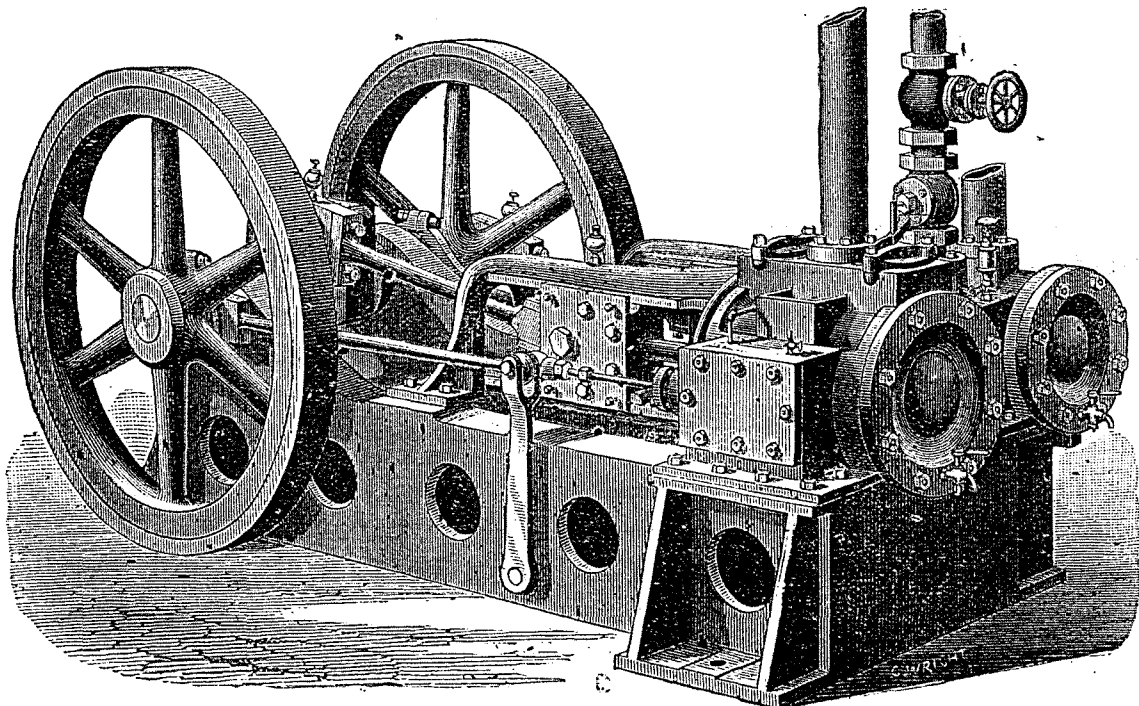
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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

28 West Market Square, Bangor, Maine.

E. M. BLANDING, } EDITORS.
W. F. BLANDING, }
E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, over the writer's signature, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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Advertising rates made known upon application.

All letters should be addressed to

THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, SEPTEMBER 9, 1881.

No session of the Stock and Mining Exchanges yesterday.

The Associated Press are doing some tall advertising for the Poland Spring Water.

Copper shares are beginning to be in demand, and an active market is predicted during the fall months.

The long-delayed "boom" in copper stocks must come soon. Ingot copper is strong at 17 1-4c and has evidently not yet reached its highest point.

The following advice from the Bonanza (Col.) Enterprise applies well to this locality: "Send your ore to the smelter or stop blowing about what you have 'on the dump,' and can 'take out per day.'"

The San Francisco Mining and Scientific Press publishes this week an extra double-sheet edition, containing among other articles of unusual interest a history and description of the wire rope cable railroad system, which has proved such a success in that city.

The Portage Lake Mining Gazette states that a rare opportunity is now offered for some educational institution or private individual to secure a choice cabinet of mineral specimens. The fine collection left by the late A. J. Corey, for many years superintendent of the Quincy mine, is for sale. Information will be furnished by Hon. S. D. North, or Mr. D. Kloeckner, Hancock, Michigan.

Since our last report, mining shares have generally remained firm, but the market has been dull and devoid of special interest. On Wednesday last, however, a fair business was transacted at the various Exchanges, and "coppers" were quite active at advancing prices. Maine stocks have not changed materially from last week's prices. At the Boston Mining Exchange, on Wednesday, sales of Copperopolis were reported at \$1.95; Milton, 84c; Twin Lead, 60c; Deer Isle, 58c; Young Hecla, 40c. Empire sold down to 32c. At the Old Board, Douglass closed at \$2 bid; Blue Hill, 3 1-4 bid, 3 1-8 asked; Sullivan, \$3 bid.

We publish this week a communication from Mr. Maliphant, of the Douglass Smelting Works, in reply to Prof. Bartlett's criticisms on the manner in which smelting operations at Blue Hill have been conducted. Prof. Bartlett's article has been productive of good in one respect at least, as it has enabled us to hear from some of the parties having these operations in charge, thus giving the public an opportunity to learn, authoritatively, something as to the course which has been pursued. We hope, however, in all future discussions of the subject which may appear in this JOURNAL, to see no allusions to "malice" or "egotism." They are entirely unwarranted and are not arguments.

The irrepressible Newfoundland correspondent of the New York Herald has again come to the front, this time with a thrilling "yarn" about a conspiracy among the convicts resident in the French island of St. Peters to murder the officials and take possession of the island. The St. John, New Brunswick, Daily Sun well says that "Newfoundland, for some reason or other, has proved a perfect mint to the Bohemian intent on making money by the invention of blood-curdling adventures and tragedies for the delectation of the New York Press. Some of the stories which have come from that quarter have displayed rare inventive talent, and would have done credit to the foremost writers of romance on either side of the Atlantic."

Personals.

JAY GOULD is said to be growing corpulent.

PROF. W. FRANK STEWART is still at the Tremont House in Boston.

TREASURER SWAZEY of the Douglass Copper Mining Company is in Boston.

GEN. W. B. HAZEN, chief signal officer, has been visiting Maine during the past week.

MR. FRANCIS WORCESTER has removed from his summer residence in Sullivan to Ellsworth.

MR. H. H. EMERSON, of Ellsworth, was at the Bangor House Monday evening on his way to Portland.

JOHN MACKAY, the Bonanza King, is at Christiana, Norway, with his family. No "boom" in Comstocks just at present.

REV. DR. BUTLER, formerly of Bangor, has given up the ministry and has entered the employ of the Hallowell Granite Company.

MR. F. A. McLAUGHLIN, the well known mining super-

intendent, is in the city and yesterday made a pleasant call on the MINING JOURNAL.

MR. JOHN R. BOTHWELL, of the firm of Clark & Bothwell, left New York early during the present week for the Pacific coast, where he goes to visit the Stormont, Starr-Grove and Hite mines.

PROF. N. N. ATKINSON, formerly principal of Warner (N. H.) High School, and who lately, with a friend, discovered a gold vein in Nevada, is reported to have sold his share in the same for fifty thousand dollars.

HON. GEORGE S. MERRILL, editor of the Lawrence American, is making a tour through the West, and has visited and inspected the properties of the Hoosac Mining and Milling Company, in Colorado, of which he is President.

MESSRS. GEO. E. HARRINGTON, President of the Copperopolis, J. D. PRESCOTT, of the brokerage firm of Prescott & Hersey, and F. TUCKERMAN, all of Boston, passed through Bangor Saturday morning on their way to the mining regions of Hancock and Sullivan and returned on Tuesday evening.

PROFESSOR RAPHAEL PUMPELLY, Geologist and Mining Engineer of the United States Geological Survey, has resigned his position and been engaged by the Oregon Trans-Continental Company to make a full survey of the region traversed by the Northern Pacific Railway and Navigation Company, including all the adjacent territories.

MR. H. HAVEMANN, of the firm of C. Westenholz & Co., Paris, who are among the largest ore dealers in Europe, passed through this city last week on return from a trip to the Cape Rosier mine. He has also made an examination of Copperopolis ores and arrangements have been perfected for the shipment of ore from the latter mine to Havre.

ASA B. HUTCHINSON, of the old "Hutchinson Family," lives in Leadville now. He and his brilliant wife, formerly Mrs. Powers, of Bangor, have large mining interests in and near the city, and, at the same time, keep a first-class private boarding-house. Asa is still lively as a boy, and has never lost a particle of his early freshness, mellowness, and genuine love of song and of friends.

"BRICK" POMEROY, who was somewhat notorious during the war as publisher of a "Copperhead" newspaper, went to Colorado two years ago, with about \$300. He is now said to be worth \$200,000, and is President of the Atlantic and Pacific Tunnel Company, which is capitalized at \$7,000,000. "Brick" is also editor and proprietor of "The Great West," one of the best and most reliable newspapers in Colorado.

LORENZO DELMONICO, the head of the famous house of caterers in New York city, died on Saturday last at Sharon Springs, N. Y., after a protracted illness. He was a native of Switzerland and came to the United States in 1827. About twenty years ago Mr. Delmonico lost his entire fortune by large investments in a petroleum company, of which he had been made president, and which failed. By an arrangement with his creditors, however, he was enabled to continue his successful management of his business, and subsequently paid off his entire indebtedness.

Dips, Spurs and Angles.

THE LAND OF PROMISE.

Tell me, reckless sharp stock, thou
Who hast busted free and wide,
Seen the biggest boomings blow
And the fiercest wildcats glide;
Say, of all thine eyes have seen,
Which the fairest land has been?

"Gummy! shall I tell thee where
Fictions seem most blest and rare,
Far above all lies beside?
'Tis where experts most abide,
On the rugged Comstock's slope—
Land of never ceasing hope."

—[San Francisco Exchange.

—A kil'n business—making bricks.

—B sharp at times; B natural always; B flat never.

—A Boston critic explains that a certain vocalist sings badly because his heart is too big and crowds his lungs.

—In the mountains—Arabella (whose soul is wrapped in science): "Charles, isn't this gneiss?" Charles (who is deeply interested in Arabella): "Nice! it's delicious!"—[Vanity Fair.

—A lot of Maine women have organized a mining company. If speech is silver, that company will strike the biggest bonanza ever seen at the first meeting of stockholders.—[Boston Globe.

—The Denver Daily Stock Report remarks that "La Plata is stiff." A Boston lady of esthetic "culchaw" would remark; "It doesn't mattah how stiff the Plata is, so that the gravy is limbah."

—The selectmen of Franconia, N. H., have changed the name of Haystack Mountain to Mount Garfield—probably because some mineralogist has stated that there are indications that lead is contained in its bowels.—[Rockland Opinion.

—Dave Day, editor of the Solid Muldoon, Ouray, Colorado, speaks about a mine down in his country which is worked in three places—on the vein and in the District and United States Courts. The two latter workings, he says, have developed nothing but pyrites of perjury and sulphide of hope.

—The Portland Argus announces the receipt of a despatch from the superintendent of a Maine mine, which is as follows: "Our blower works to perfection and will supply sufficient air for all the men who can work." That's just what's the matter with many a Maine mine. Their "blowers" have worked to perfection.—[Boston Post.

The Bagaduce.

The Bagaduce District, so called, properly includes the region drained by the Bagaduce River, embracing the towns of Brooksville, Castine and Penobscot. This "river" is really nothing more than an irregular arm of the sea which winds its tortuous course through the above mentioned towns, penetrating the very heart of one of the richest mineral regions yet discovered in this eastern country, and through the narrow passages of which the outgoing and incoming tides flow with a velocity of nine or ten miles an hour.

A great number of promising mineral discoveries have been made in this region, many of which make a truly wonderful showing. The veins are mostly of mammoth size and may be traced for long distances, while the ores, although base, as is usually the case near the surface, are massive, occur in large bodies and are found to carry goodly proportions of the precious metals. Although comparatively little has yet been done toward the development of these extensive deposits, enough has been accomplished in that direction to demonstrate the fertility and permanency of the ore-channels, and negotiations are now pending and arrangements being perfected for the working of a large number of valuable properties in the district now lying idle.

A short time since, several gentlemen of this city interested in mining developments on the shores of the Bagaduce planned an excursion to that locality, by steamer Queen City, of the

Bangor and Bar Harbor line, which should not only be a pleasure trip in itself but give those of our citizens who chose to avail themselves of the privilege (including several who have hitherto been sceptical concerning Maine's mineral wealth) an opportunity to inspect the North Castine mine, now being operated by Bangor parties, and also to see for themselves, and bring away specimens from the remarkable surface showing of mineral lately uncovered on the Dodge and Jones properties, on the Brooksville shore of the river. The excursion was to have come off week before last but owing to an accident to the Steamer City of Bangor, of the same Line, it was necessarily deferred until Thursday of last week.

The morning was the hottest of the season, and the dense smoke which had hung over the river and bay for several days was thicker and more impenetrable than ever. Nevertheless, about seventy-five ladies and gentlemen were on the boat at the appointed hour, and a MINING JOURNAL reporter was fortunate enough to be one of the number. The steamer left her wharf promptly at eight o'clock. Although the fine scenery of the river banks was totally obscured on the downward passage by the villainous mixture of smoke and fog, the cool and refreshing breeze encountered shortly after leaving the harbor left no occasion for regrets at having left the hot, dusty and smelting city behind. The Queen City is the fastest boat on the river and is, withal, a model of neatness and comfort. Consequently, notwithstanding the murkiness of the atmosphere, the party thoroughly enjoyed the sail, and after touching at Fort Point and Sandy Point, Castine was reached a full half-hour before noon. Here is the entrance to the Bagaduce, and as it was necessary to wait a couple of hours for the incoming tide, an opportunity was afforded the excursionists for a stroll through the streets of this ancient and historic but beautiful town. Our reporter improved the occasion by inspecting the remains of the old French fort and viewing with wistful eyes and a throbbing heart the outer walls of the State Normal School building, after which he placed himself on the outside of a few refreshments and joined the party on the wharf shortly after one o'clock.

Re-embarking, the lines were cast off and the gallant little craft steamed away up river with the flood tide. Soon the hoisting works and dump of the North Castine mine came in sight, situated on the shore within a stone's throw of the water's edge. A scow which does service as a ferry-boat between Castine and Brooksville was here taken in tow, and after continuing her course a short distance the steamer came to a stop, and the passengers were transferred to the scow and landed at the Dodge property on the Brooksville shore. Here, upon the bluff, a shaft is being sunk upon a well-defined ore channel known as the "Pine Tree vein," and is now down something more than twenty feet. The showing at this place is excellent; the vein is large and quite a quantity of fair grade ore has been taken out.

Perhaps 2000 ft. from the Pine Tree shaft, an opening has been made on the Jones property, which presents the most remarkable surface showing of mineral we have yet seen in Maine. The excavation is nothing more than a mere, shallow prospecting pit, and has not even demonstrated the width or trend of the vein, which is of unknown extent; but it has exposed a massive body of as fine looking ore as one would care to see, consisting of galena, zinc blende, fine sulphurets of iron and some copper. The following assays of surface specimens will show that the precious metals are not wanting:

CERTIFICATE OF ASSAY.

NEW ENGLAND MINING BUREAU, L. B. DARLING, PRINCIPAL, }
119 MATHEWSON ST., PROVIDENCE, R. I. June 11, 1881. }

To E. C. Smart, Esq., Bangor, Me.:

The samples of mineral sent me by mail have been assayed for silver and gold, with the following result per ton of 2000 pounds: 4 ozs. silver and ½ oz. gold; value \$14.80 per ton.

L. B. DARLING.

CERTIFICATE OF ASSAY.

BANGOR ASSAY OFFICE, 10 HAMMOND STREET, }
BANGOR, ME., July 12, 1881. }

The sample of galena submitted by Mr. E. C. Smart, marked "Jones," has been assayed for gold, silver and lead, with the following result per ton of 2000 lbs.:

Gold, in pennyweights, 0 14-24, Present value U. S. Currency.....	\$ 0 60
Silver, in troy ounces, 5 9-10 " " " "	6 50
Lead, per cent. of, 41½ " " " "	37 35

Total Assay value..... \$44 45

A. E. BARCLAY, F. C. S., Assayer.

A blast of seven shots fired during our stay threw out a large quantity of massive ore, and but very little rock; while after the debris was removed the bottom of the hole showed unmistakable indications of improvement in the character of the ore body. This prospect surely should not be allowed to remain idle a day, and we are glad to learn that there is a prospect of its speedy development. The two properties—Jones and Dodge—comprising 200 acres of land, have been consolidated, and shares in the same are rapidly being taken up in Bangor.

Shortly after three o'clock the Queen City, which had meanwhile returned to Castine, put in an appearance, and the party of visitors clambered into the scow and, after numerous interesting experiences and struggles with the tide, which was running like a sluice, reached the steamer and were taken on board. Starting down river, the North Castine mine was soon reached, and a portion of the excursionists went ashore to take a look at the property.

The North Castine mine has had a somewhat unsavory reputation in the past, owing to the mismanagement of its affairs; but all this is now changed as the property has largely passed into other hands, is being worked legitimately and systematically, and from present indications it will soon more than redeem the mistakes of the past. Quite a large body of ore near the surface was removed, and since the present management assumed control the shaft was driven downward forty feet through barren rock, without sign of a color. They have been rewarded, however, by striking, some time since, another extensive ore body, and have also found the hanging wall of the vein, which it is proposed hereafter to follow wherever it may lead. The shaft is now down about eighty feet, and three eight-hour shifts per day are driving work as rapidly as possible, under the direction of Mr. Chas. Duntun as foreman and Mr. Frank W. Leavitt, of this city, superintendent. When the 100-level is reached drifts will be run on the vein in either direction. The ore dump presents a fine appearance, consisting of some seventy-five tons or upward and containing little or no waste rock. A very marked and gratifying change is noticed in the character of the ore-body during the last few days, the ore being almost entirely free from base metals and the rock being of a more favorable nature. Future developments will be awaited with much interest.

The value of the precious metals contained in the ore which has been taken out may be best appreciated by the results obtained from the working of several lots which may be considered average samples of the whole dump, by L. B. Darling, of Providence, R. I. The first lot of 100 pounds, showed a value of \$41 gold and \$28.40 silver per ton; the second was a ton-lot and gave \$68.80 in gold and silver; the third was also a ton-lot and the product was \$66.06 in gold and silver.

After a brief stay at the mine, the steamer was again boarded and the excursionists started homeward. The return trip was a most delightful one. A northerly breeze which sprung up during the afternoon had cooled the atmosphere and dispelled the smoke, and the evening was in all respects most charming. After a quick passage of about four hours, the Queen City arrived at her wharf at eight o'clock, and the party dispersed to their homes well pleased with their trip to the Bagaduce.

The Mascot Mines.

Our readers have from time to time heard of the Mascot mines at Gorham, N. H. A correspondent of the MINING JOURNAL who recently visited them writes as follows:

The mines are situated on Mt. Hayes about a mile north of the village, across the Androscoggin. The company have built a first class turnpike road from the river to the mines at a cost of over five hundred dollars. Arrived at the mines we find a peculiar scene of beauty. About four hundred feet above the river in a depression which was once the bed of the river lies a pretty lake, from the shores of which nearly the whole of the Presidential range is visible. On the west of this pond work was first begun. Here during last winter Mr. J. M. Johnson, now superintendent, worked a prospect shaft, from which he obtained several tons of fine galena ore. This was sent to Boston and smelted, and on the strength of the showing, the Mascot Company purchased the claim and the two adjoining ones on either side. On the west side of the pond a tunnel is now being driven to tap the vein at a depth of 75 feet. Work has not been stopped a day at a time since May 24th, when the Mascot Company took hold.

About August 1st work was commenced on the "Galena King" claim, lying east of the pond. About three hundred feet back of the pond a cliff rises perpendicularly about 300 feet, back of which rises the broad side of Mt. Hayes. The lode comes out through this precipice, crosses beneath the pond and continues on west to the river. The company have constructed a slide for lowering ore and a stairway for going up and down, to the top of this precipice, and an ore house and office is situated at the base. Going up this stairway we come to a point, 150 feet from the foot, where a tunnel is being driven in on the vein which though in but ten feet at the date of our visit already gives a good showing of ore. The vein is perfectly defined with two good walls. Going on up the stairs we come near the summit to a platform substantially built into the cliff, underneath which is the machinery for lowering the ore to the house below. The ore is handled on the platform above, is run

into a bucket through a chute and the bucket is lowered by means of a friction wheel geared to a drum. We found that the principal work had been done above this platform. Here an open cut has been made in the vein, taking out everything between the walls, and as handsome a pile of pure galena ore, bright and heavy, lay upon the platform and the surface of the cliff above, as one could see by travelling a lifetime in the West. About thirty tons of ore were out Sept. 1, and the company estimate that they will ship one hundred tons in September to the New England Smelting Works in East Boston.

An examination of the vein shows a remarkable formation. Instead of laying in pockets in the quartz as galena ores commonly do, we find the ore here in perfectly well defined streaks following the direction of the vein. One streak lays on the foot wall and as we saw it was fully fourteen inches wide, and pure. There are three other streaks in the vein varying from three to eight inches in width, the next widest being next the hanging wall. At least a quarter of the seven foot vein was pure ore, which has a perfect cleavage from the quartz and requires no cobbing.

The company are pushing the development of their mines energetically and intelligently. About fifty men were at work the day I was there. I have told the story exactly as I saw the mine and every word of it can be verified by a personal visit by any one who doubts. The managers invite the fullest inspection of the property, and passes and a guide are furnished to every part of the mines.

One peculiarity of the "Galena King" is that it is all out of ground. The managers had an entirely new problem on their hands. There was machinery and ways enough of hoisting ore out of the ground, but their mine is up in the air and they had to invent ways of getting their product down. The plan of development contemplates five openings on the cliff, the lowest on a level with the ore house. And on the Mascot, the adit will be driven until it cuts the vein, when drifts will be started each way and an incline sunk following the vein.

The Silver Hill Mine.

LIKELY TO PROVE A GOLD MINE INSTEAD OF A SILVER MINE.—A PROMISING PROPERTY.

Our readers are aware from reports which have from time to time appeared in these columns that the Silver Hill Mining Company have been recently operating on an extension of the "Jones' Hill" vein, in the town of Garland, Penobscot county. From the great amount of massive galena, rich in silver, found near the surface this has hitherto been supposed to be a silver vein, but later developments have given cause for the belief that a more precious element than silver was the predominating metal, and the owners of the property are now confident that they have brought to light a valuable gold mine.

Before the Silver Hill shaft had penetrated the ledge many feet, the galena began to show signs of running out and as work progressed it disappeared almost entirely. This was somewhat discouraging, but work still continued and the vein, about twelve inches wide at the start, kept constantly widening. A short time since, one of the owners was struck with the similarity of the rock to the gold bearing quartz of other mining districts, and more from curiosity than anything else had a quantity tested for gold. To his surprise and gratification the test showed the presence of gold in a considerable amount. A large quantity of the contents of the vein was then sent to Boston and submitted to a severe series of tests by Prof. Holliday, of the Boston Ore Milling and Metallurgical Works. The results are given below:

CERTIFICATE OF ASSAY.

OFFICE OF BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 15, 1881. }

Received of Silver Hill Mining Company, for assay, sample of "Quartz Ore," marked "Keg No. 2," which, upon test, yielded to the ton of 2000 lbs.:

16½ dwts. gold, @ \$1.04..... \$ 17.33
8 13-30 ozs. silver @ \$1.14..... 9.88

Valuation \$ 27.21

JOHN HOLLIDAY, Prof. Chemist and Assayer.

CERTIFICATE OF ASSAY.

OFFICE OF BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 17, 1881. }

Received of Silver Hill Mining Company, for assay, sample of "Selected Ore," which, upon test, yields to the ton of 2000 lbs.:

53 dwts. gold, @ \$1.04..... \$ 55.12
8½ ozs. silver @ \$1.14..... 9.88

Valuation \$ 65.00

JOHN HOLLIDAY, Prof. Chemist and Assayer.

CERTIFICATE OF ASSAY.

OFFICE OF BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 19, 1881. }

Received of Silver Hill Mining Company, for assay, sample of "Mixture of full width mined," which, upon test, yields to the ton of 2000 lbs.:

20 dwts. gold @ \$1.04 \$ 20.80
9 ozs. 13½ dwts. silver @ \$1.14..... 11.02

Valuation \$ 31.82

JOHN HOLLIDAY, Prof. Chemist and Assayer.

CERTIFICATE OF ASSAY.

OFFICE OF BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 22, 1881. }

Received of Silver Hill Mining Company, for assay, sample of "Selected Ore," which, upon test, yields to the ton of 2000 lbs.:

143½ dwts. gold @ \$1.04..... \$ 149.06
20 ozs. 6½ dwts. silver @ \$1.14..... 23.18

Valuation \$ 172.24

JOHN HOLLIDAY, Prof. Chemist and Assayer.

CERTIFICATE OF ASSAY.

OFFICE OF BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 22, 1881. }

Received of Silver Hill Mining Company, for assay, sample of "Quartz ore," marked "Keg No. 3," which, upon test, yields to the ton of 2000 lbs.:

20 dwts. gold @ \$1.04..... \$ 20.80
2 ozs. 13½ dwts. silver @ \$1.14..... 3.04

Valuation \$ 23.84

JOHN HOLLIDAY, Prof. Chemist and Assayer.

CERTIFICATE OF MILL WORKING.

BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 19, 1881. }

Received of Silver Hill Mining Company, for test, 100 lbs. of "Ore, whole width 6x10 feet," which, upon working by milling process, shows a value per ton of 2000 lbs.:

18 15-24 dwts. gold @ \$1.04 \$ 19.37
3½ ozs. silver @ \$1.14..... 9.69

Valuation \$ 29.06

BINNS & KIDNEY,
JOHN HOLLIDAY.

CERTIFICATE OF MILL WORKING.

BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 19, 1881. }

Received of Silver Hill Mining Company, for test, 100 lbs. "Quartz ore," which, upon working by milling process shows a value per ton of 2000 lbs.:

15 dwts. gold @ \$1.04 \$ 13.52
6 ¾ ozs. silver @ \$1.14..... 7.69

Valuation \$ 21.21

BINNS & KIDNEY,
JOHN HOLLIDAY.

CERTIFICATE OF MILL WORKING.

OFFICE OF BOSTON ORE MILLING AND METALLURGICAL WORKS, }
33 HAWKINS STREET, BOSTON, Aug. 22, 1881. }

Received of Silver Hill Mining Company, for test, 200 lbs. "Average full width ore," which, upon working by milling process, shows a value per ton of 2000 lbs.:

18½ dwts. gold @ \$1.04 \$ 19.98
8½ ozs. silver @ \$1.14..... 9.97

Valuation \$ 29.95

BINNS & KIDNEY,
JOHN HOLLIDAY.

These tests are amply sufficient to establish the character of the vein. It will be seen at once that if the company can mine a sufficient quantity of this ore (which is free-milling) they have surely struck a bonanza. Of their ability to do this there can scarcely be a doubt, although the developments upon the property are yet meagre. The appearance of the vein, the great distance for which it has been traced and the formation in which it occurs are proof-positive that it is a true fissure; while the developments in the shafts on the Jones Hill property and the openings made in other places show the rock to be identical in appearance with that sampled, as above. The Silver Hill shaft is now down about thirty-five feet, at which depth the vein is reported to be fully two and a half feet thick, and still widening. Most of the gold is disseminated throughout the rock in minute particles and cannot be seen by the naked eye, but occasionally very handsome specimens are found in which it is plainly visible.

Want of space forbids going into further details concerning this property at present; but our reporter will soon visit the locality and make a careful examination of the prospects, and the result of his observations will be given to our readers. The Silver Hill Mining Company are a substantial organization, have plenty of funds at their disposal, and mean business. They have recently purchased the Garland Hill property, on the same vein, and arrangements will, it is expected, be made with the Jones Hill Mining Company whereby the three properties may be consolidated, placed under one management, and a small stamp-mill erected at the mines if thought advisable.

—Mount Desert is the most progressive watering place in the country, growing wonderfully, with already miles of handsome cottages, (as residences, costing many of them, grounds included, \$20,000 to \$40,000, are called,) and some seventeen hotels, some of them having as many as 200 guests at a time. This refers to Bar Harbor, Mount Desert, while Southwest Harbor, on the same island, a few miles distant, has at least two hotels, besides many boarding houses.—[N. Y. Stockholder.

Copper Smelting at Blue Hill.

BLUE HILL, Sept. 2, 1881.

To the Editors of the Maine Mining Journal:

GENTLEMEN:—In your issue of August 26, 1881, an article appears, written by Professor Bartlett, State Assayer, in reference to copper smelting at Blue Hill. Should the same pass unnoticed, your readers will conclude that what he has written is correct; therefore it is but fair that a reply should be given through the same medium.

Prof. Bartlett prefaces his remarks with the assumption of giving your readers some information in regard to "Smelting at Blue Hill," and criticising the same. Now it is evident to many of your readers that Prof. Bartlett's spirit has been moved by various causes, one of which may possibly be personal feeling, as rivals in trade generally feel (details are not needed, as business men acquainted with the surroundings perfectly understand). And undoubtedly he is making himself an advertising medium for another—for another company's ore. The statements contained in the article are manifestly incorrect and are likely to mislead, and there is also displayed altogether too much egotism and want of practical knowledge.

There are some good points in the article which, no doubt, are likely to be of benefit to some—to himself, for instance, when he will come to make use of them—and these points are but a second edition, as we have been working them from the first; and we are surprised that Prof. Bartlett has been so long in giving them to the public as original when he has had the best possible chance of being posted at the time they were here being worked; if original, why not have given us the information before we started? Moreover, his remarks are given in a malicious spirit, which is ungentlemanly and unjust. Many of them are also false, and not taken from reliable data, which is unfortunate from a gentleman of his standing, to whom a scientific public look so much for reliable information.

FURNACES

Are of two kinds—blast or cupola furnaces, and reverberatories, being "air" or "draught" furnaces. Blast furnaces are built rectangular, square, round (the round part being only four or five feet high); the octagonal furnace has not been seen by us, in substance, but we have heard someone ask: "How would an octagonal one do?" The reverberatory is *decidedly* not the *cheapest* to build and costs four times as much as a cupola.

Much does not depend on the form of the furnace, as far as smelting qualities are concerned, but does as regards durability and stability. The round ones have been tried over and over again, by different parties and under various circumstances. We are perfectly conversant with the workings of these furnaces and there is no perceptible difference in the smelting powers of any of them in ratio to the superficial surface which the blast works on; but in the stability of the rectangular and square furnaces they put the round ones far into the background; octagonal ones no doubt would follow suit.

Granting there are "eddies" (which is only supposition), some claim they are beneficial owing to the blast travelling over more surface, consequently having a greater reducing action, and, by practical experience, smelting takes place nearly as well as in any part of the furnace and better than where the blast enters, for where the blast enters a "nose" is formed and distributes the blast more uniformly over the corners and meets there by being driven upwards. In reference to "bears," it is owing to bad feeding, through carelessness or ignorance of the feeder; and it is a great point with practical smelters that, when any part of the furnace gets thin, he form a "bear" to protect the lining. So it is optional with the workmen to form or prevent a "bear;" but prevention is better than cure.

What they use in Germany and on the continent of Europe we do not profess to know more than a great many others do—otherwise than by works written; and one page of practical results is better than volumes of theories and assumptions.

Mr. George Thompson, Manager of the Huntingdon Sulphur and Copper Company, Dillonton, Canada, who has had a lifetime experience in the metallurgy of iron, steel, copper, &c., has worked the furnaces referred to. Mr. Thompson also being a good practical chemist and of good judgment and foresight, has adhered to the square furnace. The ores at Dillonton are identical with the Blue Hill ores; and from such practical men we are to look for good, sound information and reliable results such as we have had and made use of. The rectangular furnaces so successful at Capleton and Eustis Smelting Works are the inception of Mr. Thompson and are a perfect success, which no sensible man can deny. Therefore, the great cry about form of furnace (the size of which is not four feet inside) and size of tuyers explodes in gas.

The Vershire furnaces work with one tuyer, and are they not successful? And are there not skillful smelters at Vershire? Then were we not justified in following their example who are successful rather than running after chimeras? At Blue Hill

there are three tuyers attached to the cupolas (four have been tried but did not work). Prof. Bartlett might have given more minutely the size of the tuyers, which are three and one-half inches in diameter, instead of "good sized cannon;" he may have meant either a good sized toy cannon or a good sized bomb cannon—in his view not much different.

Now comes the portion of his "criticism," as he terms it; it has more of malicious insinuation, therefore we term it ungentlemanly, unfair and false, as the following will show: Anticipating some difficulty in our first essays to smelt made us very careful in our first attempt to get all the unburnt ore removed the best we could under the circumstances. Every sensible person knows what first attempts are. We had not skilled help that knew burnt ore from unburnt ore (badly burnt ore makes very little difference in the running, but makes low grade matte), had no help that knew even the use of the tools, let alone the hundred and one points in connection with the same, and had Prof. Bartlett himself been here the results would not have been one iota better; even with his chemical knowledge, let him try with help that barely know the difference between a piece of coke and burnt ore, and he may then have some feelings different from what he has displayed.

"Huge pieces," if any were put in, should not have been so, as no ore or flux should be put in larger than from two to two and one-half inches at the maximum thickness. Charges are carefully weighed. The flux also has been put with the ore in proper and well calculated proportions. It is almost impossible to get uniformity, owing to the fact that the ore from the shaft comes from different drifts, and the percentages of copper, iron and silica are not the same. As it comes out of the shaft it is dressed and sent to pile-burning, and when it is delivered to the furnaces one load may and does differ in composition and in chemical combinations from another, as the following will show: The charges being mixed up uniformly are charged in the same way; yet the slag from the same differs in appearance and composition and the changes take place in two pots one following the other, yet the furnace runs all right; which proves that exact chemical combinations are not imperative, and according to reliable authorities the proportions of silica and iron in slags very as much as fifteen to twenty per cent.—more or less iron, or more or less silica. One authority gives the slag (silicate of iron) as—silica 48 per cent., protoxide of iron 37 per cent.; another—silica 52 per cent., protoxide of iron 29 per cent.; and so on *ad infinitum*. So much for that theory. As for limestone being used *ad libitum*, it is not so. Daily records of all material used, as also the quantity, are kept, assays of matte for copper, etc., with remarks upon, which can be used as reference at any time.

Prof. Bartlett cannot be serious when he refers to the relative proportions of sulphur to the copper; if so, his notions are very crude indeed. Suppose we are treating ore containing two to three per cent. of copper, we could not burn the sulphur down to the same percentage; again, if we were treating ores containing twenty per cent. and over of copper, would it do to have the same amount of sulphur? *Decidedly not*. If we can get the sulphur down to about 4 per cent., then we will have the best results—matte of high enough grade to ensure a clean slag. Now, how can he assert that we have worked unscientifically, unskillfully and unsystematically?

SMELTING.

The science is not "one of exceeding chemical exactness," and the smelter does not require a thorough knowledge of chemical combinations; but, at the same time, a practical smelter who has the knowledge of chemical combinations is far superior to the smelter who possesses no knowledge of chemistry; yet a practical smelter is vastly preferable to a theoretical chemist, for, to bring about practical results, a practical smelter can tell, by the appearance of the slag when running out of the furnace and by the fracture of the slag when cold, what is wanted. How comes it that practical smelters are in demand all over the world—men who can barely read or write—men who do not know what chemistry means, or what are the combinations of the fluxes? It is because they know by their slag and the appearance of their product whether it is iron, lime, fuel, &c., that is wanted. Put a practical smelter and a theoretical chemist at a new ore and, taking into consideration all the circumstances, the practical man will come out ahead.

The analyses given of the Blue Hill ores are very acceptable, if reliable (being the first ones we have seen), and we have no reason to doubt the results given of the sample tried; but it is not the average output of the mines and, to our knowledge, no average sample has ever been tested. To properly test the output of a mine and what goes to different processes, a certain portion should be taken from every barrow or wagonful delivered to its respective destination; a portion—say about one small shovelful per barrow, or about two shovelfuls per wagon—should be taken for a whole month, and sampled and tested in the usual

way. When that has been done, and not till then, can we look for reliable information about results. We have not taken such samples, and unless Prof. Bartlett have such samples we cannot accept his results as correct.

Taking 46 per cent. silica in the ores as near enough for sample, Prof. Bartlett would enlighten your readers—ourselves among the number—if he would give us details concerning the form in which the silica exists. Is it in the form of quartz or native rock? By what scientific term is the rock designated? Is there any mica present? When he gives us details and states what is the best flux for these substances he will then supply a great want. The percentage of silica is immaterial in burning whether in piles or kilns. Having the draught regulated to a nicety is all very well for making acid. Sinteration does take place in roasting our ores (Prof. Bartlett would not have known it had he not seen it here or been told of it) and, as he has stated, runs to the bottom. The top part ran over 3 per cent. in sulphur and the bottom, that had run down, contained under 12 per cent. sulphur—the mean of both about 7.5 per cent. sulphur. The bottom was desulphurized a second time, so that the average that went to the furnaces was about 5 per cent. in sulphur. Some of the bottom was tried without twice burning, and the furnace ran well enough, the only objection being low grade matte. Kiln roasting is unquestionably the best method, and that has been our object from the first, as can be seen from the plant for this purpose now being erected. So it is seen that we have not been working so unscientifically as Prof. Bartlett would make it appear.

The Capelton or some of the New Hampshire ores would, in our opinion, at present be the best and cheapest we could get, and that subject has been discussed since the commencement of our smelting operations, so to us that is a stale subject. It is a strange coincidence that Prof. Bartlett should strike so many of these matters at the same time with us, or rather some months later; it cannot be that he was informed as to what we were about. To smelt Blue Hill ores it would require from 25 to 30 per cent. of Capelton ore as it comes from the Chemical Works, and *not* from the dump at Capelton. In view of the purchase price, transportation and the difficulty of burning the "fines," it would not pay, as the same has been closely figured on.

But we can do better ourselves in a short time. Our ores will be treated in such a way that we will not require any flux from outside; our slag from the bringing-forward processes will carry us through all right; it is only a matter of a brief time.

Summing up, then, we reply to Prof. Bartlett's criticisms as follows:

1st., Our furnaces will not work with a greater number of tuyers. Pressure blowers are a failure where the pressure needed is no more than one pound per square inch.

2nd, Quite admissible; the size of the lumps of ore should not exceed two inches in the thickest part.

3d, Mundie is preferable to limestone if it can be obtained cheaper; especially so if carrying copper.

4th, There should be less sulphur than copper, as shown above; five to ten per cent. less oxide of iron than silica will do well enough.

Many of your readers would be and are anxious to know as much as possible about such matters, and your humble subscriber is also anxious to glean all the reliable information that can be obtained; but before accepting everybody's advice we wish to know where the parties giving it have acquired their practical knowledge and experience, as also their data, notes and observations upon such matters. Until this has been ascertained, we must discard such information as unreliable.

Many more points we would have gone into in detail, but feeling that we are encroaching too much upon your valuable space, we forbear.

Yours truly,
H. MALIPHANT.

AUGUST DIVIDENDS—PARTIAL LIST.—Alice (Montana), \$40,000; Black Bear Quartz (Cal.), \$9,000; Boston and Montana, \$20,000; Calumet and Hecla, \$500,000; Central, \$60,000; Chrysolite, \$100,000; Con. Gold, of Georgia, \$4,000; Copper Queen, \$25,000; Deadwood-Terra, \$40,000; Eureka Con., \$25,000; Evening Star, \$25,000; Exchange Silver, (Nev.), \$3,000; Green Mountain, \$9,375; Homestake, \$30,000; Idaho Gold (Cal.), \$23,250; Indian Queen, \$6,250; Inyo Con. (Cal.), \$5,000; Iron Silver, \$100,000; La Plata, \$15,000; Northern Belle, \$37,500; North Belle Isle, \$15,000; Ontario (Utah), \$75,000; Quincy, (Mich.), \$120,000; Richmond Con., \$130,000; Silver King (Arizona), \$25,000; Silver King (Col.), \$50,000; Standard Con., \$75,000; Tip Top (Arizona), \$20,000; Tombstone, \$50,000; Western (Arizona), \$75,000; Yuba Gold (Cal.), \$4,000. Total, \$1,761,375.

LODES, LEADS AND VEINS.

ESSEX.—Mr. G. W. Ellis, President of the Essex Gold Mining Company, has been visiting the property during the past week, and on Tuesday last telegraphed to Boston as follows: "We are pushing the drift across the vein on the 130 level, and had, at the close of last evening, ten feet of very rich quartz, and the hanging wall not yet reached." He further says that there is now a large amount of high grade ore on the dump which, when milling operations are commenced, will be certain of yielding an abundance of the precious metal.

DEER ISLE.—Supt. Dickson's weekly report, dated Sept. 5, is as follows: "The winze from the 130-level has attained a depth of twenty feet and is in solid ore. We have commenced stoping from the 130-level upwards, where we have five to seven feet of pure ore. Our output of ore is only limited by the number of men employed. Our lateral drifts being completed and our connections made, it is clear sailing to put the whole force at work extracting ore. I see nothing to prevent us from making regular shipments to Swansea."

CAPE ROSIER.—The Cape Rosier Company now employ forty-two men. A large amount of work is being done at the mine. In No. 2 shaft, workmen are drifting and stoping on the vein and taking out large quantities of excellent ore.

SUNBURST.—Secretary Donelan reports good progress being made. "Have just (Sept. 2) finished timbering the shaft. Vein looking splendid."

SULLIVAN.—Under date of Sept. 7, Supt. Cahill reports to us as follows: "In sinking a sump on fourth level east, we struck a fine body of ore averaging \$62.04 per ton; it has every indication of increasing as we gain depth. On the same level, west of No. 1 shaft the ore vein is four feet and widening as we advance. The third level west continues to look finely. Everything working well."

Blue Hill.

MAMMOTH.—Supt. Duff is sinking a shaft in the ledge and is rapidly attaining depth. A large amount of ore has been taken out.

DOUGLASS.—The mine is looking far better than ever in its past history. The underground developments during the past month have shown that the westerly drifts carry even richer ore bodies than are found to the east. The second running of the refinery resulted in the production of five hundred bricks of ingot copper averaging about seventeen pounds in weight. A shipment of copper was made on Friday last by steamer. The cupolas are running steadily and doing very excellent work.

STEWART.—The work of sinking the shafts on the Stewart progresses. Shafts Nos. 2 and 3 have been steadily increasing in depth and are now between 55 and 60 feet deep. No. 2 shaft is making a very fair show of copper ore.

BLUE HILL.—The mine is looking its best and everything runs smoothly. The quality of the ore continues of the same high grade. The smelting furnace has been running this week very satisfactorily.

TWIN LEAD.—The southerly crosscut has advanced 18 feet into the vein and shows good ore. The vein appears to be of great width.

GRANGER.—A letter from President Stone, under date of Sept. 7th, says: "I have just come from the New England Smelting Works. They have run slow to season the furnace, and stopped once for repairs. They have run through about twelve tons of Granger ore and it makes about two tons of 24 per cent. matte. Some of the matte will run 30 per cent. Mr. Reese estimates the average of the first run at 24 per cent. It will not need as many runs to transform it into ingot copper as my previous communication intimated. So far as appears by assays the matte carries about 36 dwts. of gold per ton of matte. The outlook now is better than appeared at the commencement of the smelting. Prof. Holliday says even 2 1-2 per cent. of such ore would pay."

British Provinces.

Mining licenses on Crown Lands in Northumberland County, N. B., will be offered for sale at the Crown Land office, Fredericton, on Wednesday, 28th inst.

It is reported by several of our Provincial exchanges that the copper mine near Dorchester, N. B., has been sold to a company of Boston capitalists for \$90,000.

It is reported that New York capitalists have purchased the International coal mines at Bridgeport, Cape Breton. The consideration is not known, but the purchasers are also the owners of the Block House mines.

The Traveller says that Captain Isaac P. Gragg, General

Manager of the Victoria Oil and Mining Company, left Boston for Cape Breton, on Monday evening last, to locate sites for additional oil wells in Baddeck valley.

Mr. H. Walton quarried at his granite quarries, Spoon Island Queens Co., a block of granite, measuring 65 feet in length, 20 feet wide and 11 feet thick, apparently without a flaw. This granite is of the mottled gray and black, and is considered equal to the Aberdeen granite. It weighed 1,101 3-4 tons.—[St. John Globe.

There are at present nine collieries in active operation in Cape Breton, giving employment to about 1,000 cutters. The output this year will be the largest on record. The total amount of coal raised in Nova Scotia in 1880 was 1,032,710 tons. That of Old Mines Sydney was 110,000 tons. The yield this year, it is said, will be about 120,000 tons.

The silver miners in Gloucester county appear to have "struck it rich." Bathurst advises to The Sun, yesterday, say that the latest reports from Nigadoo Silver Mines are very encouraging. The shaft has been deepened during the past week and the vein of galena is getting larger and richer. The stockholders are very much elated at their prospects. Samples are being prepared for the Halifax Exhibition.—[St. John Sun, Sept. 6th.

WOODSTOCK IRON WORKS.—The St. John Telegraph says the stock of iron ore raised during the winter at the mines is completely used up, the furnace consuming more than was anticipated. The company have a number of men at the mines raising ore and are having it hauled by teams. Their stock of charcoal is running low, which will have to be renewed. The company have shipped a quantity of pig-iron to Londonderry N. S., to be worked up into car wheels. It requires a good grade and this charcoal iron is said to be the best for that purpose.

GLOUCESTER SILVER MINING COMPANY.—We last week announced the purchase by Messrs. Adams and Sadler of an extensive tract of mineral land in Gloucester county, N. B. The St. John Sun of Sept. 1st says that William A. Hickson and John Sadler, of Chatham, Samuel Adams, of Leadville, Colorado, Robert R. Call, of Newcastle, John J. Adams, of New York City, Edward J. Hickson and John Ellis, of Bathurst, James Hickson and Rev. Edward Hickson of St. John, have filed in the office of the Provincial Secretary a memorandum of association for the incorporation of a company to be styled the "Gloucester Silver Mining Company." The object of the Company is the digging, raising and mining of silver and other ores and minerals, and the crushing and smelting thereof, with such other things as are incident to the attainment of that object, with capital of \$250,000, to be divided into 50,000 shares of \$5 each. The office or principal place of business is to be at Bathurst. An organization meeting has been called for Saturday, the 10th inst., at the Wilbur House, Bathurst.

ITEMS FROM THE HALIFAX NEW ERA.—The extraction of iron ore has been commenced on the McDonald-Weaver property, East River, and the ore is being shipped to the United States.—The coal shipments from Pictou for the week ending August 25th were, Halifax Co., 576; Intercolonial Co., 2,862; Acadia Co., 1,220; Vale Co., 1,903; Total, 6,557 tons.—A deposit of magnetic iron ore has been discovered at St. Agatha des Monts, a new parish some 30 miles north of St. Jerome, Que. The deposit is said to be large and valuable.—The claims at Montague operated upon by Messrs. Foster & Son are really turning out well, and the most gratifying results are being the reward of deep mining. Messrs. Foster & Son are not speculators, but practical miners who are following mining as a legitimate business.—The statement is made that early in September the Canada Copper and Sulphur Co., will commence its own smelting operations. By this means large savings are expected to be effected. The shares, £4 fully paid, are considered by Herapath's Journal cheap at £1. 10, the present price.—A valuable seam of copper and silver ore has been discovered near Tatamagouche. The test at New York shows it to be much richer than that of Newfoundland. This discovery was made by Messrs. Duncan Rankin and Jas. Conn. Samples of this ore are to be seen at the office of D. M. Murry, & Co., Pictou.—Mr. Jno. McCallum brought to town, last week, a number of very fine specimens of gold quartz unearthed from his mine recently discovered at Kiliag River, West-Halifax. This discovery was first made by Mr. Peter Dunbrack of Dartmouth and Mr. McCallum of this city, but did not give very rich indications until within a month ago. A company has been formed, a large area of ground secured and Mr. McCallum says he feels confident of discovering the main lode shortly.—Friends who have lately visited the Manganese Mine at East Mountain report that quite a "hum" is also heard in that quarter. The mine is owned by Messrs. McLellan of Hauts Co., D. Archibald of Halifax, Alex. Carter of Truro and others. The "lead" was discovered upon the property of Mr. Chas. Hoar, and after a number of trial pits were made, a main shaft was commenced and has

been sunk about 30 feet. Practical miners are in charge and the progress made has been very good, considering the hard rock through which the seam runs.

General Mining Notes.

The deepest mine in Colorado is the California, on Quartz Hill, near Central. The main shaft is down 1,310 feet.

It is estimated that 378,151 persons are employed in the mines of Great Britain, and the length of underground tunnelling in which they work is 58,744 miles.

The Southern Utah Times makes the prediction that the time is not far distant when the mining of copper will take rank among the chief industries of Utah.

The Bullion Miner reports the mining market in Philadelphia as very active and the amount of business in the various mining shares increasing in volume and price.

It is stated that iridium is found in abundance in Oregon and Washington Territory. It is thought that Holland's process for fusing and molding iridium is likely to cause this metal to become a source of considerable wealth in the region mentioned.

At the recent annual meeting of the Calumet and Hecla Mining Company, in reply to queries from several stockholders, Prof. Agassiz stated the mine was opened some five years ahead and that there are no indications whatever from underground explorations that the ore supply is giving out, but to the contrary.

One cubic foot of lead ore weighs 474 pounds; thus a vein of galena, or lead ore, one foot wide, six feet high, and six feet long (otherwise a fathom,) will produce eight tons, five hundred-weight and thirty-two pounds, or a vein one and a half inches wide will net one ton of ore per fathom; three inches wide, two tons; six inches, four tons, etc. This rule will be a safe guide to estimate by.—[Silver World.

About 17,000 men in Colorado are engaged in mining, and the average number of days' labor is about 200 during the year, which, at \$3 per day, would, together with interest and improvement, make \$10,000,000. The number of dollars taken out of Colorado mines in 1880 was 20,000,000; hence we see it costs about forty cents for every dollar of gold or silver taken out. Mining is not such an unprofitable business after all.—[Indicator.

Wood River has two smelters in operation, one at Bellevue, with a capacity of five tons, and the other near Hailey, which smelts twenty tons per day. The one being erected four miles from Galena has a daily capacity of thirty tons, and the sampling, smelting and separating works at Ketchum, and which will take in forty tons per day, are nearly completed. The fifth smelter has been shipped, and will soon be erected at some point in the Wood river district.

A rumor reaches the Denver Inter-Ocean office through private sources to the effect that the discovery of tin ore has been made in the southern portion of the State. The same rumor places the discovery on the Huerfano river thirty miles from Silver Cliff and attributes it to a party of three Germans who were prospecting at the time they made the "find," for mineral of a different character. One of them had formerly worked in the British tin mines, and recognized the ore as soon as he saw it. Specimens sent to Denver, so the report goes, have given satisfactory assays. The vein is said to be seven feet wide.

The dividend-paying mines, so far as they have been reported during the present year, number fifty-eight, and have paid out an aggregate of \$9,940,916, of which the five companies of Arizona contributed \$1,315,000, seventeen California companies \$1,795,141, and Colorado, twelve companies, \$1,621,250. Nevada mines number nine, which have disbursed \$1,347,525; Dakota, three mines, \$735,000; Montana, three mines, \$375,000; Utah, two mines, \$506,000; Georgia, a gold mine, \$16,000; and Missouri, one lead mine, \$40,000; while Michigan, with five paying mines, has disbursed as the profits of the copper production, \$2,190,000.—[Economist.

A very rich vein of copper ore was struck last week at a depth of fifty-five feet on the South Mountain, on the old Watson farm near Fairfield, Adams county, Pennsylvania. It has been known for the last century, that there was a large vein of copper on this property, from surface indications, and considerable time and money has been spent searching for it, but without success until this time. This mine is owned and worked by the South Mountain Mining Company, which is composed of Philadelphia capitalists, who commenced the development of this mining region a few weeks ago and will make a thorough development of the same.—[Harrisburg Telegraph, August 13.

The Bodie Free Press says that D. E. Jones of Bodie, and San Francisco parties, have taken hold of the Bluestone copper

mine in Jordon District, one mile from the mouth of Mill Creek Canyon, and on Wednesday ground was broken for the erection of a smelter, which will be erected immediately. The Blue-stone is a large and very rich copper vein, carrying about 72 per cent. of copper, \$10 to \$12 per ton in silver and traces of gold. The facilities for smelting are excellent, wood and water being abundant, and the company have just located ample ground for smelting works on that branch of Mill Creek that cuts across the Bodie road to the northward of Grant's station and sweeps along the base of the hill under the mine.

Ben. Rowe and his wife struck a little bonanza in their backyard at Virginia. Ben was fixing up an old bulkhead, built to keep the bank from caving, when he uncovered a pocket of the rich stuff that was characteristic of the Comstock close to the surface. He and his wife took out a sum estimated at from \$9,000 to \$15,000. The find was on ground owned by the Ophir, and that company has brought suit to recover \$9,000. There is not an inch of ground from the peak of Mount Davidson to the Carson river, west and east, and from the sugar loaf to Carson City, north and south, that is not claimed by some mining company, and any man who finds a rich boulder or pocket within those bounds takes out the mineral at the peril of a lawsuit. The Ophir Company is probably the rightful owner of the money taken out by Rowe, but had it not been for his accidental find, the company would never have known of the existence of the deposit.—[S. F. Daily Report.

The Pueblo Indians at Taos, says the New Mexico News and Press, are beginning to learn the way of the prospectors and some of them exhibit considerable shrewdness in their knowledge of the gullibility of "the tenderfoot." They frequently borrow without leave or have given to them a piece of good ore by some prospector. They then go out of town and return in the direction of the mountains and show the ore to some man who hopes to find a mine, and with many expressive gestures and mysterious grunts indicate that they know where there are quantities of such ore and will tell upon the payment of "un paeso," or if this is demurred to, for a drink of whiskey. The man who is not up to the trick frequently spends much time and cursing trying to find the mine. Two young men from the East agreed to pay an Indian \$5 to find the mine from which he had taken his specimen. They hired horses and rode through the mountains until they were tired and thoroughly convinced that there was no mine in the mountains. The Indian came at length to a river about ten feet deep and said he got the specimen "in there." They paid the Indian \$3 to take them home.

NORTH STATE MINES.—The following information concerning the mines and prospects of the North State Mining Company is from the Carolina Watchman of Sept. 1st, and will be of interest to our readers: "The Crowell, on account of difficulty with stockholders, and the superintendent's being called away on railroad matters, has suspended operations for a short time. At Copper Knob work is progressing fairly. They are down 157 feet, and sinking new winze in first level. They will go down 400 feet. The erection of furnaces for smelting is progressing as rapidly as the brick makers can furnish the material. They are opening their large mica mine with most flattering results. They are running a drift on an eight foot vein, four feet of which is solid mica, of very light color, free from iron stains and very flexible. They also have a force employed opening their vast iron beds. They own four and one-half miles of fine iron ore, which lays in beds of from ten to forty feet wide. They propose, for the good of the State, to make a fine display of minerals from Western Carolina at the Atlanta Exposition. This is of course a labor of love, as the company cannot hope to realize anything by this display, except the honor due them from the State, for thus showing to the world the products of her mineral wealth."

Nuggets.

—The Pembroke Iron Works are running on full time.

—The Maine State Fair is being held this week at Lewiston. Very large throngs are in attendance.

—The Kenduskeag National Bank will probably move into their new quarters in November and the Penobscot Savings Bank in January.

—Mr. H. H. Emerson and other parties are soon to commence prospect work on a promising tin discovery near South West Harbor, Mt. Desert.

—One hundred tons of pig iron from the Katahdin Iron Works have been shipped this week from Bangor to New York by Steamer James A. Gary.

—The steamers Queen City and Ralph Ross have each taken large excursions from Bangor down the Bay to the wreck of the City of Richmond during the past week.

—A copper ingot from the Douglass Smelting Works of Blue

Hill has been on exhibition this week at the Bangor office of the American Express Company. Another ingot has been on exhibition at Prof. F. L. Bartlett's in Portland.

—The Deane Steam Pump Company have lately shipped their special pattern mining pumps to the Barcelona mine, Nevada; Sulphuret, Legal Tender and Tombstone mines, Arizona; and to the Alta-Montana, Bonanza Chief and Only Chance mines, Montana.

—Only a very small portion of the ice cut on the Penobscot during last winter has been disposed of. The amount shipped from the port of Bangor thus far this season is not more than six to seven thousand tons. It is reported a large brig is now bound here to load with ice.

—Bangor mechanics are giving attention to the invention of rock drills. A few weeks ago the MINING JOURNAL announced that Mr. Royal had completed a drill of much promise and now we learn that another Bangor gentleman has perfected a drill of much merit. In both instances patents have been obtained.

—Rev. Samuel Annear is receiving numerous visitors at his charming "Crystal Cottage" in North Penobscot. Tourists sojourning in that vicinity should not fail to visit this interesting retreat. The crystals are always beautiful and the garden is now in its best attire. The place is unique in its beauty and attractions.

—The Steamer Jas. A. Gary, which has been plying between Bangor and New York, has been sold to the Mexican Construction Company and will henceforth be employed on the waters of the Gulf of Mexico. It is probable that another and faster steamer will be placed on the route between this city and the Metropolis.

—We acknowledge the receipt of Stockbridge's Musical Journal for August. Besides the latest gossip concerning musical personages and events, it contains two pleasing songs—one with guitar accompaniment—and several light instrumental pieces. Published by Ira C. Stockbridge, Portland, Maine, at 60 cts. per year.

—We are in receipt from the well known publishing house of Henry Carey Baird & Co., of Philadelphia, of a copy of "Underground Treasures; How and Where to Find Them." The work is from the pen of James Orton, A. M., and is a valuable contribution to mineralogical literature. Among its numerous interesting features is a key by which all minerals can be readily determined. The volume comprises one hundred and fifty pages of interesting reading, is handsomely illustrated and neatly bound. The price is \$1.50.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Grand Mogul Mining Co.,	Auburn,	Aug. 27,	\$500,000
Alton Mining Co.,	Lewiston,	Aug. 27,	500,000
Good Fortune Gold & Silver Mining Co.,	Lewiston,	Aug. 27,	500,000
Bakeman Mining Co., of Cape Rosier,	Portland,	Aug. 30,	500,000
Neptune Mining Co.,	Cutler,	Sept. 1,	500,000

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, SEPT. 7, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Ahouez.....	2½	3	2½	3	2½	3	2½	3	2½	3	2½	3
Atlantic L. S.....	12	...	12	...	13	14	13	14	13	14	12	14
Atlas.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper..	3½	3½	3½	3½	3	...	3	...	3½	...	3½	...
Brunswick.....	...	10	...	10	...	...	...	...	5	8½	...	8
Calumet & Hecla..	215	216	215	216	219	220	219	220	...	220	213	219
Catalpa.....	1½	1½	1½	1½	1½	1½	1½	1½	1½	1½	1½	1½
Central.....	2½	4	2½	4	2½	3	2½	3	2½	4	2½	2½
Copper Falls.....	2½	4	2½	4	2½	3	2½	3	2½	4	2½	2½
Contentment.....	2	...	2	...	2	...	2½	2½	2	...	2	...
Dana.....	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver.....	...	...	...	...	...	1	...	...	...	...	...	1
Empire.....	...	...	...	...	...	...	...	...	...	...	...	...
Franklin.....	11	11½	11	11½	11½	11½	11½	11½	11½	...	12½	12½
Harshaw.....	5½	6	5½	6	6	6	6	6	6	6	6	6
Huron.....	3	3½	3	3½	3	3½	3	3½	3½	3½	3½	3½
Hanover.....	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt.....	...	...	...	...	...	...	...	...	...	...	...	...
International.....	...	...	...	...	...	...	...	...	...	...	...	...
National.....	2	2½	2	2½	2	2½	2	2½	2	2½	2	2½
Osceola.....	29	30	29	30	27½	28½	27½	29	28	28½	...	29
Pewabic.....	12	14	12	14	12½	14½	12½	14	13	15	14½	15
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	33	33½	33	33½	33	33½	32½	33	33	33½	31	35
Ridge.....	...	...	...	...	3½	4	3½	4	3½	4	3½	4
Silver Islet.....	41	41½	41	41½	40	42	37	40	34	35	33½	35
Star.....	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan.....	3	...	3	...	3	4	3	...	3	3½	3	...

ASSESSMENT NOTICE.

North Castine Mining & Smelting Company.

BANGOR, Me., August 27, 1881.
 Notice is hereby given to the Stockholders of the North Castine Mining and Smelting Company, that at a legal meeting of the Board of Directors of said Company, held on the 17th inst., an assessment was voted to be laid, and was laid, upon the entire capital stock of said Company, in conformity with the laws of this State and the by-laws of the Company, as follows: Five cents per share upon every share of said capital stock, which by vote of the Directors is ordered paid to the Treasurer of the Company as follows, viz: Two cents per share to be paid on or before the 5th day of September, 1881; and the balance in three equal installments payable on or before the 30th days of September, October and November, 1881.

Per order of the Board of Directors,
 S. P. JOHNSON, Treasurer.
 P. S.—Certificates of Stock will be issued upon call.

COLBY'S MAP

OF THE

Mining Districts

— OF —

EASTERN MAINE,

(Size 16x24 inches), showing the exact location of nearly two hundred mineral properties. It is an invaluable guide to the Mining Regions, and should be in the possession of every mining man.

Price only 25c. Pocket Edition 35c.

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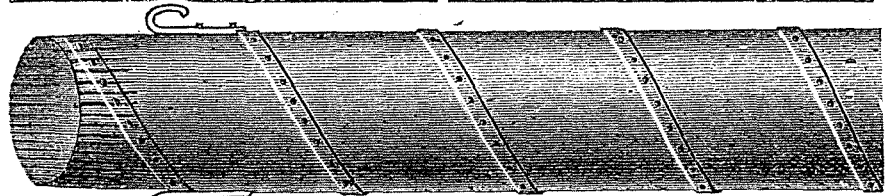
Maine Mining Journal,

Bangor, Maine.

**Reed's Sectional Covering,
 For Boilers, Steam and Water Pipes.**

It is cheap, durable, and the best non-conductor of heat of any covering made. It can be taken off and replaced on the pipes any number of times without injury to the covering. Any person can put it on the pipes. SEND FOR A CIRCULAR.

J. A. LOCKE & SON, 40 Courtlandt Street, New York.



**Root's Patent Heavy Sheet Iron Hydraulic Pipe,
 WITH RIVETED SPIRAL SEAM.**

of all Diameters; Strength or Thickness according to pressure required, for MILLS, MINES, and WATER WORKS, made of galvanized or black iron and dipped in coal-tar and asphalt. Furnished with slip joint, sleeve and nipple, or flange connections. In lengths of from 5 to 25 feet, each tested to required margin of safety.

BURSTING PRESSURE 300 TO 1000 LBS. PER SQUARE INCH. according to diameter and weight of pipe.

AVERAGE FIRST COST FROM 10 TO 60 PER CENT LESS than other tubing; the greatest difference being in the larger diameters.

AVERAGE WEIGHT 50 TO 75 PER CENT less than wrought or cast iron tubing.

AVERAGE SAVING IN COST OF TRANSPORTATION 50 TO 75 PER CENT.

The advantage of the spiral over the straight or longitudinal seam is that the Spiral Seam is the STRONGEST while the straight seam is the weakest part of the pipe by about one half.

Where it is found inconvenient or undesirable to ship tubing already formed up we can supply punched and formed sheets nested and packed for shipment (which can be riveted into pipe at destination) in packages of any desired weight.

Estimates and Price list furnished on application. A full stock always on hand.

ABENDROTH & ROOT MFG CO, 28 Cliff St., N. Y.

RAND DRILL CO.

Rock Drills and Compressors.

IN USE IN CALUMET AND HECLA and SULLIVAN AND WAUKEAG MINES.

Send for Descriptive Circular.

GEO. H. SAMPSON, Agent, - - 25 Congress St., BOSTON.

BOSTON ORE MILLING and METALLURGICAL WORKS

Metallurgists, Assayers and Analytical Chemists.

GOLD AND SILVER REFINERS.

Ores Crushed, Sampled and Tested.

PRACTICAL MILL RUNS 500 POUNDS AND UPWARDS.

Assays of Ores and Metals.

Refractory Ores Treated by a New Process

SURVEYS, EXAMINATIONS, REPORTS, SKETCHES AND MAPS CAREFULLY MADE.

Construction of Works and Supplies Furnished.

33 HAWKINS ST., BOSTON, MASS.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Horrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Horrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullin, Richard Laffan, Jeremiah Wooster.

FRANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farmum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffin, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. F. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. F. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Rediff, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

OSHKOSH CONSOLIDATED MINING CO.,
Lawson, Colorado. Organized under the laws of the State of Maine.
Capital, \$500,000. Shares, \$5 each, unassessable; 40,000 shares in the Treasury.
President, E. C. Nichols, of Bangor; Treasurer, C. T. Plympton, of Boston; Secretary, S. P. Johnson, of Bangor. Directors—E. C. Nichols, S. P. Johnson, Dr. W. K. Knowles and John R. Mason, Bangor; C. T. Plympton, Henry A. Piper and Geo. W. May, Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullin, James F. Davis, Gully Mullin, A. A. Bartlett.
P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 865,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Gully Mullin, H. B. Mason, L. W. Hodgkins, P. Mullin.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

Silver Hill Mining Company.

Office, 11 CENTRAL STREET,
Room 4, Boston.
Mines at Garland, Me.
Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
25,000 Shares in Treasury.
President, John F. Hudson, Boston; Treasurer' Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.
Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

BLUE HILL CENTRAL Mining and Smelting COMPANY.

OFFICE.....BANGOR, ME.
MINES AT.....BLUE HILL, ME.
CAPITAL, \$500,000.
100,000 Shares: Par Value, \$5.00.
Treasury Fund, 30,000 Shares.
Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

YOUNG HECLA Mining and Smelting COMPANY.

Office at Bangor, Me. Mines at Blue Hill, Me.
Capital, \$500,000.
100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.
President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

NOTICE.

The stockholders of the Franklin Silver Mining Co., of Maine, are hereby notified that there will be a meeting of the stockholders of said company at the store of Jerry Wooster, in Hancock, Sept. 19, 1881, for the purpose of reorganizing said company and transacting any other business that may legally come before it.
Per order of the President and Directors of the Company.
N. P. DOE, Secretary, pro tem.
Bangor, Aug. 24, 1881.

GLYNN & REYNOLDS,
Booksellers and Stationers,
—DEALERS IN—
Room Papers, Borders and Curtains, Wrapping Paper, Bags and Twine.
American and English Tissues, Card Boards & Fancy Papers.
No. 142 Exchange St., Bangor, Me.
JAS. D. GLYNN. EDW. W. REYNOLDS.

SEND YOUR ORDERS BY GILBERT, CRANDON & CO'S EXPRESS.

For Bangor, Machias, Portland, Boston, and all intermediate towns,
Connecting with all points west and south from Boston, and at Rockland with points east to Machias and west to Portland, leaving Bangor every boat at 11 A. M.
Low rates and satisfaction guaranteed.
N. M. JONES & CO., Agents,
24 West Market Square,
At E. G. Ingall's Jewelry Store.

Bucksport and Bangor R. R.

CHANGE OF TIME, June 27, 1881.

	A.M.	A.M.	P.M.	P.M.
Leave Bucksport,	6.00	10.00		5.03
Arrive Bangor,		7.03	11.15	6.00
Leave Bangor,	7.35		2.00	7.00
Arrive Bucksport,		8.40		3.15 8.07

The 6.00 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
STAGE CONNECTIONS.—At Bucksport, daily, for Castine, Penobscot, Blue Hill, Ellsworth, Sullivan and Mt. Desert.
L. L. LINCOLN, Supt.

Portland & Boston Steamers.

One of the first-class side-wheel steamers of this line will leave Franklin Wharf, Portland, at 7 P. M., and India Wharf, Boston, at 5 P. M., daily, (Sundays excepted.)
CONNECTIONS are made at Portland with GRAND TRUNK, PORTLAND & OGDENSBURG, MAINE CENTRAL, KNOX & LINCOLN Railroads, and with Steamers of the BANGOR & MACHIAS LINE; and at Boston with all lines for points South and West.
Tourists will find this one of the finest OCEAN TRIPS on the New England coast.
WM. WEEKS, J. B. COYLE, JR.,
Agent, Boston. Gen. Ag't, Portland

Bar Harbor Stage Line.

Stages leave the Bangor House every morning (Sundays excepted) at 7.40 A. M. Every evening (Sundays excepted) at 7.45 P. M. Leave the Penobscot Exchange at 7.45 A. M., and 7.50 P. M.
Fare from Bangor to Ellsworth, \$1.50
" " " Bar Harbor, " " 3.00
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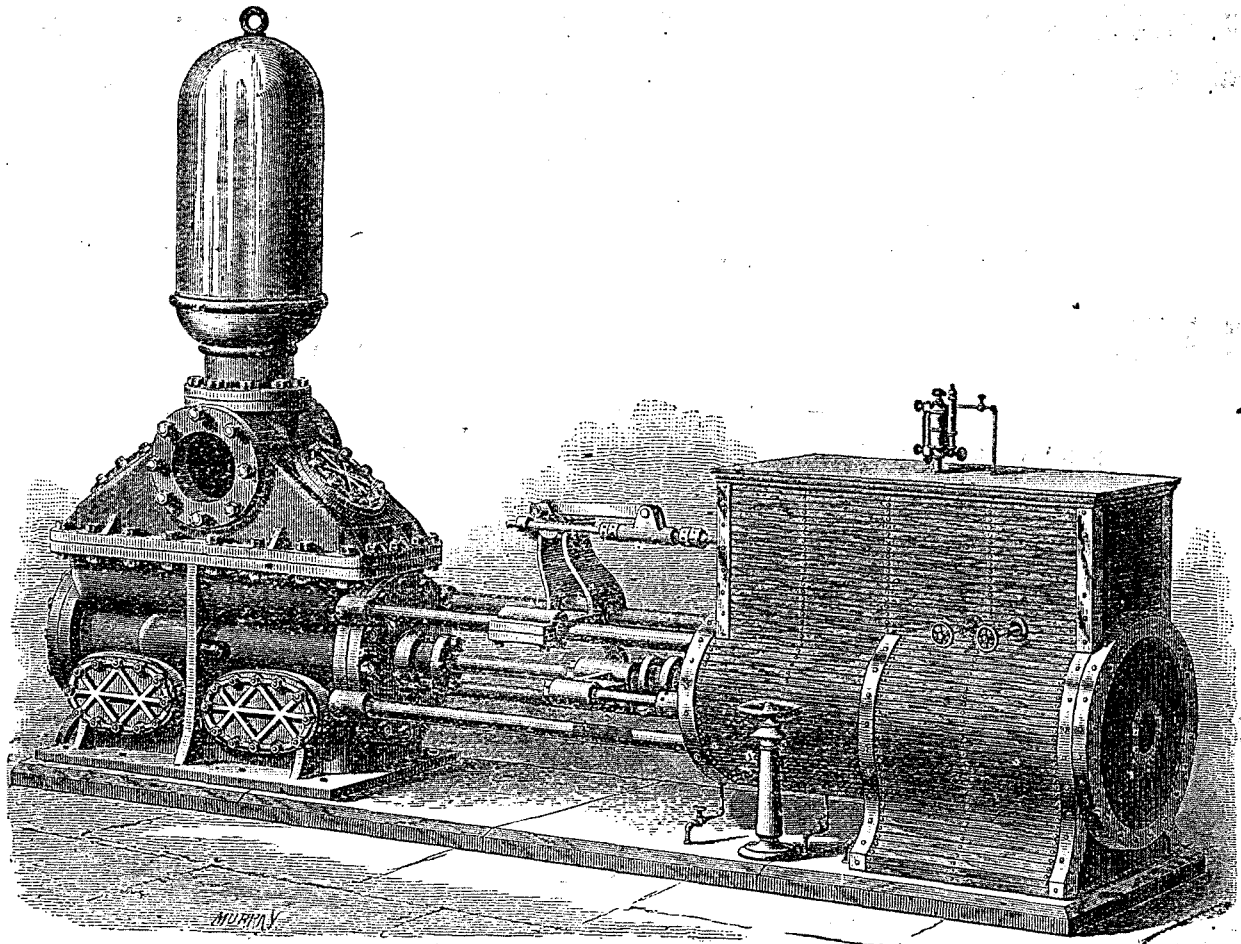
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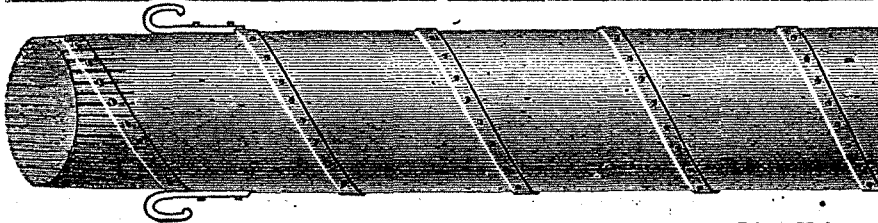
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The newspapers of the country can do a good work, and assist in making the punishment of the miserable being who attempted the President's life far more severe, by suppressing his name entirely, never letting it appear in their columns. Whenever it is necessary to refer to him, let him be known and spoken of only as "The Assassin."

The MAINE MINING JOURNAL reports that a Westman gas roasting kiln, which has been so largely adopted in Sweden for roasting iron ores, and has been working satisfactorily for some time at the Katahdin Iron Works, is to be built for roasting Blue Hill copper ores at the mines of the Douglass Copper Mining Company.—(Engineering and Mining Journal.)

We hardly made that statement; the kiln in question is a modification of the Westman kiln, and is designed for using wood instead of gas as a fuel.

The promised "boom" in copper stocks seems to be fairly under way. The recent and rapid advance in the price of ingot copper together with good reports from the mines, has had an effect at last, and no limit can be set upon the upward movement. Quotations of ingot copper, on Wednes-

day last, were as high as 18 1-2 bid, with none offering at that figure, and it is believed the demand will, before the week is out, put the price to 19 1-2 or 20. Now we shall see the "low-priced coppers" of Lake Superior come out of the woods and put in an appearance on the Board.

The Fair of the Massachusetts Charitable Mechanics' Association opened on Tuesday last, at their new and magnificent building on Huntington Avenue, Boston, under favorable auspices. Nearly all the exhibits are in readiness for inspection, and others are in place and in advanced stages of completion. The attendance has thus far been large and there is every indication that the exhibition will be the grandest of its many successes during the Association's half-century of existence.

The belief is gaining ground that a genuine strike has been made, at last, on the Comstock, although no one as yet has had sufficient nerve to locate it. The prevailing impression is, however, that if a bonanza has been uncovered it exists either in Union or Sierra Nevada, most probably the latter; as a consequence of which, Sierra Nevada shares have advanced during the week from \$14 to \$28.50. Latest advices from San Francisco report Pine Street as excited and the vicinity of the Exchanges crowded with men and women who have waited patiently, paying assessment after assessment, for an old-time boom. We sincerely hope they may get it. A boom in Comstocks resulting from actual ore developments would set the wheels of the mining industry revolving throughout the whole extent of this broad land as nothing else could.

At the Portland Smelting and Reduction Works the finishing touches are being given to the new part and the establishment will soon be running to its full capacity. The old works are now running on ore from the Cape Rosier mine, of which some two hundred tons are on hand and another cargo of one hundred tons will be received this week. One of the cupola furnaces has been running on Cape Rosier ore containing as high as 40 per cent. zinc, the only fluxes used being small quantities of other ores, and producing a matte from the first running which contains 33 per cent. of copper. It also runs very high in gold and silver. The furnace has not clogged, nor has it been repaired in any way, thus far. The only difficulty experienced has been the bad effect of the zinc fumes upon the workmen; this, however, will be remedied in the new works by condensation chambers. On Monday last, three hundred tons of ore from the Grand Trunk Copper Mine, at Milan, N. H., were received by way of the G. T. R. R. whose tracks extend into the works.

Extensive works for the reduction of ores by a new method, known as the Hamilton process, are being erected at the foot of Fifteenth street, New York City. The inventor and general manager is Walter Hamilton, a mineralogist and assayer of many years' experience and a graduate of the London University, who has devoted nearly ten years to the perfection of his process. He claims to be able to extract all the metallic contents from any character of ore at a cost of about \$1 per ton. Similar claims have often

been made before, but practical tests have invariably resulted in failure. Nevertheless, we shall await with interest further developments as it is not impossible that Prof. Hamilton may have hit upon something which will prove of permanent value. There is much yet to be learned concerning the economical treatment of ores, and many of the methods at present in use are still very imperfect. It is said that the experimental tests of the Hamilton process have produced most satisfactory results. Neither water nor chemicals of any kind are used.

Business has been quite active at the Exchanges in Boston during the past week, and mining shares are beginning to receive the attention their merits deserve. The entire list, with a few marked exceptions, shows great strength and a tendency toward considerably higher prices; and that in the general advance which is sure to come Maine stocks will not be found in the rear is evidenced by the transactions of the past few days. The sales of Maine stocks at the Old Board for the first three days of the present week were as follows: Monday, 900 Sullivan at prices ranging from 3 5-8 to 4; Tuesday, 100 Douglass at 2 1-2 and 1,000 Sullivan at 4 1-8 to 4 3-8; Wednesday, 850 Sullivan at 4 1-2 and 4 5-8. At the Mining Exchange, transactions appear in the official report as follows: Monday, 9,500 Milton at 85c to \$1; 400 Copperopolis at \$1.99 and \$2; 1,500 Deer Isle, buyer 60, at 65c. Tuesday, 6,900 Milton at 88c to \$1; 700 Copperopolis at \$2 to \$2.10 buyer 30; 200 Blue Hill at \$3; 44 Sullivan at \$4.25; 100 Pine Tree at \$2. Wednesday, 2,600 Milton from 93c seller 30, to \$1.04 buyer 60; 700 Copperopolis at \$2.10 to \$2.12; 300 Blue Hill at \$3; 500 Deer Isle at 75c; and 100 Twin Lead at 75c. Lively times are anticipated during the fall months. A large number of city brokers, business men and investing tourists who have visited the Maine mines during the past summer have returned full of enthusiasm over these eastern prospects, and their influence will soon be felt.

We are gratified to learn that business of all kinds has never been better in Ellsworth than during the present season. This beautiful little city, the only one in the State having no railroad facilities, not only possesses many inherent elements of growth, but from its position is destined to become the centre of a large and prosperous mining district. With a fine water-power, a location upon tide-water, situated in the midst of a fine farming country and in close proximity to the most promising mining camps in the East, it only requires for her business men to be alive to their interests and watchful of their opportunities to make of her a city second in importance to none east of the Penobscot. Several projected enterprises, notably the new Woolen Manufacturing Company, show that her citizens possess the proper spirit and are impressed with the importance of immediate action. But Ellsworth needs and must have a railroad. There is a prospect that the Bangor & Bucksport narrow-gauge may be extended another season, but should that enterprise fall through we believe other means will be provided. The Maine Central people have for some time had an eye open to the mining developments along the eastern coast, more especially since the completion

of the Grand Southern of New Brunswick to Calais; Pembroke, Machias and other shore towns are becoming tired of isolation from the outside world during nearly half the year and seem disposed to render valuable assistance to any enterprise promising relief; and the much-talked-of "Through Line" from Bangor to St. John along the coast of Hancock and Washington counties may not, after all, be entirely visionary.

Personals.

GEN. W. B. HAZEN, "Old Prob.," is at the Agamont House, Bar Harbor.

SUPT. SHOENBAR, of the Milton, recently made a visit to the Blue Hill mines.

GOVERNOR PITKIN, of Colorado, is visiting Hon. John R. Buck, at Hartford.

SUPT. LEAVITT, of the North Castine, passed Sunday last in this city with his family.

SUPT. MOYLE, of the Blue Hill, was at the Bangor House Sunday, on a brief trip to Boston.

W. D. LEWIS, Esq., of Boston, was in the city the first of the week, en route for Blue Hill.

PIERRE HUMBERT and family, of New York, are still sojourning at the Higgins Cottage, Bar Harbor.

COL. BROWNELL GRANGER, Supt. of the Granger mine, left Blue Hill early in the week on a business trip to Boston.

MESSRS. GEO. D. COLBY and C. F. NEWCOMB, of the Katahdin Iron Works, visited Blue Hill during last week.

W. D. SWAZEY, Esq., Treasurer of the Douglass Copper Mining Company, returned home on Friday last from a week's trip to Boston.

PROF. W. F. STEWART has recently visited the Mascot mines, in New Hampshire, and made a lengthy and, it is said, highly favorable report.

DR. S. LAUGHTON has returned to Bangor after passing a prolonged vacation of four months and a half at Castine. He will now probably make a visit to some of the inland resorts.

PROF. GEO. L. VOSE has severed his connection with Bowdoin College, and goes to Boston as Professor of Civil and Topographical Engineering in Massachusetts Institute of Technology.

MAURICE C. BLAKE, Mayor-elect of San Francisco, was born in Otisfield, Maine, about 1817, and was graduated at Bowdoin College in 1845 at the head of his class. His father was a distinguished physician of Otisfield.

DR. T. STERRY HUNT, of Montreal, sailed for Liverpool on Saturday last, on his way to attend the International Geological Congress, which opens at Bologna, Italy, on the 26th of the present month. He will afterward visit Germany, and return home late in November.

MR. GEO. B. GOODWIN, of the Boston Post, formerly editor of the Bangor Daily Commercial, is about to commit matrimony. The bride-elect is Miss Grace Webster, of Orono. Cards are issued, and the wedding will take place at Orono, Thursday, Sept. 29th; a special train will leave after the ceremony.

DR. WM. WARREN GREENE, a leading physician of Portland, confessedly the ablest surgeon in the State, and one of the most skillful in the country, died on board the Cunard steamship Parthia, of uraemia, on the 10th inst., and was buried at sea. He had been visiting London as delegate to the International Medical Congress. He was a graduate of the Medical School at Ann Arbor, Mich., was for a time Professor at Long Island College and, since 1865, at Bowdoin. He was about fifty years of age.

Dips, Spurs and Angles.

SONG OF THE "FLY BOY."

Sing a song of six pence,
Pocket full of shares;
Copper Knob's at ten cents!
Who the Hades cares?

Bulls are getting ready
To scatter all the gloom;
Things are sliding upwards;
Look out for a boom!

And when the boom is highest
I'll sell out all my stock;
But when the boom is "busted"
I'll get another block,
And don't you forget it!

—[N. Y. Financial and Mining News.

—A legal tender—a hod carrier.

—A man feels boulder when he has the rocks in his pocket.

—It's time to gather the deadly hammock.—[Rockland Courier.

—A Western fashion editor wrote "shirred tulle pokes are popular." The compositor got it "shirt tail pockets are popular."

—It is said that since John E. Owens lost \$45,000 in Arizona mining stocks he has played "The Victims" with renewed energy and effect.

—A striking instance of the new uses of electricity is the discovery of the sunken schooner Vermillion, lost with a valuable cargo of copper in Lake Erie about fifty years ago. The electric drag located the wreck exactly, after every other means had failed.

—The first birth at Hailey, in the Wood River region, occurred recently. The Times says the new comer was "liberally toasted and welcomed in true frontier style," and the next sentence of the item pathetically says: "The baby died, and was buried to-day."

—"Come, now, guess what my favorite flower is," said the spinster housekeeper to the widower's little boy, as they were walking in the fields together. He was a lad who kept his wits about him and his eyes open, so he answered, as he looked up with an arch expression, "Poppy."

—The State Geologist of New Jersey is of the opinion that the land in Cape May and Cumberland counties is gradually but certainly settling into the sea. From knowledge now in his possession he estimates that the surface has settled about eight feet during the last 100 years. New Jersey never belonged to the United States, anyhow.

—The people of Terry county, Alabama, have regard for decency and the "fitness of things." They drove out of town one Clemens, who married a second wife three days after the death of his first. They did not mind his being Clemens, but they did not want him to start into the twain business. He had to mark what they said too.—[S. F. Daily Report.

—A Deadwood man who saw another reach for his pocket, thought the fellow meant to draw a revolver on him and shot him dead. Then he found that the man was about to draw a flask to treat him, and he much regretted his hasty

act. But he remarked that the last wishes of the deceased should be carried out, and took a drink from the flask. Such a touching example of respect for the last wishes of the dead is seldom seen.—[Boston Post.

—The Virginia Chronicle says that stunted tourists from Boston; angular immigrants from Philadelphia; bilious wrecks from Chicago; enervated speculators from St. Louis; and puffy Cockneys from Albion's sea-girt shore—all agree in the verdict that on the Comstock are the ruddiest children, the finest specimens of manhood and the loveliest women, whose swelling contour of form demands no extraneous aid to perfect its symmetry.

—It happened once in a Roman Catholic chapel in Ireland that three ladies of the Protestant faith were obliged to take shelter there from a shower. The officiating priest, knowing who they were, and wishing to be respectful to them, stooped down to his attendant, who was on his knees, and whispered, "Three chairs for the Protestant ladies." The man stood up and shouted, "Three cheers for the Protestant ladies!" which were given with hearty good will by the congregation.

—Nevada's tablet for the Washington monument is disfigured with the name of the stone-cutter who dressed the block of granite—"J. Barrett," cut into the stone on the right lower corner in letters about an inch long. The State, says the Virginia Chronicle, in Mr. Barrett's modest view, is to pay \$300 for the privilege of placing his name in the National monument and extending his fame to posterity. Gov. Kinkhead is justly indignant at this insufferable exhibition of bad taste, and thinks of having Barrett's name filled with composition.

—Curran, the witty and eloquent Irish barrister, who was for some years the Master of the Rolls in Ireland, was dining with an Irish Judge, who, from the severity of his sentences, was known as the "hanging judge," and of whom it was said that he had never been seen to shed a tear but once, and that was when, at a performance of the "Beggars' Opera," he saw Macheath get a reprieve. "Pray, Mr. Curran," said the judge, "is that hung beef beside you? If so, I will try it." "My lord, if you try it, it's sure to be hung," was Curran's ready reply.

—A wealthy Bostonian of a half-century or so ago was about to die. He had accumulated his money by hard, honest toil, but had never been noted for liberal charities. His physician, an intimate friend of many years, felt impelled to break to him the solemn truth of his approaching end, which he did in this way: "I think it my duty, as your friend and physician, to inform you that you cannot live long." "Not long, doctor?" "Not more than 48 hours." The patient was silent a moment. "Let's see," he at last said, feebly, "to-day is Monday—can't you manage to carry me over dividend day?"

—If the following truly western story has ever been in print we have failed to see it. It was told us recently, while riding up the Animas valley. Two sports went from Truckee, California, to Southern Arizona, where the weather is usually extremely warm. One very hot day one of the couple disappeared, was searched for and was found standing on the sidewalk peeping into the fourth story windows of the hotel. His tremendous elongation of body was the result of the rise of the mercury with which his system was surcharged. He was taken home, laid on the floor and soured with cold water two days before he resumed his normal altitude.—[Colorado Miner.

—A German Socialist of this city has invented an infernal machine that will prove most effective in annihilating tyrants. The interior of the bomb is filled with limburger cheese, with a tube in the centre charged with garlic and having within that tube about half a pint of lager. When the bomb is thrown the phial containing the lager breaks,

the garlic suddenly expands, the limburger is driven violently outward, the bomb bursts and the result may be imagined. At one of the experimental operations Charley Schultz's dog was carelessly allowed to stray within sixty feet of the missile and was blown into such small atoms as to render his remains useless for anything but pork sausage.—[San Francisco Daily Report.

—It is amusing the way the Wood River papers show up the worst sides of the rival towns, Bellevue and Hailey, that are making a hard fight for the county seat. The Bellevue paper refers to Hailey as a place fit only for the homes of rattlesnakes, and intimates that the town is composed of a few adobe and tents. One of the Hailey papers strikes back at Bellevue in this strain: "Although she has been in existence over a year, her only hotel is still an unsightly, inconvenient log house, from which all lodgers escape at the earliest opportunity offered them. On her main street the Chinese prostitute and Chinese laundry-man flourish, and the character of the buildings erected seems to indicate that they are only for temporary use. A portion of her site is malarial and disease-breeding, and last spring the inhabitants of the lower part of the town woke up one morning to find a foot of water on their floors and all about them."

—Arizona, first in mines and second in nothing, except in lawlessness, now comes to the front as possessor of the grandest waterfall yet discovered, and like all good and great things, this new wonder is located in Pinal county. To Thomas McLellan belongs the glory of discovering this fall and from him we obtain the particulars. It is at Box Canyon, about 15 miles from Florence. The wall on one side of the canyon is of solid rock, perpendicular to a height of eight hundred feet. Over the top of this wall pours a sheet of water at least sixty feet wide, and as pure and clean as an angel's record. It comes with a rush and curves gracefully downward, breaks against the bottom of the canyon with a roar and clash of thunder. Clouds of spray float up from the deep, dark depths of the gorge, and drifting out into the sunlight are touched with the tints of the rainbow and envelop the surrounding hills in a vein of dazzling, prismatic hues. It is transcendently beautiful and indescribably grand. The little water-drop at Niagara sinks into insignificance, by a two-thirds majority, in comparison. Tom was so enraptured by the sight that he watched it for five hours without intermission and would have been there yet if his "grub stake" had not become exhausted.—[Florence Enterprise.

CORRESPONDENCE.

Copper Smelting at Blue Hill.

PORTLAND, Sept. 12, 1881.

To the Editors of the Maine Mining Journal:

SIRS:—I am exceedingly sorry to see in the last issue of your valuable JOURNAL such a violent attack upon myself by Mr. Maliphant. My article was written with the best of motives and without the slightest feeling of malice and was neither directed to Mr. Maliphant nor indeed to any one in particular. It had reference to all the smelting operations carried on at Blue Hill. I thought it might be the means of provoking a discussion but expected it to come in rather a more gentlemanly manner than Mr. Maliphant has seen fit to adopt. As to rivalry in trade, or as to my advertising for ores, that is the sheerest nonsense and purely a creation of fancy on the part of Mr. Maliphant. Other and worse insinuations of his are too personal, and savor so strongly of illfeeling and prejudice that I do not deem it necessary for me to reply. Mr. Maliphant evidently thinks that I had something to do with his relief from further work on the cupola furnaces at the Douglass, but I was aware of this before the article was written and consequently it could have no bearing on that part.

As to Mr. Maliphant's arguments on furnaces and smelting operations they are so fraught with prejudice and show so little regard for exactness that it is of no use for me to refute them. After carefully reading his article I am not surprised that the Douglass Co. have found it necessary to procure another man to run the cupola furnaces. A man who asks such a senseless

question as this: "is the silica (of the ore) in the form of quartz or native rock?" and who asserts that he can tell what the charge needs by simply looking at the slag; and who admits that he did not know the composition of the ore he was smelting until he saw my analysis; and who states that he has been endeavoring to reduce the sulphur in the ore all the time, yet has been feeding in raw ores with his burnt material; and who states that "the amount of silica in the ore is immaterial whether burned in piles or kilns;" and who deliberately states that practical smelters who can "barely read or write" are preferable to those educated on the subject; such incongruous and inconsistent statements are quite sufficient to show Mr. Maliphant's unfitness for a position of such high importance as that of manager of the smelting works for the Douglass Company.

There is no one more anxious to see smelting a success at Blue Hill than myself and I am fully aware of the many difficulties with which Mr. Maliphant had to contend, and I think in many directions he has shown great ability, but he should not allow himself to become spiteful when good naturedly criticised. Again I reiterate that my article was written with the kindest of feeling and good will and I assert that every word it contained can be substantiated; and if Mr. Maliphant will condescend to discuss the question of smelting calmly, without bringing up personal animosities, I shall be most happy to meet him.

Respectfully,

F. L. BARTLETT.

Phosphate Mining in Canada.

[Special correspondence to the Maine Mining Journal.]

MONTREAL, Sept. 8, 1881.

SIRS:—With the exception of a sale of some 5,000 acres to a new French Co., a few weeks ago, there has been very little phosphate property changing hands of late. At no time has there been any great activity in sales, but the special dullness we have experienced, at least at this point, may be attributed to the number of people out of town during the hot weather—to the report that at least one other French company will enter the field in a short time, which has had the effect of raising the views of holders of desirable lots—and the fact that two parcels (of 3000 acres in all), in the heart of the township of Templeton, will be offered at auction early next month, and it is expected that this will be a fair test of the value of property in the phosphate belt.

Phosphate is readily saleable at \$17 per ton, and over, deliverable at East Templeton, or other points along the Q. M. O. & O. Railway, which gives a very large profit in working a good bed. Seven dollars (\$7) is an outside estimate for mining phosphate in sight, and cartage to the railway or Ottawa River. The freight to Montreal is generally \$1. Some of the mines being worked partly on English account, the phosphate does not change hands, but the average miner prefers taking his cash on this side, to taking the risk of the many contingencies which may reduce the proceeds of his account sales. The freight to England has varied from 8 to 15 shillings per ton, 10 shillings being about the usual rate.

The output this year will show a considerable increase over that of last year, but it is impossible to give any figures in connection with it, as so many small mines are being worked in inaccessible parts of the country, from which the phosphate can only be carted over winter roads.

There has been a very large influx of French capital into the Province of Quebec, during the past year. Two Credit Foncier companies, both with large capitals, are already at work, and with the prospect of more French capital being invested in our mines, there is no doubt that mining in Canada, and the sale of mines, will not be such a slow business as it has been heretofore. It is reasonable to expect that within a year from this, mining, in the phosphate region alone, will assume very large proportions; and I venture to prophecy that enterprising Americans will find here a field either for steady mining or speculation that they will find difficult to equal elsewhere.

R. H. G.

SOUTH CAROLINA PHOSPHATE MINES.—The first shipment of the crude fertilizer was made in 1837, when about six tons were sold; since then the annual shipments have increased until the present year they will reach 300,000 tons, at \$8 per ton. The manufacture of raw material into commercial fertilizers has also increased with wonderful rapidity, until at the present time there are thirteen of these manufactories in Charleston. The shipments of manufactured fertilizers from Charleston in 1867 aggregated about 12,000 tons, while this year the shipments have been 100,000 tons, nine-tenths of which were manufactured in that city from crude rock mined within a few miles of their works. It is said that these fertilizers have contributed largely to the increased yield of cotton, through the cotton growing States.—[Charleston News and Courier.

LODES, LEADS AND VEINS.

ESSEX CONSOLIDATED.—Advices from the Essex Gold mine, Lyman, N. H., state that the drift on the 130 foot level has been driven 14 feet through first-class ore. The vein is over 12 feet in width, and the ore shows \$11 to the ton in free gold, besides carrying 15 per cent. of pyrites which average \$150 per ton. A good body of ore is accumulating on the dump, and it will probably not be a great while before milling operations are commenced. Prof. E. T. Cox, for a number of years State Geologist of Indiana, and who located the famous mines of the Tombstone District in Arizona, was in Boston last week, and having examined some of the ore of the Essex Company, was greatly pleased with it. He had not time to visit the property, much to his regret, but from all the information he had learned concerning it, he was inclined to consider it a bonanza. A telegram received in Boston on Wednesday last from President Ellis, who is now at the mine, says that in addition to the work in the drift on the 130-foot level, the vein has been cut some six hundred feet from the main shaft, towards the northeast. At a depth of twelve feet the vein is three feet in width, the quartz being very rich in the auriferous metal.

ELY COPPER MINE, VERMONT.—This mine produces annually 3,000,000 pounds of copper, raises an average of 250 tons of ore per day, runs twenty-four furnaces, and gives employment to from 800 to 1000 people constantly—the able-bodied men at mining and smelting, and the old men, cripples, and boys at cobbing and sorting. The product goes to the Ansonia Copper Company at Ansonia, Conn., where it is prepared for market, a large force of men being employed in its manufacture. The mine has made its owners immensely wealthy, and stands today the leading industrial institution of the State.—[Boston Advertiser.

MASCOT.—A carload of first-class ore, twelve tons and ninety-six pounds, was shipped from the mine on Saturday last. It went to the New England Smelting Works at East Boston.

DEER ISLE.—Supt. Dickson's report to Sec'y Gould, for the week ending Sept. 12, is as follows: "Our force is now engaged in stoping out ore from the 130 level. As we are stoping immediately over the winze we have discontinued work in the latter until we reach a point in the stope where it will not interfere with the windlass, etc. The bottom of the winze is in solid ore and we shall drift from the same when it attains the depth of our lower level (some 10 feet more) following the course of the ore and connecting with our drift on the 180 ft. We are taking out nothing but clean ore ready for shipment. I trust you will succeed in securing a vessel soon, as cargo can be furnished as soon as one arrives."

BROOKSVILLE.—The annual meeting of the Brooksville Copper Mining Company was held at Portland on Friday last and the following officers elected for the ensuing year: President, M. G. Palmer; Secretary and Treasurer, George F. Gould; Directors, M. G. Palmer, W. H. Sanborn, George Burnham, Henry P. Merrill and J. Mathias. The report of the officers showed that a tunnel has been run on the property from fifteen to twenty feet, which is now in solid ore of good quality; and that samples of the ore had been successfully worked. It was voted that work be resumed on the company's property at once, and that every endeavor be made to fully develop the mine at the earliest possible moment. In accordance with the above vote work will be commenced immediately.—[Argus.

NORTH CASTINE.—Developments are progressing underground with the usual rapidity. From the 80-foot level crosscuts are being driven north and south. Sinking is also in progress in the bottom of the shaft. On Saturday, in the north crosscut, a considerable quantity of copper sulphurets was encountered. This is a new feature in the mine as copper has been found in the North Castine ore only very sparingly in the past. Everything is running along very systematically and well.

FRANKLIN EXTENSION.—The annual stockholders' meeting of the Franklin Extension Silver Mining Company was held at the office of Secretary Coombs, in Portland, on Monday last and the following officers chosen for the ensuing year: Treasurer and Secretary—A. W. Coombs; Directors—L. D. M. Sweat, W. E. Gould, J. N. Winslow, D. B. Ricker, W. H. Sanborn, G. M. Parker and Isaac Hamilton. Affairs at the mine are said to be in a flourishing condition. The shaft is down considerably more than a hundred feet, in good ore, three shifts are employed and work is progressing expeditiously.

Sullivan.

FANEUIL HALL AND SULLIVAN.—Supt. Hayward reports, under date of Sept. 14, as follows: "The crosscut has advanced since my last report thirteen feet. The new pumps are doing splendid work. At a meeting held by the directors last week

it was decided to put in a compressor and in future develop the property with power drills; this will secure through ventilation and insure a more rapid development. Everything at the mine is in a thorough condition and working well."

SULLIVAN.—Supt. Cahill reports to us for the week ending Sept. 14, as follows: "In my last I advised you of the value of ore per ton in the east drift, 4th level. Since then I have made the following assays from the west drift, same level:

September 9th, No 1, 117.85 ounces,	\$146.05
" " No. 2, 61.96	84.10
" " No. 3, 30.77	39.73
" 10th No. 1, 113.00	140.05
" " No. 2, 22.03	29.84
" " No. 3, 43.60	62.83

The above samples were taken for an average of the face of the ore vein. All the drifts are in excellent ore. The mine is looking better than ever. Everything working well."

GOLDEN CIRCLE.—An adjourned stockholders' meeting of the Golden Circle Mining and Milling Company was held in Portland on Monday last, to hear and take action upon the report of the committee appointed to investigate the company's affairs. Beyond learning that some \$7,000 are required to liquidate the indebtedness of the company we could not learn that anything was accomplished.

Blue Hill.

MAMMOTH.—The Mammoth, under Supt. Duff, has already produced several hundred tons of very rich ore. The shaft has been sunk 22 feet and a crosscut has now been started southward to strike the hanging wall.

DOUGLASS.—Renewed interest is taken in the workings of the Douglass on account of the recent production of a large quantity of ingot copper. The Douglass grounds, at the present time, are the scene of great activity. The cupola furnaces on the occasion of the visit of the MINING JOURNAL representative were both running continuously and to the satisfaction of the managers. The melted metal and slag flow from the furnaces with great freedom and very much better than a few weeks ago. The black-copper furnace runs to a charm and does very excellent work. The reverberatory furnaces have been built over and will soon be in operation again. The refining furnace is a complete success and readily transforms the blister copper into the clear metal. The large quantity of ingots now piled up make a very fine exhibition. The underground developments at the present time are exceptionally interesting and a larger amount and a richer quality of ore is now being exposed than ever before in the history of the mine. About thirty tons of very high grade ore are now being raised daily to the surface.

STEWART.—Supt. Dunn continues vigorously driving shafts Nos. 2 and 3, and they were on Monday last about 60 and 64 feet, respectively, in depth. The shafts follow the vein and make a good showing of ore, No. 2 shaft giving very good results. Work is progressing in a highly satisfactory manner.

BLUE HILL.—The Blue Hill continues to make a brilliant showing of ore. The incline shaft is down about 150 feet and the winze from the 110 level is down about 30 feet on the vein in very superior ore. The smelter ran smoothly all last week and performed exceedingly satisfactory work. The molten liquid flowed from the furnace in the presence of a MINING JOURNAL reporter very freely and a large amount of high grade matte has collected. The matte comes out in very large bricks which weigh about three hundred pounds. The furnace is this week receiving a new lining.

TWIN LEAD.—Work at the Twin Lead progresses satisfactorily. The south crosscut from the bottom of the incline has advanced 122 feet and has passed through the vein, which proved to be thirty feet in thickness and carrying good ore. A drift is now being run a few feet to the eastward and a winze will be at once commenced and sunk on the vein. Supt. Duff is in excellent spirits.

GRANGER.—Supt. Granger is pushing work with his accustomed energy. The works are in excellent condition and everything runs smoothly. The winze from the 100 level is now about 80 feet down on the vein and the ore body has the same general characteristics as in the upper level. The drift from the 100 level is being run easterly on the vein and is now in about 50 feet. Stoping is now in progress above the winze and this will be continued on the course of the vein to the surface. In this way the Granger will obtain an incline shaft from the surface to the lowest depths of the mine. A large amount of excellent ore is being taken out in stoping. A special stockholders' meeting is called for next Saturday at the office of the Company, in Boston. It will be an important one, and Supt. Granger is expected to be present and make a report which, it is understood, will be a most excellent one.

British Provinces.

SATEMO.—The superintendent of the Satemo telegraphed on Tuesday last as follows: "Encountered another rich strike on Nugget lode to-day; 800 tons on dump; contractors rapidly hurrying new mill to completion."

The company who have taken charge of the manganese mine on J. B. Newcomb's property, Hopewell Corner, intend pushing forward their operations and will put up the necessary buildings at once. The manganese found is said to be of a first-rate quality.

Kingston Chronicle and News:—It is reported that gold quartz of very rich quality has been discovered on the farm of Wm. Cassidy, in Camden, west of Centreville. Thirty dollars worth of precious metal was extracted from 1,000 lbs. of ore. Experimental washings of rock in Kaladar are yielding rich returns.

A despatch to the St. John News says: "The Secretary of the Nigadoo Mining Company has a lot of beautiful specimens of ore on exhibition here. The last assay, by Professor Bartlett, of Portland Maine, pronounces the ore to contain 72 ounces of silver and 61 per cent. of lead to the ton of ore. Considerable excitement is manifested in Bathurst, and several prospecting parties are fitting out."

Cape Breton Advocate:—A quantity of galena from the deposit near Salmon River, owned by J. A. McKenzie and others, was brought in and will be shipped to Boston. The analysis from specimens sent to an American assayer, gave a paying proportion of silver. It is now proposed to ship ten tons, and if it turns out satisfactorily, the mine will be further developed. We have seen a very rich specimen of galena from a mine near St. Ann's.

A mine of gold, silver and lead was recently discovered in Colchester county, N. S., within twelve miles of Brookfield station. A company has been formed, prospecting has been carried on vigorously during the past month, and been rewarded by the discovery of a three feet lode very rich in the above named minerals. There is in connection with this lode a large belt of soft rock, thirty feet wide, heavily charged with these minerals, also a belt of limestone and feldspar intermixed with the minerals. Several assays have been made, with the following satisfactory results: Gold 1 oz. to 1 1-2 ozs., silver 25 to 50 ozs., lead 45 per cent. to the ton.

GLOUCESTER COUNTY, N. B.—A correspondent of the MAINE MINING JOURNAL at Bathurst, N. B., writes under date of Sept. 12th as follows: "Mining matters in Bathurst are booming. A new company composed of the members of the Nigadoo Company and several others was organized on the 10th under the name of 'The Gloucester Silver Mining Company;' President, R. B. Call; Vice-President, John Sadler; Treasurer, William A. Hickson; Secretary, John Sivewright. The company have engaged Mr. Samuel Adams, of Leadville, Col., as general manager, at a salary of \$2000 a year, and are going to work at once. They have capitalized for \$250,000, pooling 25 per cent. of their stock as sold for a working capital. The indications are excellent. The Nigadoo mine is turning out some ore of a good grade but as it is situated far in the interior of the country the company will not be able to ship any until their road is completed. A recent assay by Prof. Bartlett, of Portland, gives metallic contents per ton of 2000 lbs.: Gold, 1-2 pennyweight, value 57c.; silver, 72.68 Troy ozs., \$81.39; lead, 60.75 per cent., \$60.75; total assay value, \$142.71. The shares of this company readily bring \$3 to \$4, being nominally worth \$5, and the stockholders are certain they will go far above par as soon as they can get their ore in the market. Several prospecting parties are out and two more new companies are in course of formation."

The Hailey Times of Aug. 24, says that during the months of June and July over 2,000,000 pounds of ore, averaging \$200 per ton, were shipped from the Wood River mines. This exclusive of the bullion, of which there were only four car-loads shipped, the only smelter on the river not having got fairly started. The smelter now produces a car-load of 10 tons of good grade bullion every forty-eight hours. During the two weeks ending to-day 863 sacks of Bullion ore and 818 sacks of Mayflower ore were shipped from Bullion. During the week ended this morning Cliff & McKay shipped to Kelton 500 sacks of Wood River and 335 sacks of Mayflower ore. C. B. Fox shipped last week 65 sacks of Idahoan ore. About 25 tons more were shipped direct from the mine. The sacks average 130 pounds. During the week ending yesterday the Wood River Smelting Company shipped 150 tons of base bullion and high grade ore. The ore was shipped because more was offered for sale than the smelter could work. The utmost capacity of the furnace is 20 tons per day.

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

New Alta-Montana mill started up on Tuesday last.

From 1863 to June 30, 1880, Idaho produced over \$78,000,000 in gold and silver.

Black Hawk mine, Plumas county, Cal., proving profitable on ore yielding \$4 per ton.

Extensive and valuable iron claims near Cedar, Utah, bonded by Denver & Rio Grande R. R. Co.

Copper smelter talked of for Tintic, Utah, to work the vast amounts of copper in that district.

Grand Gulch (Utah) Copper mines ship two wagon loads copper matte per day to Milford smelter.

Silver Islet, notwithstanding its "millions in sight," has levied another assessment of \$1 per share.

Famous Spar mine, Aspen, Col., of which A. D. Breed of Caribou, Me., is Supt., reported sold for \$300,000.

A company has been organized in Chicago for the purpose of mining for gold and silver in Page county, Virginia.

Utah wants to send a 2000-pound nugget of ore, found in a washout after the recent rains, to the Atlanta Exposition.

G. W. Bothwell, manager of the Starr-Grove properties at Lewis, Nevada, has recently been on a trip to Wood River.

Famous Carbon Hill Coal Mine, near Tacoma, Oregon, purchased by Charles Crocker, of San Francisco, for \$7,000,000.

Copper mine in Gillis district, 30 miles east of Hawthone, Esmeralda county, Nev., sold to New York parties for \$10,000.

The gold mines of Virginia are attracting considerable attention just at present, particularly among Philadelphia capitalists.

Mill of the Massachusetts and New Mexico Mining Co., near Silver City, N. M., destroyed by fire. Reported insured for \$30,000.

The Ruby Hill Mining News says there are enough lead bars stacked at the Richmond furnace to supply the ties for the new railroad.

The quartz mines of Oregon are yet in their infancy, yet the annual product is about \$650,000 and the total yield has been over \$8,000,000.

Suit brought by Silver Cliff Mining Co. against Morey & Sperry, claiming \$100,000 damages for misconstruction of Old Silver Cliff mill.

Silver mine at Middlesex Fells, Mass., recently discovered by F. W. Morandi, assays \$55 per ton, ten feet down. Shaft being sunk rapidly.

Philadelphia parties are about to take charge of some extensive copper mines in Archer county, Texas, which are reported as very rich.

Sixty tons of copper ore from the New Battle Mountain Mining Company's mines at Copper Canyon, (Nev.) were recently shipped to San Francisco.

Richmond Con. paid quarterly dividend of \$2.50 per share, aggregating \$135,000, in London, on the 9th of last month. Total dividends to date \$3,637,587.

Excitement in Antelope Valley, Mono county, Cal., over discovery of rich copper deposits. Lode traceable for miles. Ore smelts freely in a blacksmith's forge.

Osceola (Mich.) has declared a dividend of \$1.50 per share, aggregating \$75,000, payable Oct. 1st. This is the third dividend during 1881, or a total of \$225,000.

ADDITIONAL AUGUST DIVIDENDS.—Christy (Silver Reef), \$6,000; New York Hill (Cal), \$10,000; Robinson Con., \$50,000. Total dividends paid in August \$1,827,375.

Ore body in Robinson Con. said to be 26 feet thick on sixth level. Seventh level opening better still, assaying 180 ozs. per ton; 20,000 tons exposed below tunnel level.

The Pinal (Arizona) Drill of Sept. 3d contains an interesting description of the noted Mack Morris mine, in Globe district, from the pen of its able editor, Judge Reymert.

Our Pacific coast exchanges say that the recent rise in the price of lead is causing a revival of mining of low-grade base ores in the camps of that coast, particularly in Utah.

The Salisbury (N. C.) Watchman calls for 25 pounds of

ore from every mine in Rowan county, to be displayed at the Atlanta Exposition. Send 'em in. Show up your specimens.

A correspondent of the Eureka Leader, who has made a careful examination of the recently-discovered mines near Palisade, says that they are a good prospect, but nothing to go wild over.

San Francisco from the beginning of the American settlement of the Pacific Coast has manufactured all its mining machinery. From this lucrative traffic enormous fortunes have been made.

Works of Adams Mining and Reduction Company, Charlotte, N. C., not in operation. Splendid buildings and machinery standing idle. So says the Carolina Watchman. No cause given for suspension.

The Apache, St. Nicholas and Midas, vast copper mines in the Old Hat district, Arizona, have recently been sold to a Dr. Kane, for \$60,000. The Citizen says the work of development will be pushed vigorously.

Lexington mine, Butte, Montana, purchased by a French company for \$1,000,000. The famous Broadway mine, with its associate, the Mutual Agreement, also of Montana, sold to English capitalists for \$225,000.

The superintendent of the Leeds, at Silver Reef, has received instructions from the home office to proceed with necessary repairs at the mill and prepare for active operations at once. This will be good news to stockholders.

Other mining districts will please take a back seat now and give the Black Hills a chance. The Deadwood Pioneer announces the discovery of a four-foot ledge of solid gold in the Bengal Tiger claim, at Tigerville, Pennington county.

Stormont, one of the Clark & Bothwell group of mines, has declared its first dividend under the new management, payable Oct. 1st. The amount is five cents per share, aggregating \$10,000. Ten years' supply of ore is reported in sight. The mill will be run night and day, hereafter.

A vein of galena ore nine inches thick, one foot long and six feet high will weigh a ton; the same quantity of zinc blende will weigh 1125 pounds; of iron pyrite, 1400 pounds; of copper pyrite, 1150 pounds; gray copper, 1335 pounds; and of quartz, 725 pounds.—[Georgetown (Col.) Courier.

It is currently reported that the Nevada Bank has reduced the interest on money loaned on stocks to seven per cent. The reduction is of special interest to brokers and dealers and ought to have a favorable effect on the stock market. Fifty per cent. of the market value will be loaned on stocks by this bank.

An expedition sent over the route of the Northern Pacific Railroad by the "Chicago Times," from the Yellowstone to the head of Lake Pend d'Oreille, reports the region "densely wooded, very mountainous, abundantly supplied with water, poorly favored with grass, and with indications of rich mineral deposits."

Ben Rowe, who found a rich pocket in his back yard, at Virginia City, and who has been sued by the Ophir Company for restitution for ore extracted, has filed a location of claim with the Recorder of Storey county, claiming that it is a distinct vein not covered by the Ophir title. The ledge is 1,000 feet west of the Ophir hoisting works.

STARR-GROVE.—The Starr-Grove mine is again under full headway, the repairs to the air-compressor having been completed, and a full force of miners are now engaged in taking out ore and opening up new drifts. The new incline shaft is progressing finely and is in good ore. Both mills are running on ore from this mine.—[Lauder Free Press, Sept. 2.

The greater part of the time of Comstock mining superintendents and foremen is taken up in writing indignant denials to the newspapers that anything but barren porphyry has recently been struck in any of the crosscuts. That any person could be so malicious as to intimate that a sign of ore has been found is beyond comprehension and shows the possession of a wicked heart.—[S. F. Daily Report.

The Providence mine, of Nevada City, is being put on the London market at the rate of \$1,500,000. Young Jesse Grant appears as one of the directors. As the home price of this property was rated at \$800,000, the promoters of the scheme if successful, will make a nice little plum for themselves. The Providence is considered a great mine, however, and has immense reserves of ore.—[Grass Valley Union.

The Nuestra Senora property, situated at Sinaloa, Mex., embracing over 8,000 acres of mineral, timber and agricultural

lands, reported purchased by a Philadelphia company. Mother lode said to be 118 feet from wall to wall. Over 1,000,000 tons of ore exposed, averaging \$70 per ton silver, with 1,000,000 cubic feet of ore on dumps. Viboulla Creek furnishes water supply for a 100-stamp mill. Consideration not known.

The Wood River News says: "Many of the miners throughout the mountains are tired of waiting for the action of 'reported' capitalists (who want to bond a good mine for a song, and sing it themselves), and have gone to work sacking their ore. Nick Johnson's and several others' pack teams are kept busy, and fifty others could get work if they were in the country getting ore down to where wagons could get at it.

Nitre deposits, in a formation similar to those found in Peru, have been discovered in Humboldt Valley, Nevada. Nearly all the valleys of Nevada contain nitre, but it is so mixed up with other minerals that it could probably not be profitably separated. The time will come, however, when the chemicals contained in the so-called alkali of Nevada will be utilized and their extraction form a profitable industry.—[S. F. Daily Report.

Wells, Fargo & Co.'s report of the semi-annual production of precious metals on the Pacific coast, just issued, is as follows: Gold, \$9,418,378; silver, \$29,826,400. The report was prepared by John J. Valentine, Superintendent of Wells, Fargo & Co.'s Express, from the books of the company, and is authentic. This rate continued during the remainder of the year will aggregate for 1881 about \$80,000,000, the largest bullion production since 1874.

Serious trouble is anticipated in Indian Territory to grow out of the recent discovery of silver. The prospectors are irrepresible and it seldom occurs that they can be kept out of a region where precious metals are to be found. If the new discovery promises rich it will take more than the U. S. army to keep out the invaders. Poor Lo has been driven about considerably and it now looks as though he had got to relinquish a portion at least of his especial domain.

The Globe, Arizona, Chronicle, in contradiction of the report that rich discoveries have been made in the Globe Copper mine, gives a letter from a correspondent, who says that he has visited the mine, and saw "only croppings containing native copper and some on the hill showing native stains." The editor says: "There is no truth whatever in the statement that a 'seven foot vein, carrying glance, native copper, red oxides and green carbonates,' has been found on this property. All the showing that has yet been made is in the surface croppings, except at one point in the shaft, where a pocket of ore was found, but soon disappeared."

CHAPPARAL.—Work has been resumed at the Chapparal mine on the ore body that was opened up from the shaft last spring, and from which they were driven out by the water at that time, but which is now drained and in good workable condition. It is calculated that within two or three weeks enough ore will have been taken out to justify starting up the mill again. Meantime the tunnel is being driven from Kelsey canyon toward the shaft. This tunnel is 300 to 400 feet lower than the present workings at the bottom of the shaft, and henceforward no interruptions on account of water are apprehended.—[Mountain Democrat, Aug. 27.

A new Boston enterprise is the Atlantic and Gulf Steam Transportation Company, which has recently been organized to do a general steam freighting and transportation business between New York, Boston, and the Gulf ports. The company will represent Boston capital, among the parties interested being Messrs. Oliver Ditson, Albert C. Smith, H. H. Mawhinney, W. H. Hill, Jr., James Littlefield, and others. The steamer Raleigh, now receiving new boilers at New York, will be the pioneer vessel of the new line, which expects to do a good business in carrying railroad supplies for the Mexican lines now building, and in the transportations generally of Gulf State and Mexican products.—[Railway Herald.

The mining dividends of Arizona this year are nearly as great as those of California. In all probability next year Arizona, in the matter of productive mines, will lead all the other States and Territories in the Union. It is by no means certain that gold and silver mining will be the best paying industries. Coal and copper may turn out to be the most valuable minerals in the territory. Silver is found in every county in the territory and in rock formations which defy geological science. And because the formations were unlike those which old miners had encountered in California and Nevada, they, for a time, underrated the resources of the territory in this respect. It would be a singular turn of events if Arizona should be the greatest silver producing country in the Union. But this is really what recent developments indicate.—[S. F. Bulletin.

UPPER WOOD RIVER MINES.—Compiled from the Bellevue News (which, by the way, is being issued as a daily until the fight for the county seat is ended): At Galena, the Senate has 4 feet of \$200 ore, and 700 tons on dump; Red Cloud about the same quantity; 30-ton smelter will be ready to run in 30 days; White Cloud and Highland Chief taking out large quantities high grade ore; Alturas Co. working several claims, all looking well; no idle men around the place. At Vienna, Smiley's Gulch, the Vienna mine, 150 feet deep, has 5 feet of \$200 ore; Oregon lode about the same size and character; Mountain King, opened in three places, shows 16 feet solid ore averaging over \$200 per ton; Emma shows three feet of 150-ounce ore; Solace 4 1-2 feet averaging over \$400; Nellie group and other claims showing well. At Sawtooth, the Columbia Co. are putting up 20-stamp mill. Said to be ore enough in sight in Smiley and Beaver gulches for 1,000 stamps.

LOW GRADE ORES PAY.—The Sierra Buttes mine, Sierra county, Cal., worked by an English company, yielded, during the last half of 1880, 24,864 tons at one average cost of \$3.56 per ton; the mills crushed the ore at a cost of 63c per ton, making the total cost \$4.19. The yield of free gold was \$5.91, which was increased by working over the tailings to \$6.84 per ton. From this a dividend was declared of about \$30,000, leaving a cash balance of nearly \$60,000 to be carried forward. The mines of the Plumas Eureka (also an English company), Plumas county, produced during the same time 47,450 tons, at an average cost of \$2.66 per ton. The quantity crushed was 38,671 tons, at an average cost of 56c, making a total cost of \$3.22 per ton. The average yield of the ore crushed was about \$6.50 per ton, the aggregate amount being \$250,481. From this a dividend of over \$100,000 was declared, leaving a balance of about \$60,000 to be carried forward.

Nuggets.

—Mr. Geo. H. Emerson, of North Castine, has one of the finest farms in Hancock County.

—Mr. F. A. Darling, of Blue Hill, is enlarging and much improving his residence in that village.

—The Bulletin understands that arrangements are in progress for building a hotel at West Sullivan.

—The Dominion Exhibition at Halifax, which opens on the 21st inst., promises to be a grand success.

—A large party of Ellsworth and New York gentlemen visited the Blue Hill mines during the past week.

—A party comprising twenty-two members of the Essex Institute at Salem, Mass., are stopping at Bar Harbor.

—A company has been formed at Gouldsboro to purchase a steamer to ply between West Gouldsboro and Bar Harbor.

—A promising copper lode has been discovered, during the past week, upon the already noted "Jones" property, in Brooksville.

—The receipts of the State Fair at Lewiston this year were \$17,037.94, or \$1,671 more than the unprecedentedly large receipts of 1880.

—It is estimated that plans to build at Bar Harbor, Mt. Desert, before the opening of another season, have been already made to the extent of \$200,000.

—The Courier says the steam tug C. M. Winch took a passenger from Rockland to Blue Hill on Sunday last, getting \$60 for the job. The copper camp is beginning to possess some attractions.

—And now one of our exchanges tells us that coal was found in the town of Brewer in 1835, in boring a rock near the river, about a mile above the toll bridge. It was said at the time that it ignited and burned freely.

—Bankers and brokers say that last month was the dullest August in Wall Street that they have experienced for 10 years. If reports are correct Jim Keene is probably of the opinion that September is sufficiently lively.

—In the towns of Orland and Penobscot (Hancock county) there are a large number of brick yards and a very large business has been done this season. Messrs. Bowden & Grindel, of Penobscot, have manufactured over one million bricks this year.

—Rockland hasn't seen the time for six years when the prospects of the city were so flattering as at present. Business is good, taxes are less burdensome, and there is a feeling of buoyancy and confidence on all sides that is most pleasing.—[Courier.

—The American Sleeping Car Company has been organized in New York, with a capital of \$10,000,000. The incorporators are Adam H. Ward, Aaron H. Cragan, Joseph H. Parsons, Horace E. Dillingham, Edward M. Clark, Frank W. Allen, and Isaiah S. Emery, of New York; Cornelius S. Bushnell, of New Haven; and Shepard Homans, of Englewood, N. J.

—The slate business of Piscataquis county is in a flourishing condition. The several companies operating at Monson manufactured during the month of August 2,376 squares of roofing slate, as follows: Hebron Pond quarries, 1,251 squares; Dirigo, 570; Monson Pond, 555. The Williams Slate Company, of Brownville, have a contract for several thousand squares, to be delivered as soon as they can be quarried.

—We acknowledge the receipt from Messrs. Goff, Hastings & Co. of an elegant pamphlet containing the reports of Profs. W. F. Stewart, J. Alden Smith and E. E. Burlingame upon the properties of the Boston Gold and Silver Mining Company. We have not space in the present issue to refer to the reports at any length, but they are all highly flattering, and that of Prof. Stewart's, geologically considered, is one of the finest we have ever seen.

—Some of the New York stock brokers have had lots of fun this week, and some of them haven't. A pool of speculators quietly got control of 90,000 of the 100,000 shares of the common stock of the Hannibal and St. Joseph railroad, and then went to work and bought all they could, the sellers vainly supposing they could deliver the stock as agreed. But when settling day came round they couldn't, for the simple reason there was none to deliver, and the price was run up to 200 on Wednesday. Jim Keene, it is said, has lost a million dollars, being short about 20,000 shares. He offered to settle early in the week at 80. The pool named 100, and he laughed at them. They had already got his foot in the "bear trap," and they laughed at him. Russell Sage is short, it is reported, all the way from 5,000 to 10,000 shares.

—In clearing off the surface of the famous Mt. Mica deposit, at Paris, a number of specimens of tin ore have been obtained and a large quantity of mica exposed to view, indicating a very extensive deposit of this mineral. Upon the very top of the ledge a decayed place in the granite revealed seven tourmalines which were once of wondrous beauty, but from long exposure to the action of the elements they were disintegrated into numberless fragments and could not be removed from their matrix without being destroyed. They were transparent—red at the base, then changing into bright green, and deepening into dark green at the summit of the crystal. One of them measured six inches in length by four and a half inches in breadth; another was four inches long by one and a half inches wide. As soon as active operations are commenced at this locality it will be much visited by mineralogists.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Dracut Nickel Mining Co.	Portland.	Sept. 20.	\$300,000.
Mine Hill Mining Co.	Portland.	Sept. 10.	500,000.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, SEPT. 14, 1881.

NAME.	Thurs *		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Allouez	3	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	2 1/2	2 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Atlantic L. S.	14 1/2	15	14	16	14	15	14	15	14	15	13	16
Atlas	...	...	...	...	...	...	...	...	...	...	...	...
Aztec	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper	...	...	...	...	...	...	...	...	...	...	...	...
Brunswick	...	...	...	...	...	...	...	...	...	...	...	...
Cajumet & Hocla	2 3/4	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Catalpa	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Central	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls	...	...	...	...	...	...	...	...	...	...	...	...
Contentment	...	...	...	...	...	...	...	...	...	...	...	...
Douglass	2	...	2	...	2	...	2 1/2	...	2 1/2	...	2 1/2	...
Dana	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver	...	...	...	...	...	...	...	...	...	...	...	...
Empire	...	...	...	...	...	...	...	...	...	...	...	...
Franklin	12 1/2	13	12 1/2	13	12 1/2	13	12 1/2	13	12 1/2	13	12 1/2	13
Harshaw	...	...	...	...	...	...	...	...	...	...	...	...
Huron	3 1/2	3 1/2	3 1/2	4	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
Hanover	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt	...	...	...	...	...	...	...	...	...	...	...	...
International	...	...	...	...	...	...	...	...	...	...	...	...
National	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Osceola	...	...	...	...	...	...	...	...	...	...	...	...
Pewabic	13 1/2	15	12 1/2	15	14 1/2	15	15	15 1/2	15 1/2	15 1/2	15 1/2	15 1/2
Phoenix	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac	...	...	...	...	...	...	...	...	...	...	...	...
Quincy	35	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	36 1/2	37	38	38 1/2	38 1/2
Ridge	4	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
Silver Islet	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Star	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan	...	...	...	...	...	...	...	...	...	...	...	...

*No Board.

ASSESSMENT NOTICE.

North Castine Mining & Smelting Company.

BANGOR, Me., August 27, 1881.
 Notice is hereby given to the Stockholders of the North Castine Mining and Smelting Company, that at a legal meeting of the Board of Directors of said Company, held on the 17th inst., an assessment was voted to be laid, and was laid, upon the entire capital stock of said Company, in conformity with the laws of this State and the by-laws of the Company, as follows: Five cents per share upon every share of said capital stock, which by vote of the Directors is ordered paid to the Treasurer of the Company as follows, viz: Two cents per share to be paid on or before the 5th day of September, 1881; and the balance in three equal installments payable on or before the 30th days of September, October and November, 1881.

Per order of the Board of Directors,
 S. P. JOHNSON, Treasurer.
 P. S.—Certificates of Stock will be issued upon call.

YOUNG HECLA

Mining and Smelting COMPANY.

Office at Bangor, Me. Mines at Blue Hill, Me.
Capital, \$500,000.

100,000 Shares. Par Value, \$5.00 each.
 Treasury Fund, 20,000 Shares.
 President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. P. Scoville, Bangor.
 Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace F. Tobey and Frank H. Williams.

BLUE HILL CENTRAL

Mining and Smelting COMPANY.

OFFICE.....BANGOR, ME.
 MINES AT.....BLUE HILL, ME.

CAPITAL, \$500,000.

100,000 Shares: Par Value, \$5.00.
 Treasury Fund, 30,000 Shares.
 Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

Silver Hill Mining Company.

Office, 11 CENTRAL STREET,

Room 4, Boston.

Mines at Garland, Me.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
 25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.
 Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

Blanchard Slate Co., OF MAINE.

Quarry in operation at terminus of Bangor and Piscataquis Railroad.

Quality and natural advantages unsurpassed. Dumpage and drainage unequalled. Railroad transportation adjoining. Stock for sale. Sections leased on favorable terms. Capitalists invited to inspect.
 A. C. HAMLIN, President, Bangor.

CHAPPARAL GOLD MINING CO.

Location of Mill and Mines:

SELSEY MINING DISTRICT, EL DORADO COUNTY, CAL.

CAPITAL, \$2,000,000.—PAR VALUE, \$10.

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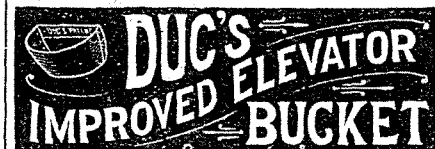
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4.—12.—91.

BANGOR, MAINE, SEPTEMBER 23, 1881.

{ \$2 per Year ;
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W. FRANK STEWART,
Practical Geologist and Mining Engineer.

Parties who may desire my services as a mining expert, in any portion of North America, can confer with me by writing to the care of the Mining Record, No. 61 Broadway, New York; or to the MAINE MINING JOURNAL, Bangor, Me.

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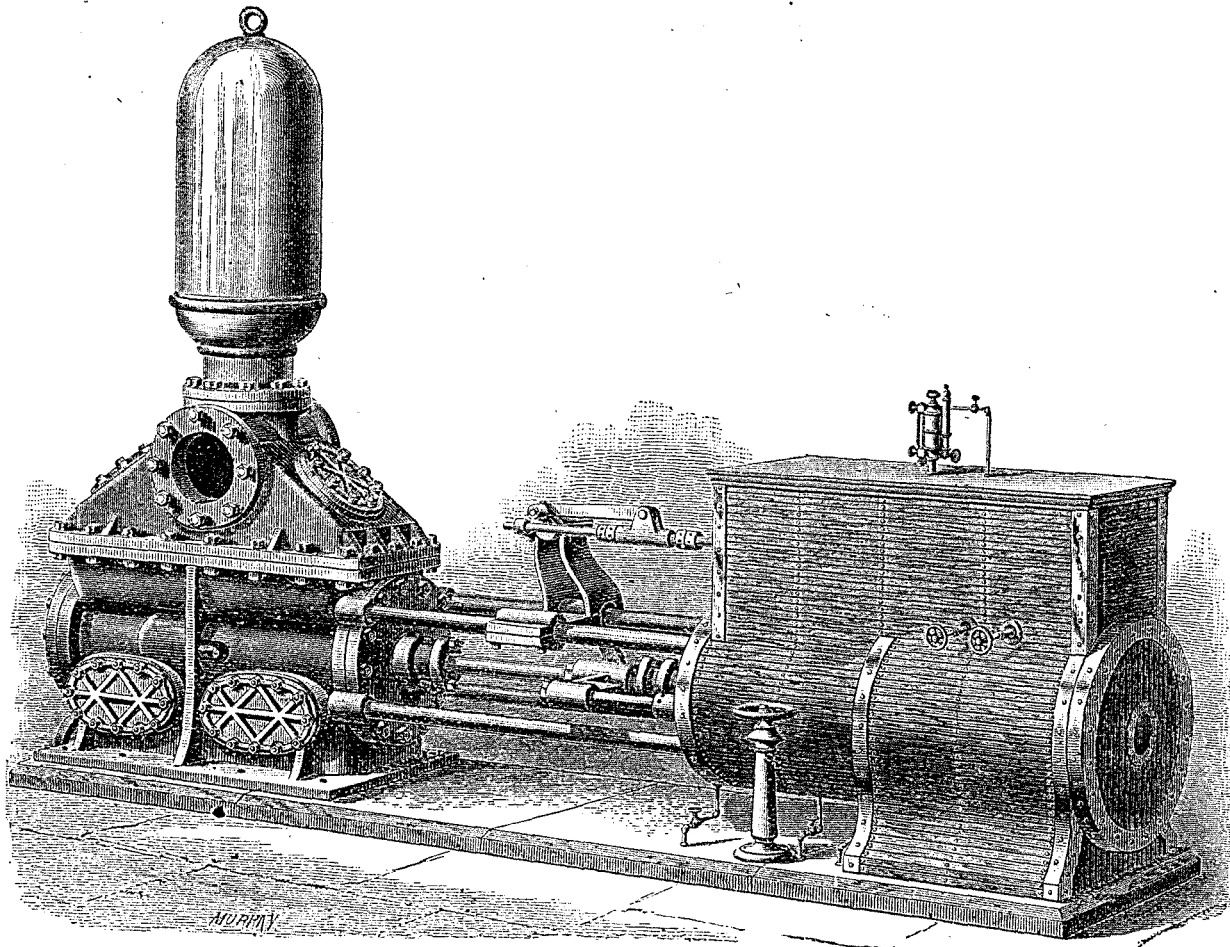
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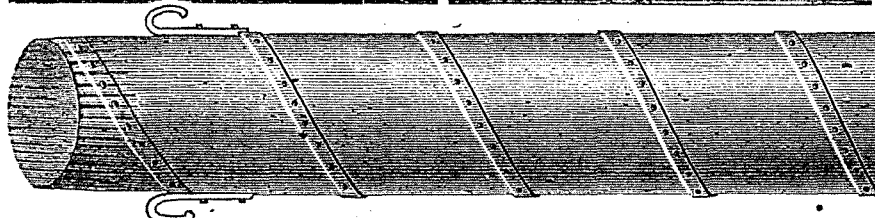
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PUBLISHED EVERY FRIDAY AT
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E. M. BLANDING, } EDITORS.
W. F. BLANDING, }

E. H. DAKIN, BUSINESS MANAGER

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, SEPTEMBER 23, 1881.

THE PRESIDENT IS DEAD.

The chief magistrate of the Nation has fallen by the assassin's hand. The local and metropolitan press have not only informed our readers of this fact but they have also done all the moralizing necessary upon this subject; and it only remains for us to assure our readers that this deplorable calamity (for it can be considered in no other light) has not resulted in disaster to the financial and commercial interests of the Nation. In no other country than that in which we live could this have been possible. In any other Nation on the civilized globe a sudden and enforced change of Rulers would have involved marked changes in the policy of administrative affairs to such an extent as to overthrow both State and Commercial projects and bring about chaos generally. That such has not been the result here is not wholly due to the enlightened age in which we live, but is a sure and incontrovertible test of the permanency of our republican institutions. A citizen of the Republic was elevated to the position of Chief Magistrate for a brief time, after which he expected to resume his former position. The assassin prevented this. But the man who was elected to fill his place, in case of his removal by disability, was chosen by the same people, and through the same belief in his integrity and worth; and, notwithstanding an apparent antagonism of view as to how the end should be secured, the result would have eventually been the same. President Arthur is emphatically a business man; his past record has shown that he is every way worthy of confidence. Therefore, let us believe that President Garfield's policy will be carried out to the letter, and that we yet have a President who will labor for the best interests of the whole country.

THE BOSTONIAN STYLE.

The Empire Mining Company, a well-known Boston organization, at the second annual stockholders' meeting just held at Hartford, Conn., re-elected the old board of officers and voted to sell out to a new company organized under either Maine or New Hampshire laws, upon an assessable basis. The Empire has from the first been a disgrace to the entire mining business of Boston, but we will be charitable and assume that its system of organization was solely responsible for its unfortunate condition. The following, from the San Francisco Daily Report, will serve to show what is thought of such childish schemes on the Pacific Coast:

The Massachusetts non-assessment plan is being illustrated in the working of the Empire mine at Tombstone. The mine is owned by Boston men and is said by the Epitaph to have large quantities of ore in sight and every likelihood of being a bonanza proposition, yet the Bostonians to whom it belongs are managing it so badly that it is a detriment to the whole district. The mine has just, for the second time, been closed down by orders from the home office. The reason is that the amount just raised by the peddling of stock or by some such means has been spent and more money has to be raised somehow or other. If the mine were in California lands an assessment would be levied and out would come the ore. The Epitaph is, naturally enough, very mad about the business and says: "Suppose that Contention or Grand Central had pursued so beggarly a policy in the beginning, where would they have been to-day? Just where Empire is. Our advice to Empire is to pool your stock, put a price upon your mine and sell to men of money and enterprise enough to put it on a paying basis. It is evident to the merest tyro that the present company will never do it. As it now is it is the only black spot upon the district, and that, as we have before said, not because of any fault of the mine, but of the management."

Mr. John E. Booth, of this city, has lately perfected a hand rock-drill which for efficiency, cheapness and ease of handling, is far ahead of anything of the kind we have ever seen. In the machinery and tools used in mining and quarrying operations there has always been a wide gap between drilling by hand and the use of steam or compressed air; this gap the invention of Mr. Booth is designed to fill. Other machines have been constructed for this purpose, but this seems to possess all the advantages of the others combined, and in a simplified form. Space will not permit going into details at present, nor would it be possible to give our readers a lucid description of its construction without the aid of diagrams to illustrate; but it will soon be on exhibition in some conspicuous place, and we shall also endeavor to furnish additional particulars hereafter. The drill is a neat, substantial and compact machine, and may be either placed upon a tripod having all the adjustability required to adapt it to uneven surfaces, or attached to a horizontal bar for use in shafts, etc. The machine is self-feeding, acquires its power from strong, spiral, steel springs, and may be run either by hand, horse or steam power, as may be desired. It is made of the best cast steel and iron, weighs (including the tripod) but 300 pounds, and can be readily moved by one person in less than a minute, by laying it down and running it upon its own wheels. The inventor hopes to be able to place his machine in the market at a price not exceeding \$200. This is much cheaper than any other drill of the same class, and it is certainly far more effective, as it drills with equal facility in any position—in open cuts, shafts, stopes or in the face of advancing drifts. Mr. Booth is also perfecting a prospecting drill, upon the same principle, which he thinks will not weigh more than 40 to 50 pounds, and which will supply a long-felt want.

Every mining camp in the country ought to adopt measures for placing facts and figures as to its production and advantages properly before the public, whilst miners and others who can formulate their ideas upon papers, should pen for their local press, as well as for journals abroad, such features relative to their sections as may interest the general reader. Upon this important point an esteemed exchange says that it is quite singular how careless and heedless of the opportunities presented on every hand are the people of the mining districts in neglecting to give information to the papers of the vicinity regarding their developments and prospects. They will sit for hours loafing languidly on store boxes, or about a saloon, and the burden of their conversation will be a lament because capital does not come to invest with them, because prospectors and professional miners seek other destinations, and because that prosperity which characterizes other localities appears to shun theirs. At the same time the editor who will circulate their statements, if they will make them, to the four quarters of the globe, who will give them a status among capitalists, and cheerfully present their attractions to men seeking opportunity for profitable labor, will almost beg of them to pen an occasional line and assist him in the good work for their advantage. Hiding a light under a bushel is really a very poor policy. Many superior localities go begging where inferior camps are enjoying popularity, and this on account of a proper lack of presentation to the public.—[*Railway and Mining Gazette.*]

Regarding the situation in Wall Street, Uncle Rufus Hatch remarks, according to the *Graphic*, that "everybody has been standing bricks on end and when one falls it will knock over all the others. The financial balloon is in the clouds. When it nears the ground Gould heaves over a sand bag and up she goes. Then Vanderbilt pulls the safety valve and down she comes. Between them both she'll soon be without either sand or gas. Joe Medill insane. Every broker either driving a dog cart or sailing a yacht, half of them running country seats more expensive than their seats in the Stock Exchange, all the grain cornered in the large cities, all the farmers coming to town to feed themselves and stock, all the bank presidents to join the Stock Exchange to facilitate business, the commercial community on stilts, everybody getting groggy. Vanderbilt himself gone on Maud S., and everything dancing the racquet to Jay Gould's music."

The Hamilton Reduction Works, in New York City, are approaching completion, and mining men and metallurgists who have examined into the workings of the new process are enthusiastic in their belief of its success and express the opinion that it is destined to make a complete revolution in the treatment of ores. The power of melted lead in dissolving gold is the phenomenon upon which the success of the process is based. We have at hand a complete description of the process, but as the Works will soon be in full operation we prefer to wait until their practicability is assured before giving it to our readers.

We desire to call the attention of our readers to the sale of mineral and phosphate lands in Canada, advertised in

another column. Phosphate mining has become an extensive and remunerative industry with our neighbors across the border. Foreign companies are also finding it a profitable business. The phosphate is easily and inexpensively mined and meets with a ready sale at good prices. This will be found a promising field for the judicious investment of American capital.

At the stockholders' meeting of the Boston Mining and Stock Exchange, held on Tuesday last, it was voted to dissolve the corporation on Oct. 1, 1881. It was also voted to allow thirty days, or until Nov. 1, in which present stockholders, who have not yet signified their intention to become members of the Association into which the Exchange is to be merged, can do so by signing the roll.

Sales of Maine stocks at the Boston Stock Exchange during the week have been as follows: 1,370 shares of Sullivan at 4 to 4 5-8; 300 Blue Hill at \$3; 500 Douglass at 2 3-8. At the Mining Exchange, Copperopolis closed on Wednesday at \$2.11, Milton at \$1.12, and Deer Isle at 67 cents. Prices of copper stocks are strong, with no especial demand.

The members of the Boston Mining and Stock Exchange were to go over to East Boston in a body, yesterday afternoon, and make an inspection of the New England Smelting Works.

Ingot copper remains at 18 1-4 to 18 1-2, with no prospect of a decline at present.

Personals.

SUPT. MOYLE, of the Blue Hill mine, returned from Boston on Tuesday last.

SUPT. SHOENBAR, of the Milton mine, has been in Boston during a portion of last week.

SUPT. BARCLAY, of the Hersey Smelting Works, has been spending a few days in Bangor.

MR. T. BRIGHAM BISHOP, of Boston, was in the city early in the week and made a flying trip to the Bagaduce.

MR. A. H. HARRIS, President of the Deer Isle Silver Mining Company, has been passing the summer at Deer Isle.

DIRECTOR BURCHARD, of the United States Mint at Washington, is in Leadville, looking up statistics on the mining product.

MR. W. A. LEONARD, Supt. of the Cherryfield mine, was in Boston during last week, securing the machinery for a new concentrating mill.

DR. E. S. LEWIS, of Franklin, made us a brief call yesterday. DR. LEWIS is an old and esteemed resident of Franklin, and is a firm believer in the mineral wealth of Maine.

HARRY B. PARKER, of Blue Hill, recently favored us with a call. MR. PARKER was on his way to St. John, and speaks very enthusiastically of the future prospects of the copper camp.

PROF. W. FRANK STEWART, who has been obliged to postpone his Western tour on account of professional en-

gagements in the East, was in this city on Wednesday last, on his way to Sullivan. The Professor is in good health and looking finely.

C. X. HOBBS, Vice-President of the Newfoundland Railway Company and, until recently, manager of the famous State Line Mines, in Nevada, was at the Bangor House on Sunday last, in company with a party of New York gentlemen, on his way to Newfoundland.

EDGAR WILLIAMS NYE, now managing editor of the Boomerang, published at Laramie City, Wyoming Territory, is said to be the original "Bill Nye," on whom the "Heathen Chinee" played it so fine, according to Bret Harte. He formerly lived at Black River Falls, Wisconsin.

We were pleased to receive a call on Wednesday last from Mr. BEN. SMITH, with Geo. L. Claffin & Co., of Providence, R. I., one of the largest wholesale and retail drug houses in New England. Mr. SMITH is spending his vacation in this vicinity and is at present visiting A. M. Campbell, Esq., of this city.

REV. J. A. SEITZ, editor of the Norway "New Religion," favored us with a call on Tuesday last, on his way to Ellsworth to attend the Unitarian Conference. Mr. Seitz takes a deep interest in the mining developments of the Pine Tree State, and proposes to make a brief tour of inspection among several of the most prominent mining districts.

Dips, Spurs and Angles.

- A new kind of metal—printers' zink.
- A hole-sale business—selling oil wells.
- The biggest fish of the season is caught with a rod and lyin'.
- Many of the Arizona miners are miners their hair.—[Graphic.]
- The Rockland Courier wants to know if "evil communications corrupt good manners," how the deuce is it that all editors are such gentlemanly fellows?
- On the north side of Lake Superior, every man owns a mine, every poor man owns from two to three, and a very poor man from six to eight.—[Wicked Chicago Paper.]
- There is nothing which quickens a man's moral perceptions so thoroughly as the discovery that he is caught out on the wrong side of a corner in the stock market.—[Graphic.]
- A young lady who is doing the Alps reports progress to her guardian: "I tried to climb the Matterhorn; didn't reach the top. It's absurdly high—everything is high in this country. Please send me some money."
- Gen. Stoneman, of Los Angeles, Cal., is the owner of a fine horse, called Ben Butler. The reason given by the General for naming the animal after the Massachusetts Statesman is that he never knows in what particular pasture to find him.
- It is said that tight lacing checks cerebation. It also checks circulation and respiration, and although it may promote flirtation and adoration, also produces palpitation, ossification and murderation. Altogether, waist attenuation is not worthy the self-stultification and self-mortification which it costs.
- The editor of the Boise (Idaho) Statesman recalls this incident of his San Francisco life: Hall McAllister was

standing on Kearney street, talking with W. H. L. Barnes, when a woman went by with an enormous bustle. Barnes looked at her and asked: "Hall, what sort of papers do you suppose that woman has got in her bustle?" "Call and Examiner, if you want to know," replied Mr. McAllister.

—A tough nut—J. W. Nutt, who lives on Mount Bross, Park county, Colorado. One night recently he stepped out of his house and in a moment of abstraction stepped over a cliff thirty feet high. He fell with a thud on a ledge beneath and, turning over, rolled down the almost perpendicular hill-side sixty feet further. He then got up, and, although the night was dark as Erebus, picked his way back up the precipice, an almost impossible task in daylight, and soon found himself standing in his cabin and but little hurt.

—An Oregon editor has forged a draft on a Portland bank, and the entire country is paralyzed with astonishment. This is the first time for over half a century that an editor has been guilty of a dishonorable action. Like Brother Bassett of the deceased *Portico*, they survey the world and its sinners from an "elevated plateau" and seldom condescend to meddle with the minor vices. Hence the familiar phrase on the lips of all good men: "I'd rather be an editor than an angel, for if I were an angel I could not be an editor; but if I were an editor I must inevitably be an angel."—[San Francisco Exchange.]

—Bellevue and Hailey, in the Wood River region, are still fighting for the county seat. The Bellevue News of Sept. 10th says: "We do not claim to be immaculate in Bellevue, and on that ground claim the county seat. Oh, no! It was in heaven that they found the devil himself, at first; fired him out and allowed him to create a little hell of his own. Even so did Bellevue, and the archangel now has his imps dancing about him on the "desert land tract" up the river. It is not justice to our county officials to make that spot the county seat of Alturas, and in that pandemonium force them to dwell for a year or more."

—Greasy Creek, in Arkansas, is one of the latest natural wonders discovered in the United States. California has a spring at Calistoga which, seasoned with pepper and salt, tastes like chicken broth. Elsewhere they have discovered one that flows turtle soup. The Rev. John R. Yeatts, a Baptist divine, is authority for the discovery of a spring near Greasy Creek, Arkansas, flowing fifty gallons a minute, colored like apple cider and tasting like applejack. He saw hundreds "lying" around the spring in a state of blissful intoxication, laughing and trying to clap their hands. It is called the Millenium Spring.

—"It don't do to fool with giant powder," said an old timer, yesterday, in the Boomerang office. "It's powerful stuff. I had a \$10,000 mine over in the Queen of Sheba district in '53, called the Goshallhemlock claim. I was offered \$10,000 for it, with \$5,000 in Sagebrush placer stock besides, if she opened up as well ten foot further down. We put in a blast of giant powder, and when we went to make an examination, we couldn't find the Goshallhemlock with an assessor and a search warrant. The hole was there, but there wasn't quartz enough to throw at a yaller dog. My idea is to sell a mine just before you put in the giant powder, and then if the buyer wants to blow the property into the middle of next Christmas, let him do it."—[Laramie Boomerang.]

—There is said to be a captive bear at the Arkansas Hot Springs which finds occasional solace in a bottle of beer proffered by some good-natured person. A recent visitor, who had been much amused at seeing brain draw the cork and drink from the bottle with evident satisfaction, determined to treat as often as the bear desired, taking a glass himself for every bottle which the captive put under his belt. At the end of two hours the man had succumbed to

nineteen glasses and was borne away on a shutter, while the bear strolled back and forth at the end of his chain with a serene and benevolent expression upon his countenance. And so on the Pacific Coast; many an ambitious experimenter in the stock market has kept putting up refreshments for the bear until he has been laid out past all financial redemption.—[Gold Hill News.

—The population of Mexico is 10,000,000; and there are 146 cities, 372 towns, 4,486 villages, 5 missions, 5,689 haciendas, 14,605 ranches, besides 2,248 collections or groups of houses, denominated "congregaciones," "barrios," "rancherías," etc. Value of private real estate, rural, \$773,000,000; value of private real estate in cities, \$2,558,036,000; value of cattle of all kinds belonging to individuals, \$126,000,000; property belonging to the nation, \$340,000,000; total real estate, without including mines, coasts, bays, lakes, rivers, etc., \$3,594,060,000; annual crop of Indian corn, \$112,174,424. Total agricultural products, \$177,451,086; industrial products, \$14,000,000. There are 324 mineral districts, 23 placer and 1,684 mines (worked) which produce 2,577,306 cargas (300 pounds to the carga) per annum, the value of which is \$29,713,255, and 102,240 persons are employed in the mining industry. The exports last year amounted to over \$20,000,000; the imports to over \$40,000,000. Mexico is by no means an undeveloped country, though there is still room for great development.

—The Wood River (Idaho) News, under the heading "Get In! Get In!", thus urges the citizens of Bellevue to give their newly appointed preacher a warm reception: "Rev. Mr. Gascoign, of the M. E. church, who has been preaching to the people of Lower Boise for some time, has been appointed to work in Bellevue, as our readers have been informed in other issues of the News. He came among us during the past week, and realizing the extent of his great work before him will do everything to rush the cause of the Lord and his church into prominence at once. Bellevue-ites will surely do all in their power to help the gospel mill to rise, and let the house be a good one, for in a cold country it is not manifestly as easy to serve the Lord in a barn as in a good, warm house. And while it is a little out of our line, just now, still, we would suggest that the old fossils who have been dodging civilization and the laws of God for forty years, get back into the harness this fall, and not wait for the spring rise of the spirit to tell what sinners and backsliders they have been. It's a mighty good time, right now, to jump into the ranks and help Brother Gascoign along. He preaches to-night in the school-house."

—The average English joke has its peculiarities; a sort of mellow distance; a kind of chastened reluctance; a coy and timid, yet trusting, though evanescent, intangibility which softly lingers in the troubled air and lulls the tired sense to dreamy rest, like the subdued murmur of a hoarse Jackass about nine miles up the gulch. He must be a hardened wretch indeed who has not felt his bosom heave and the scalding tear steal down his furrowed cheek after he has read an English joke. There can be no hope for a man who has not been touched by the gentle, pleading, yet all-potent sadness embodied in the humorous paragraph of the true Englishman. One may fritter away his existence in chasing the follies of our day and generation and have naught to look back upon but a choice assortment of robust regrets, but if he will stop in his mad career to read an English pun, his attention will be called to the solemn thought that life is after all but a tearful journey to the tomb. Death and disaster on every hand may fail to turn the mind of the thoughtless world to serious matters, but when the London funny man grapples with a particularly skittish and evasive joke, with its weeping willow attachment, and hurls it at a giddy and reckless humanity, a prolonged wail of anguish goes up from broken hearts and a sombre pall hangs in the

gladsome sky like a pair of soldier pants with only one suspender.—[Laramie Boomerang.

Mount Mica Mining Company.

A company under the above name was recently organized in this city, with a capital of \$500,000, divided into shares of par value \$5 each, and the following list of officers: President, Dr. A. C. Hamlin; Treasurer, John S. Jenness; Secretary, F. H. Clergue; Directors, A. C. Hamlin, F. M. Loughton, F. H. Clergue, C. P. Wiggin and J. F. Slater, of Bangor, and Ware B. Gay and W. W. Whitcomb, of Boston; Superintendent, Samuel R. Carter, Paris.

The Mt. Mica Mining Company propose to explore and mine several deposits in Oxford County which are known to be rich in tin, mica, tourmalines and minerals of the lithia group. The chief of these properties which have been secured by the Company is the famous Mt. Mica, situated in Oxford County, about four miles from the G. T. R. R. depot at Paris, a most delightful place of summer resort. It consists of a large and valuable farm of 130 acres, comprising three wood-lots covered with valuable timber, several grass fields yielding from 40 to 50 tons of hay annually, two orchards and several pastures. Belonging to the farm is a comfortable farm house, two farms, sheds, &c., and a maple sugar house.

In the central part of the farm is situated the celebrated Mt. Mica, known everywhere among mineralogists as one of the most wonderful deposits of rare minerals on the globe. It is comparatively a slight elevation of rock, mostly covered with soil and not particularly attractive to the view, but nevertheless, its gray ledges, even in the trivial excavations which have been made, have yielded to the casual explorer nearly fifty varieties of minerals, some of them rare and beautiful. It is believed that careful mineralogical research will largely increase the present number of minerals known to occur there.

The ledge derives its name from the great sheets of mica which covered its surface at the time of its discovery; but it gained its world-wide reputation from the rare minerals which were disclosed by trivial excavations, and especially from its tourmalines, which were of great beauty. Some of the most remarkable and valuable tourmalines known have been discovered here, and they embrace all hues. Many of them are still preserved in the cabinets of this country and of Europe, while fragments of others have afforded great numbers of cut gems of fine color and water. Some of them have been valued at \$1,000 or more each. Full particulars of the gems found at this locality may be found in the work on "The Tourmaline," by Dr. A. C. Hamlin, which may be obtained at the office of the MAINE MINING JOURNAL. The tourmaline deposit was supposed to be superficial and the search for them was abandoned some years ago, but explorations just concluded show that the deposit is far more extensive than was supposed, and that it extends indefinitely. The vein has recently been explored for a distance of 80 feet, disclosing the tourmalines at either extremity, and there is reason to believe that the deposit extends for 400 feet or more, and that it is also rich in the rare minerals of the lithia group. In fact, the recent explorations have brought to light some magnificent tourmalines of red and green colors, and the indications assure the explorer that the ledge yet contains many crystals as fine and pure as those of its early day.

In the eager search for the bright-colored stones in former times, several valuable minerals were overlooked. Among them was *Cassiterite*, the black oxide of tin. The discovery of this valuable ore was overlooked by the early explorers, and it was not noticed until Prof. Verrill, of Yale College, picked a specimen from out the debris and, in 1860, exhibited it at a meeting of the Boston Society of Natural History. The specimen weighed nearly five pounds, was partly crystallized, partly massive, and nearly pure. After the mineral was recognized, a number of specimens were found embedded in the rock, and the indications of a tin deposit were so assuring that a lease of the property was secured in 1862, by one of the best experts in this country, and upon his representations and the advice of other mineralogists, several capitalists in New York were subsequently induced to form a company for the purpose of mining for this valuable mineral. But the effects of the civil war and the death of several of the principal persons interested in the enterprise, prevented active operations and caused a forfeiture of the lease which conveyed the mineral rights to the company. Not long afterwards, several mineralogists, believing in the permanency and value of the deposit, offered to explore it systematically, but the owners of the property having exalted ideas of its worth declined to lease. And so Mt. Mica has remained undisturbed until the present time, with the exception of a few trivial explorations for mica and tourmalines. The amount of tin contained in this form of oxide has been ascertained to be about 80 per cent., and traces of the metal have

also been found in the gangue. The form of deposit and the associate minerals found in connection therewith, give great promise of the existence of a lode of tin when greater depths shall have been reached. Tin ore is generally regarded as a deep seated mineral and rarely occurs in abundance near the surface, except in places which are regarded as the result of the decomposition of the rocks which formerly contained it.

The search for mica was a preliminary one and successful so far as it went; but as no lease for extended operations could be obtained the enterprise was abandoned. The specimens of mica obtained were massive, some of them measuring more than a foot in diameter and weighing from twenty to forty pounds. The quality was excellent considering the slight depth reached, which did not exceed seven feet and did not extend below the frost line and reach of atmospheric influence.

Among the other rare and valuable minerals thus far found here are *Lepidolite*, *Cookeite* and *Amblygonite*. As these minerals are rich in Lithia and contain the new metals Caesium and Rubidium, they are much sought for by the chemist and the collector of minerals. Several tons of *Lepidolite* have already been found here and, as it is worth ten cents per pound or \$200 per ton, it is expected that quite a revenue may be derived from the mining and sale of it and other minerals.

Besides the above minerals alluded to, may be mentioned the great deposits of white quartz, of unusual hardness and purity, which appear on one of the flanks of Mt. Mica. This can be easily quarried and is in demand on account of its superior qualities as an article of commerce. Magnificent masses of rose colored quartz of a lovely tint have been found a few rods distant from the white quartz lode, indicating a large deposit of this beautiful and valuable mineral, but as yet its extent is unknown.

Among the other varieties of rare minerals found at this locality may be mentioned *Brookite*, *Spodumene*, *Zircon*, *Clevelandite*, *Apatite*, *Hebronite*, *Autunite*, *Chilrenite*, *Yelrocervite*, *Petalite*, *Janatite*, *Halloysite*, etc.

The company will probably commence active operations at once. The President has been authorized to make a collection of minerals from the locality for the British Museum. Already forty-three different varieties have been found and it is expected the number will soon exceed fifty.

LODES, LEADS AND VEINS.

MASCOT.—The card of the Mascot Mining Company will be found in our advertising columns. The fourth carload of ore was shipped to the New England Smelting Works on Monday last. This finishes one half of the promised shipment for September. It is expected that the remainder, consisting of fifty tons, will be shipped before October 1st.

CHERRYFIELD.—The Cherryfield is coming to the front. The company is in good financial condition and developments are being prosecuted vigorously. There have been some recent changes in the officers to supply vacancies caused by resignation. Hon. Wm. Freeman has been elected manager, and Thomas Dalby, of Boston, and F. H. Williams, have been added to the board of directors. The underground developments are progressing actively and on the 175-level drifts are being run each way on the vein. The company is to be very soon supplied with a concentrating mill to treat the large amount of ore already on hand. The mill building is completed and the machinery is now on the way to the mine.

DEER ISLE.—The Deer Isle, always a favorite, is now more deserving of the confidence of the public than ever before. A visit to the mine assures one that the prospects of the "Deer Isle" were never brighter than at the present time. A MINING JOURNAL reporter during last week examined the mine and made a careful investigation of the surface improvements and underground developments. A detailed description of the present workings will doubtless prove interesting reading. Mr. S. Z. Dickson, a very competent miner, is in charge as Superintendent and the mine has been developed in a most thorough and systematic manner. The Deer Isle has an excellent mining plant and is thoroughly equipped with good machinery. The ore house is filled with ore, a large quantity is piled up on the ground and there is also a considerable quantity ready to be raised from the drifts. The company have a very good wharf, enabling vessels to load with ore directly at the mine. The Deer Isle shaft is an incline and is down 180 feet on the vein. At 50 feet a drift was run 20 feet in the ore body. On the 100-level drifts were run each way on the vein, the southerly drift being in 50 feet and the northerly drift 45 feet. In the southerly drift the ore has been stoped out to a height of 25 feet. On the 135-level drifts have also been run. In the southerly drift stoping is now in progress. The ore body at this point makes somewhat to the westerly and it was necessary to crosscut a short distance to strike it. From the southerly drift on this

level a winze has been commenced on the ore-body and it has been sunk 22 feet. At the time of our visit work had been suspended in the winze and stoping was in progress directly over it. As soon as a station large enough for a windlass is cut out, sinking will be resumed in the winze. The winze will be continued down on the ore-body and as soon as it reaches the depth of the lowest level (180 feet) a crosscut will be run from the winze to the main drift. On the 50, 100 and 135-levels the ore exists in great quantities and stoping ground enough is exposed to ensure a large output of ore for a long time to come. The winze from the 135-level is down in massive ore and shows quite an amount of sulphurets of copper. The ore has about the same characteristics as in the past. It is a black, massive ore and carries gold, silver, lead, copper and zinc. The ore is very uniform in character and a sample picked up at random is generally a good average. The ore carries a considerable percentage of zinc and the presence of this metal makes its treatment quite difficult in this country; but in Europe the ore is readily worked and the zinc has great value. The Deer Isle mine is now so thoroughly opened that large quantities of ore can be stoped out in a short time and they now have from three to four hundred tons on the surface. The Deer Isle S. M. Co. have perfected arrangements, through Mr. C. W. Bryant, by which the ore from the mine will be shipped to England and worked. One of the largest smelting companies in Swansea guarantees to pay enough for the lead, copper and zinc in the ore shipped to them to pay the freight across the Atlantic and the expense of treating the ore, and to return to the Deer Isle Co. all the gold and silver in the ore or its money equivalent. Supt. Dickson estimates the value of the ore now being taken out as \$70 per ton in gold, silver, zinc, copper and lead. It is probable that a large cargo of ore will very soon be shipped from the mine.

Bagaduce.

EDGEMOGGIN.—The Edgemoggin mine is once more coming to the front. Arrangements have been perfected by which developments will now be commenced on a large scale. A good and substantial shaft-house is to be erected and steam hoisting machinery will be put in. A vessel is now en route to the mine from Portland with the machinery, lumber and supplies. Everything will speedily be put in order and the underground work will be pushed with vigor. The vertical shaft of the Edgemoggin is 110 feet in depth and the ore showing is very good. Some exceedingly handsome specimens of horn silver and native silver were taken not long since from the extreme bottom. The Edgemoggin Mining Company are now supplied with bountiful funds, and as they will soon be thoroughly equipped for work and possess a mining property of undoubted merit, the future developments will be watched with great interest. Mr. Richard Sherman is Foreman.

MANHATTAN.—Allusion has been made frequently to the Manhattan but no description of the mine or its developments has ever been given in these columns. A representative of the MINING JOURNAL recently visited the property and we append below the result of his observations. The Manhattan is located in Brooksville and adjoins the so-called Tapley mining property on the south. The Manhattan is owned by Messrs. John F. Proctor and Lorenzo Taylor, well known citizens of Portland, and it has been conducted as an individual enterprise; no stock has been placed upon the market and developments have progressed quietly and without any demonstration. The mine is under the charge of Mr. Wilkie Darling, the well known Superintendent, and the great amount of work accomplished and the thorough mining fashion characteristic of the developments speak volumes for the ability of the management. The shaft was sunk vertically 65 feet and a crosscut commenced easterly on that level. When in 40 feet it passed through a 3-foot vein well charged with good copper ore. The crosscut was still continued and, when in 80 feet, met another vein which proves to be fully twenty feet in width and carrying very superior and massive copper ore. In passing through the vein a large amount of very excellent ore was found and the ore dump already assumes large proportions. The ore is a beautiful sulphuret of copper and iron carrying some silver and entirely free from zinc. Considerable black oxide of copper has been encountered and also some native copper. Mr. Darling believes that a still larger vein lies about forty feet to the east and the crosscut is still being continued to the eastward with the expectation of striking it. The large vein which has just been cut through is, however, one of such magnitude that a great future is assured for the Manhattan should no additional ore bodies be exposed. The ore showing now made is one of the best it has ever been our pleasure to see and with vigorous development and a continuance of the present management we expect to see the Manhattan take prominent rank among the great mines of the East.

NORTH CASTINE EXTENSION.—Messrs. D. F. Leavitt and V. Darling, of this city, have been for some time past engaged in explorations upon a property adjoining that of the North Castine Mining Company. After sinking through earth for a considerable distance they have been rewarded by striking the ledge and finding an ore-body precisely similar to that of the North Castine. This is not only encouraging to the owners of this property, but is of value to the North Castine, as showing the continuity of their vein.

JONES.—Systematic work has been commenced upon the Jones property, at Brooksville, and the workmen are now engaged in cleaning off the ledge and making preparations to sink the shaft. The hole is at present but four feet deep, and yet Mr. T. Brigham Bishop, of Boston, who visited the property a few days since, made an offer of \$50 for the ore which had been removed, which was accepted. This speaks for his opinion of the prospect.

Blue Hill

DOUGLASS.—The furnaces at the Douglass are running as usual and quite a large amount of refined copper has collected. A large ore-dressing house is to be built at once. It will be 50x40 feet in size, will contain two large screens, and will have a capacity for dressing two hundred tons of ore per day. The product from this department will be taken direct to the kiln for desulphurization. This kiln will be somewhat similar to the one in use at Katahdin Iron Works, a description of which has already been furnished our readers. It will be conical in form, 15 feet in diameter at the base, 20 feet high, and its capacity will be 40 tons per day. It will be constructed under the personal supervision of Messrs. Davis and Colby, of the Iron Works.

BLUE HILL.—Supt. Moyle has been in Boston the past week, purchasing supplies and making arrangements for the shipment of matte, of which quite a large quantity has collected at the mine, to the New England Smelting Works at East Boston.

Egypt.

COPPEROPOLIS.—The visitor to the Copperopolis is at once impressed with the substantial and permanent manner in which operations have been commenced. The fine boarding house known as the "Copperopolis House" is one of the handsomest structures to be found in Eastern Maine and is fitted up very thoroughly. The hotel shows to advantage from the main highway and impresses the passer by with the magnitude of the extensive developments proposed on the property. The Copperopolis House is now about completed and in a short time will be open to the public. The House contains twenty-two rooms and has accommodations for a large number of guests. The view from the House is very fine, overlooking the beautiful Egypt Bay. The basement of the hotel is to be converted into a store and an extensive line of goods will be kept. Work has been commenced on a large stable 50 feet by 36 feet in size and it will be pushed to completion as rapidly as possible. The Copperopolis continues to make a remarkable surface-showing of copper. A large number of prospect pits have been sunk on the property and some very handsome ore has been taken out. Two shafts are now being sunk, one of which is 32 feet and the other 47 feet in depth. Developments are progressing rapidly and energetically under the management of Mr. John Shoenbar, the Superintendent. Patrick Mullau is Assistant Superintendent and Mr. Jones is Foreman.

HARVEY ELLIOT.—The Harvey Elliot, adjoining the Copperopolis, is being opened in a thorough manner and will shortly be fully equipped for extensive work. The company is a New York incorporation and embraces leading capitalists in that city. Mr. M. S. Smith is Superintendent and is now engaged in sinking a shaft. A large amount of lumber has arrived on the property and a substantial shaft house will be erected. Suitable machinery has been purchased in New York and is now on the way to the mine.

Sullivan.

SULLIVAN.—The Sullivan continues to hold the foremost place among the silver mines of the east. The mine is making a brilliant showing of ore and the prospects for the future are exceptionally bright. Numerous improvements and changes are constantly in progress and the grounds of the company present a very animated appearance. The boarding house is about completed and is a neat and substantial structure. Many changes have been made in the arrangement of the machinery and everything now runs very satisfactorily. Mr. Thomas Cahill, the capable Superintendent, has been very active and has brought about a complete transformation in the working of the mine. The Sullivan is now thoroughly equipped for extensive work and operations are progressing on a large scale in every

department. The incline shaft is down 280 feet and drifts are being run east and west on the vein on the 4th level in very superior ore, the best that has yet been encountered. Work is also being pushed energetically in the Waukeag vertical shaft. The under-ground developments are highly satisfactory and in the drifts and stopes enough ore of good grade has been already exposed to assure a great future for the mine. A substantial wharf has been recently built directly at the mine and arrangements have been perfected by which vessels are unloaded by steam power. Supt. Cahill's weekly report, dated Sept. 21, is as follows: "We commenced sinking for the 5th level in No. 1 shaft last night. The continuous improvement in the vein and ore as we obtain depth is of a most encouraging nature and leads us to look for a first class bonanza at sufficient depth. The drifts continue in the same grade of ore last advised."

FANEUIL HALL AND SULLIVAN.—Everything runs smoothly at the Faneuil Hall and Sullivan. The mine is equipped with substantial buildings, elaborate machinery and everything needed for rapid development. An air compressor is to be put in very soon. The crosscut from the vertical shaft is being extended out under the water and is expected to cut the Sullivan vein. Three shifts of men are employed and work progresses rapidly, although the rock encountered is very hard. Mr. A. A. Hayward is Superintendent.

PINE TREE.—The Pine Tree mine is located between the Sullivan and Milton mines. The grounds now present quite a different appearance from a few weeks since. The company appear to be preparing for very extensive work. A shaft-house of large proportions is now about completed. The main building is 66 feet by 23 feet in size and the ell is 27 feet by 20 feet. The machinery has not yet arrived. Mr. A. A. Messer is superintending operations.

MILTON.—The finely appointed works of the Milton continue to be the wonder of visitors. Everything is kept in most perfect order and under the watchful management of Supt. Shoenbar all is continually kept in the best of trim. The Milton is the scene of great activity and work is being pushed vigorously in every department of the mine. The large air compressor, air drills, pumps and all the machinery are in perfect working order. The underground developments are progressing as expeditiously as ever. In No. 1 shaft, drifts are being run east and west from the long crosscut on the 160 level. In No. 2 shaft, a crosscut is being run southerly on the 180 level to the vein. This crosscut is now in something over 70 feet.

British Provinces.

Iron ore is being shipped from the McDonald-Weaver property, Pictou, N. S., to the United States.

Anthracite coal has been discovered at French Vale, Cape Breton. This is said to be the first discovery of this kind of coal ever made in the Island.

The coal shipments from the port of Pictou, N. S., for the week ending Sept. 10th, are as follows: Halifax Co., 924 tons; Acadia Co., 537 tons; Intercolonial Co., 3,127 tons; Vale Co., 355 tons; total, 4,943 tons.

The Halifax New Era says that manganese mining is becoming one of the most profitable industries of Hants County. Near Walton about forty men and boys are employed at the work, and the price it is selling at is about \$130 a ton, while in former years, before its value was known, it only brought \$20 a ton.

The new mill in course of erection at Montague Mine, Nova Scotia, for the extraction of gold from tailings by the new process, is fast approaching completion; the machinery being now placed in position. Assays from the different strata of sand give promise of large returns, which will greatly enhance the value of mining property in the vicinity.

Mr. MacLachlan, one of the principals connected with the silver ore discovery at Smithfield, Colchester Co., mentioned in our last, was in town Thursday and reports bright prospects. The mine is composed of mixed minerals; first met, was a ten foot lode composed of a "conglomery" of minerals comprising sulphuret of iron, manganese, lead and silver. The assay is as follows: \$150 per ton silver, 45 per cent lead, 14 per cent sulphur, 10 per cent iron and 10 per cent manganese. We have several fine specimens of the ore in the office and feel sure this mine will meet with ready sale, if put on the market, or will make good returns if worked by the present owners.—[New Era.

RENFREW GOLD FIELDS.—The New Era says: "On Monday last we paid a hurried visit to the Renfrew gold fields, and feel convinced that there is plenty of ore in and around this dis-

trict, and with the present able and economical management it is sure to pay handsomely. On being driven to the mines, we were most favorably impressed with the extreme neatness and order which everywhere prevailed. Dr. Rae, under whose personal supervision the work is carried on, has adopted a most admirable scheme, or system of pumping and hoisting by water power. The machine will clear some eight or ten deep shafts of water and at the same time hoist the quartz from the mine. While we stood looking down into the mouth of a shaft, a tub of quartz was hoisted up, from which a small piece was taken and mortared, yielding several grains of the glittering metal. Dr. Rae expects to have the underground work so far advanced in a few days that he can give employment to a large number of miners. Messrs. Rae, Hall and others are doing much towards elevating the mining interests of this Province and saving it from the degrading influence of greedy speculators. We expect good results from this quarter and anticipate a large yield in the near future."

GLOUCESTER.—A correspondent of the St. John Daily Sun writes as follows concerning the property of the Gloucester Silver Mining Company: "I have just returned from a visit to the Gloucester Silver and Lead Mines, situated on the Nigadoo River, about sixteen miles from Bathurst, and hasten to send you a note about them. They are easily reached by roads running through the Dunlop, Dumfries and Robertville settlements, over which a wagon can be driven to within half a mile of the mines. They are not located on the main Nigadoo, but on two branches which empty into it from the south side of Robertville. The geology of that section is quite interesting. The country rock is a chloritic or talcose slate, with a strike of about north 60 degrees east and a high dip to the south. The ore occurs in a fissure vein traversing the rocks in a nearly east and west direction, and intersecting the strata at a pretty wide angle. The vein is about 8 feet wide and descends nearly perpendicularly. Its length is unknown, but it has been traced a distance of more than a mile along and between the two streams above mentioned. A shaft has been sunk to a depth of 25 feet and shows the vein to have well defined walls. The ore is embedded in a gangue of quartz and calcite, but the vein-stone, wherever it has been opened up so far, consists largely of an amorphous calcareous rock which has a greenish or chloritic cast and through which the galena and blende often run in masses of various sizes and shapes. Active operations are about to be carried on under the charge of Mr. W. H. Seccombe, an English practical miner. Twelve or fifteen men are at work now, and I was informed a night crew would be put on shortly."

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

Petroleum has been discovered in Dakota.

Rich strike of ruby silver and sulphurets reported in Starr-Grove.

And now it is rumored that while a new and important strike has been made on the Comstock, it is not in Sierra Nevada.

The Southern Utah Times reports an important strike in the Lulu, the first south extension of the famous Horn Silver mine.

The Albion-Richmond cases have been continued for the term. This carries them over till January, and quite probably indefinitely.

The Leadville Chronicle says the shipment of ore from the camp is in excess of 1,000 tons per day, and that the value of last month's output was \$1,250,000.

A strong flow of water in the Union-Sierra joint winze, where the newly discovered ore-body was supposed to be located, caused a sudden drop in prices in San Francisco.

Two hundred and fifty-five stamps are actively engaged in stamping out gold in Lumpkin county, Georgia, and ninety more are now being set up and will be running in November.

The Salt Lake Herald of Sept. 15th, says a carload of copper matte and copper ore from the Grand Gulch Mine was shipped over the Utah Central R. R. on Friday, its destination being Baltimore.

The drains leading from the Philadelphia Mint yielded about \$1,000 worth of gold and silver at the last annual scouring. The recovery of metal by this operation has amounted to \$24,000 in nineteen years.

The Elko (Nev.) Independent says: The great piles of copper bullion on the depot platform is all the evidence necessary to show that Railroad is a first-class mining camp, and that the copper interests of the County are coming to the front.

Senator Hill's works, at Argo, the Boston & Colorado Works, employ about 200 men, of whom 75 have families. The little town built up there has a fine school house accommodating 75 pupils, a lodge of Good Templars, a general store and a post-office.

The property of the Snowdrift Consolidated Mining Company, near Georgetown, Col., was sold last week by the sheriff. It was bid in for Gen. Henry W. Slocum, of Brooklyn, N. Y., at \$10,150, this amount being \$500 less than the judgments and costs against the company.

The Silver Reef correspondent of the Salt Lake Herald says: "The Leeds Company have a large quantity of rich ore on the dump and immense bodies in sight. Workmen are re-framing the mill, and soon scores of busy miners and mill men will make things lively about this late deserted village." Leeds stockholders take courage.

The discovery of copper and silver bearing ore near Fort Laramie is creating great excitement. Miners are stampeding to the new district, which is about six miles wide, and swarming with prospectors, all of whom are making new locations. Surface assays are from \$50 to \$150. Smelters will be erected at once, as the ore is rich from the grass roots.

The artesian well at Battle Mountain, Nevada, flows 2,000 gallons an hour. The water irrigates fifty acres of grass land, twenty-five acres of grain and vegetables, and has converted 150 acres of sagebrush desert into a fine pasture. The depth of the well is 165 feet. It is thought there is scarcely any of the desert land of Nevada that is not susceptible of reclamation by means of artesian wells.

The population of Wood river is decreasing. The country was overrun, and the surplus is scattering out for other sections. The mines are looking better, and are producing more ore than at any previous period. The fever is subsiding, and we hear less blowing than a few months ago. The district is looking more and more encouraging, and the miners are getting down to solid work.—[Idaho World.]

EAGLE.—Getting out first-class ore from the upper tunnel, or what is known as the old workings. Some very rich ore was taken out of this tunnel when the mine was first discovered, and it seems that the ledge is again proving its worth. The contractors in the lower or new tunnel are making good progress with their work and expect to complete the contract before the snow flies.—[Lander Free Press, Sept. 9.]

The main drift on the 2,400 level of the Chollar and Potosi mines, says the Territorial Enterprise of September 4th, is now a promising extension of the infernal realms. In digging the trench and putting in the sub drain they have a sort of canvas door fitting the drift, which the men push ahead some 20 feet with poles. This keeps back the heat and steam to a considerable extent, and the contrivance is moved forward as the workmen move up to it with the drain.

STARR-GROVE.—In the new upper drift, lately started, they have just struck a fine body of black metal, containing a large percentage of silver and assaying very satisfactorily. The new incline shaft is progressing with good speed and ore in bottom is looking well. Ore being sent to the mills continues to improve, and work in all parts of the mine is being carried forward with good results. Very little water is encountered and that is handled with ease.—[Lander Free Press, Sept. 9.]

The Eureka Sentinel learns that Capt. Frank Drake has at last struck ore in the Eberhardt tunnel, White Pine District. Just how big a body has been encountered is not yet known, though there is no doubt that the development is a most important one. At last accounts the ore had been penetrated several feet and was still holding out. It is said to be of satisfactory grade. The Captain and his company deserve this piece of good luck. They have held on to the enterprise for years under discouraging circumstances.

A correspondent of the Lake City (Col.) Silver World pronounces the Bear Creek Mining Company, whose stock is listed on one of the New York mining boards and quoted at 75 cents per share, a "snide," as upon patient inquiry nobody representing it there could be found, and if they have any property it is obscure and unknown. The correspondent adds: "A New York mining journal has published complimentary notices of this company, which should be condemned, as this is too good a district to be tainted with any frauds."

The Salt Lake Herald says:—"The Grand Gulch furnaces started up in fine shape on the 25 ult. The start and run was made in the best shape imaginable. During a run of ten hours on two tons of ore, some eighty copper buttons were taken out, running from forty to seventy pounds each. Mr. Adams, who manages the works, is of opinion that with the

new water jacket furnaces, ten tons of ore can be reduced every twenty-five hours. The mine is looking in splendid condition, and they are now drifting in a five-foot vein of excellent ore. The production of copper is likely to prove a new and profitable feature in Utah's resources."

It has long been known that Utah abounds in coal fields of considerable magnitude, and new discoveries continue to be made at short intervals. A short time ago a new find was made on Prince River. Emery County, U. T., which is said to consist of fourteen to fifteen veins, ranging from two to eight feet of solid coal. It is located on the line of the Denver and Rio Grande. The lucky owners are the Black Brothers of Deseret, who have a contract on the D. and R. G. The quantity in sight seems to be inexhaustible, and the quality is pronounced very superior. The coal in Price River Canyon is very plentiful, and it is understood that every foot of ground is located.—[Salt Lake Herald.

How fond some papers are of talking about "dealing out stock to poor people who can ill afford to lose their money." One would think the poor people were compelled to take stock and pay for it, whether they chose or not; instead of which they probably crowded down to the street, bought the stock for \$10 and went home rejoicing, when a month before they might have got it for \$1 just as easy, and even more easily. When a poor person buys stock at \$5, declines to sell it at \$50, and poses for sympathy when it touches \$2.50 and he is asked for an assessment, we cannot produce tears with the rapidity and copiousness of some of our easily-moved contemporaries, whose "water works," as Samivel Veller would say, are always ready to be "turned on."—[S. F. Daily Report.

One very favorable feature in the Comstock mining situation is that all the mills on the Carson river and at Gold Hill are being overhauled and put in working order, and that contracts have been let for an enormous quantity of wood and timbers. The Carson Appeal asserts that in the north end of the Comstock lies the biggest ore body ever developed, but gentlemen less sanguine and better posted than the Appeal say the showing is good for a development but it has not yet demonstrated a bonanza. However this may be, it is certain that the condition of affairs on the Comstock is better than it has been for years. There is a large area of new ground in shape for exploration all along the Lode; the water problem is as good as solved, and the mines are thoroughly equipped for work. [San Francisco Daily Report.] It will be remembered that Prof. Frank Stewart has always insisted that a virgin bonanza existed in the north end of the Comstock.

Nuggets.

—The Dominion Exhibition, at Halifax, opened on Wednesday last.

—Mr. E. J. Swan, of Franklin is soon to build a summer cottage at Hancock Neck.

—A crew of men under H. H. Emerson, of Ellsworth, are at work on the "Grant Annex," in Hancock.

—Mr. Frank Davis, engineer at the Blue Hill mine, will build a cottage for his own use in Blue Hill village.

—The Blue Hill Central are at last making a move toward starting up, and it is reported that operations upon their property will commence shortly.

—The Cape Rosier Mining Company are constantly buying farms in the vicinity of their mine. They own now a very extensive territory on Cape Rosier.

—Large quantities of paving stones are being gotten out at the granite quarries at East Blue Hill. They are shipped to Portland and sent by rail to Chicago.

—Mr. E. C. Chatto, of South Brooksville, is interested in some promising mining properties on Cape Rosier and in other portions of the town of Brooksville.

—The Edgemoggin Mining Company have purchased the shaft-house and hoisting works of the Bullion Mining and Milling Company, of Acton. They have already been removed and are on the way to Sedgewick.

—The Bodwell Granite Company now employ about fifty men in their quarry at Jonesboro. The granite is of the red variety and of very superior quality. A large quantity is now being shipped to New York where it is used in a very large block now building there.

—The Williams Slate Company, of Brownville, are putting new machinery in their quarry. Their quarry consists of 70 acres of slate property three miles from Brownville. The fol-

lowing are the directors: Russell A. Ballou, Wm. H. Ireland, Daniel Stowell, Elbridge H. Bullard and Edwin S. Harvey.

—The Bulletin and prominent mining men continue to agitate the question of a new hotel at Sullivan, and the project has assumed a definite form. A convenient site has been secured and it is proposed to raise \$10,000, in shares of \$100 each, by subscription. Col. Shoenbar is at the head of the movement, thus practically ensuring the success of the enterprise.

—The Jonesboro Lumber Company do an extensive business. They cut a large amount of timber which is sawed in their mills. At present, extensive repairs are being made to the dam belonging to the corporation. The scene of operations is in the town of Jonesboro, in Washington county. Rockland and Vinalhaven parties are heavily interested in this lumber company.

—Messrs. C. J. Smith, of Bangor, and S. K. Abbott, of Boston, are doing a very large sheep business throughout eastern Maine. They have purchased Petit Menan Point and Trafton Island and are stocking them with sheep. They already have bought 1,800 and placed them on the Point and it is their intention to winter there about 3,500. They also have something of a flock on their island. The sheep live on the dulce and seaweed which is thrown up on the shore by the waves of the sea, and find abundant shelter and protection in winter beneath the scrub trees which cover the Point. Messrs. Smith & Abbott are establishing an enterprise of a good deal of magnitude and it is confidently believed they will be highly successful. The entire business is in charge of Mr. C. J. Smith, an active, capable and enterprising young man who for several years has been in business in this city. He now makes his headquarters at West Gouldsboro.

—An impetus has been given to mining for silver-lead ores by a sharp rise in the price of lead. A rise in the price of silver would help the mining interest amazingly, as the heavy discount on silver bullion acts as a prohibition to the mining of low grade ores in many localities. It also affects the Comstock seriously, as the discount on bullion is alone sufficient to amount to a handsome profit on low grade ores if it could be saved to the miner. The prophecies of disaster to the finances of the country by the passage of the present silver law have failed of fulfillment. In fact, the standard dollar was no doubt a factor in the resumption of specie payments, and the fear that it would tend to drive gold out of the country has proved to be groundless and nonsensical. England and Germany have both suffered by the demonetization of silver, and Germany would be glad to take the back track, and would do so were it not for Bismarck's obstinacy. The United States is the great silver producer of the world, and that metal ought to be protected as well as other mining products. The best way to protect it is to permit unlimited coinage, which, by enlarging the sphere of the metal, will create for it an increased demand and thus enhance its price, saving the miners from the dreadful burden the discount now imposes. We are satisfied that Col. Fair will be heard from on this subject in the Senate, and as he seldom fails in anything he undertakes we look for him to succeed in securing legislation helpful to the silver mining interests.—[S. F. Daily Report.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, SEPT. 21, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Atouez.....	3 3/4	3 1/2	3 3/4	3 1/2	3 3/4	3 1/2	3 3/4	3 1/2	3 3/4	3 1/2	3 3/4	3 1/2
Atiatic L. S.....	15 1/2	16	16	16 1/2	17	17 1/2	17	17 1/2	17	17 1/2	17	17 1/2
Atis.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper..	3 3/4	4	3 3/4	4	3 3/4	4	3 3/4	4	3 3/4	4	3 3/4	4
Brunswick.....	6 1/2	7	6	7	...	...	6 1/2	7	6 1/2	7	6 1/2	7
Calm net & Hecla.	220	221	220	221	220	220	220	220	220	220	220	220
Catalpa.....	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Central.....	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls.....	3 1/2	3 1/2	...	...	3 1/2	3 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Contentment.....	...	...	...	...	...	...	...	...	...	...	...	...
Douglass.....	2 1/2	...	2 1/2	2 1/2	2 1/2	...	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	...
Dana.....	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver.....	...	...	50c	50c	...	...	...	...	...	...	...	...
Empire.....	...	...	...	...	...	...	...	...	...	...	...	...
Franklin.....	13 1/2	13 1/2	12 1/2	13	12 1/2	13 1/2	13	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Harshaw.....	7	7 1/2	6	7	7 1/2	7 1/2	6	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2
Huron.....	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
Hanover.....	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt.....	...	...	...	...	...	...	...	...	...	...	...	...
International.....	...	...	...	...	...	...	...	...	...	...	...	...
National.....	2 1/2	2 1/2	...	...	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Osceola.....	29	30	...	...	29	29 1/2	29	30	29	30	29	30
Pewabic.....	15	15 1/2	14	...	14 1/2	15	14 1/2	15	15 1/2	15 1/2	14 1/2	15
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	39 1/2	40	39 1/2	40	39 1/2	40	39 1/2	40	39 1/2	40	39 1/2	40
Ridge.....	4 1/2	5	4 1/2	5	4 1/2	4 1/2	4 1/2	5	4 1/2	5	4 1/2	5
Silver Islet.....	31	...	31	31 1/2	30 1/2	31	31	32	30	31	30	...
Star.....	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan.....	4 1/2	4 1/2	4	...	4	4 1/2	4	4 1/2	4	4 1/2	4	4 1/2

PHOSPHATE LANDS

In the richest zone of this mineral in the Ottawa district, adjacent to the "Goldring Mine."

On Tuesday, Oct. 11th,

at the rooms of the subscriber, 91 St. James Street, Montreal, will be sold the

MINES, MINERALS AND MINING RIGHTS

in and upon the undermentioned lots belonging to The Laurentian Phosphate Mining Company, Limited.

Portion.	Lot.	Range.	Township.	Acres.
E N	14	7	Templeton	100
N N	16	7	"	200
N N	17	7	"	100
N N	10	8	"	100
W E	15	8	"	100
N N	10	9	"	100
E N	23	12	"	100
W E	22	13	"	200
N N	23	13	"	200
W E	25	13	"	100
S E	9	14	Hull	100

The company offers for sale the Mines, Minerals and Mining Rights in and upon and under these lots, amounting in all to 1300 acres, principally in the Township of Templeton. About 27 Pits have been opened on the property, all of which have shown Phosphate to exist in paying quantities to mine; the object in opening these was not to mine, but to develop and show the beds and veins as they exist. Nos. 22, 23, and 25 in 13th Range of Templeton have been most worked; on these there is a small mountain of almost solid apatite analysing 90 p. c. Tribasic Phosphate.

The above are accessible at all seasons by good roads and very convenient for shipment, either by water or railway.

Map of the Mineral District on view, also Professor Selwyn and Vennor's reports can be consulted; the latter is very exhaustive and specific after a personal inspection.

Correspondence solicited.

In view of any purchaser buying the above 1,300 acres (the whole of the Company's lands) will be entitled to their charter of incorporation, together with Scows, Drills and all the Mining tools and other movables belonging to this Company.

Sale at ELEVEN o'clock.

JOHN J. ARNTON.

Montreal, Sept. 5, 1881. Auctioneer.

THE Mascot Mining Co

MINES AT GORHAM, N. H.

Office, Portland, Maine.

Capital \$500,000. Shares 100,000.

Stock Forever Unassessable.

DIRECTORS:

R. S. LAWRENCE, President, 23 Crawford House, Boston.

C. W. HOBBS, Secretary and Treasurer, Portland, Maine.

C. C. LANE, 7 Exchange Place, Boston.
CHAS. H. LEWIS, 4 Sears' Building, Boston.

FRANK H. WILLIAMS, 22 Water St., Boston.

CONSULTING GEOLOGIST:

PROF. J. H. HUNTINGTON, 35 Congress St., Boston.

ENGINEERS AND METALLURGISTS
BINNS, KIDNEY & HOLLIDAY, 33 Hawkins Street.

SUPERINTENDENT:

J. M. JOHNSON, Gorham, N. H.

FINANCIAL AGENTS:

F. H. WILLIAMS & CO., 22 Water St.

ORES—Argentiferous Galena and Copper. PRESENT OUTPUT—Six tons daily. VALUE PER TON—Seventy-five dollars. COST OF REDUCTION, including freight, smelting, separation and refining—Twenty-seven dollars per ton.

Forty miners, and ten blacksmiths, carpenters, teamsters, etc., employed. The September development work will ensure an October output of twenty tons daily.

Voluntary Licitation.

SALE BY AUCTION

of the celebrated

GOLDRING

Phosphate Mine!

The Subscribers have received instruction from the co-proprietors, Messrs. C. H. LETOURNEUX, R. A. R. HUBERT and ADOLPHE QUIMET, to sell at their Auction Rooms, No. 86 St. Peter Street, Montreal, on

Monday, 10th October next,

the celebrated **GOLDRING MINE**, with Buildings, Tools and Furniture. This property comprises **1,600 Acres** of land, more or less. The lots adjoin one another, and from an analysis made by J. BAKER EDWARDS, of the Phosphate, on 4th September, 1880, yielded **90.10** per cent.

The Mine is situated in East Templeton, County of Ottawa. This Township, according to the Geological Map, is considered the richest in Phosphate; only distant from Q. M. O. & O. Railway and the Ottawa River about ten miles, which makes the shipping either by rail or water easy. The roads leading to the Mine are good, and the transportation of the phosphate at all seasons done at moderate rates. Several large and substantial buildings are erected—Boarding House for Miners, dwelling for Superintendent, large building for phosphate, Powder Magazine, Store for Provisions, Forge with Tools, Office for the Company, Tramway Cars, and a line of Telegraphy connecting direct with the Dominion Telegraph Co., at Montreal; a large quantity of tools of the best make. The property is wooded, chiefly with hardwood.

Anyone desirous of visiting the property can do so in the space of 24 hours, including going and coming, from Montreal. There is a guardian on the property, who is there for the purpose of showing the property. From the station at East Templeton the public road leads direct to the mine.

The conditions of the sale will be one-third cash, one-third in six months and one-third in twelve months, with interest at the rate of six per cent. on the balance unpaid. Each bidder will have to deposit \$1,500.

Further information to be obtained from Auctioneers.

Sale at ELEVEN o'clock A. M.

BENNING & BARSALOU, Auctioneers.

WINTHROP W. FISK, B. S.

State Assayer,

Graduate of the Worcester Institute of Technology, Massachusetts. Five years practical experience with minerals.

MAIN STREET,

P. O. Box 192. Ellsworth, Maine.

Subscriptions and advertisements received for the leading Eastern and Western mining journals.

VARDEN & VARNEY,

Mining Engineers & Assayers

U. S. Deputy Mineral Surveyor for the territory of New Mexico.

27 Mining properties examined and reported on.

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BERTRAM L. SMITH,

Counsellor at Law,

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Will attend to business in all parts of the State.

R. H. GAIRDNER,

GENERAL BROKER and MINING AGENT.

28 St. Francois Xavier St., Montreal.

Iron, Phosphate and Asbestos Mines for sale.

GOLD and SILVER!

R. LONGMAN'S SONS,

Refiners and Smelters of Gold and Silver.

Bullion Purchased. Assays of Ore a Specialty.

Office, 9 John St., NEW YORK,

Works, 25 to 31 North Portland Ave., Brooklyn.

YOUNG HECLA

Mining and Smelting

COMPANY.

Office at Bangor, Me. Mines at Blue Hill, Me.

Capital, \$500,000.

100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.

President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.

Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

BLUE HILL CENTRAL

Mining and Smelting

COMPANY.

OFFICE BANGOR, ME.
MINES AT BLUE HILL, ME.

CAPITAL, \$500,000.

100,000 Shares. Par Value, \$5.00.
Treasury Fund, 30,000 Shares.

Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

Silver Hill Mining Company.

Office, 11 CENTRAL STREET,

Room 4, Boston.

Mines at Garland, Me.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.

Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

Blanchard Slate Co., OF MAINE.

Quarry in operation at terminus of Bangor and Piscataquis Railroad.

Quality and natural advantages unsurpassed. Dumpage and drainage unequalled. Railroad transportation adjoining. Stock for sale. Sections leased on favorable terms. Capitalists invited to inspect.
A. C. HAMLIN, President, Bangor.

CHAPPARAL GOLD MINING CO.

Location of Mill and Mines:

KELSEY MINING DISTRICT, EL DORADO COUNTY, CAL.

CAPITAL, \$2,000,000.—PAR VALUE, \$10.

Stock full paid and unassessable.

Registrars of Transfers, Farmers' Loan and Trust Co

Office, 61 Broadway, Rooms 7 and 8, N. Y.

APPLETON MINING AND SMELTING CO.
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluchill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., '880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullon, Richard Lafan, Jeremiah Wooster.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Saaborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., F. C. Arey, David H. Smith, Henry T. Saaborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Rediff, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
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Arrive Bangor,		7.03	11.15	6.00
Leave Bangor,		7.35		2.00
Arrive Bucksport,		8.40		3.15

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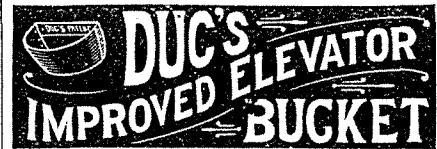
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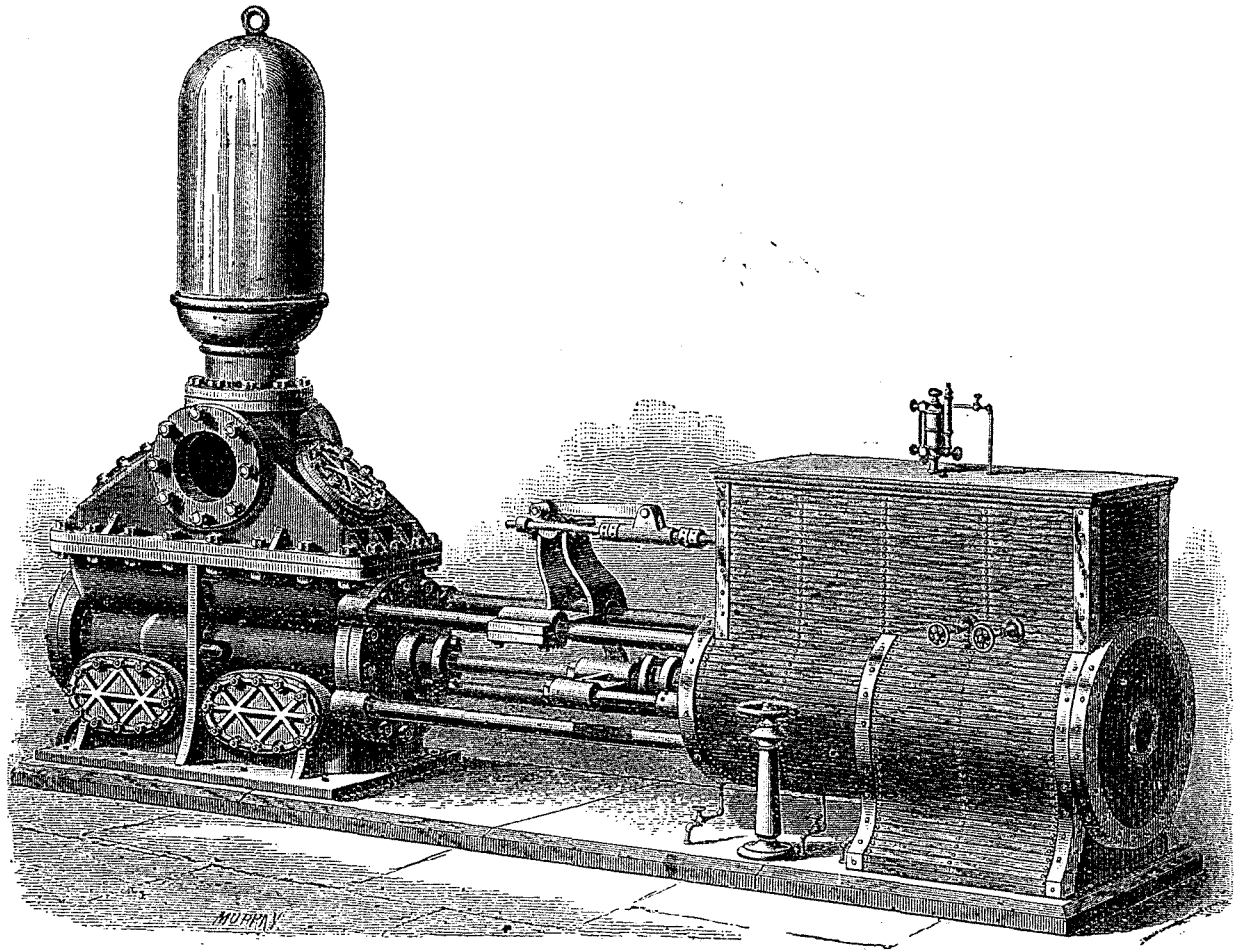
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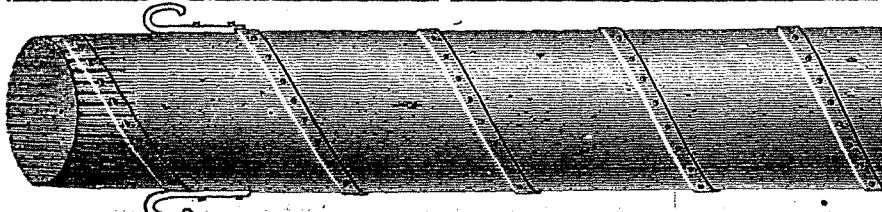
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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

28 West Market Square, Bangor, Maine

E. M. BLANDING, } EDITORS.
W. F. BLANDING, }

E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, SEPTEMBER 30, 1881.

The Boston Mining and Stock Exchange celebrated its first anniversary by a grand banquet at Young's Hotel, on Tuesday evening last. A number of invited guests were present.

THE MAINE MINING JOURNAL, published at Bangor, Maine, comes to us asking an exchange, and we exchange. Probably the mining boom in Maine this summer is about the hottest it ever has been. An old prospector up on the shores of the Anaticookytanglefloop mountains has just struck oxbide of fresh water clams and free milling bull-heads, with traces of decomposed codfish. The Journal is a good paper, and we are tickled to get it.—[Laramie (Wyoming) Boomcrang.

At the annual meeting for the election of officers of the Boston Stock Exchange, the following gentlemen were chosen for the ensuing year: President, Murray R. Ballou; Vice President, F. V. Parker; Treasurer, Charles D. Head; Clerk, W. C. Fisk; Standing Committee, H. W. Dodd, L. B. Greenleaf, J. W. Mackintosh; Committee on Mining Securities, W. W. Keith, J. C. Watson, J. P. Brewer, E. D. Bangs, E. W. Mussey, W. R. Stedman, Geo. F. Lord, Jr.

A prospector who can show in his claim a good body of ay-ore can generally secure the necessary capital with which to develop it. Men should not place too high a value on their prospects when they have not a dollar in the world to make a mine of it with, which is too often the case. The better plan is to dispose of an interest, even at a low figure, and then proceed to develop. After some headway has been gained at that, the mine, if at all valuable, will command a

high figure; but a prospect is an uncertain investment and cannot always command what the owner may consider it worth.—[New Mexican Mining News.

Why cannot the press agents, and why cannot the managers of newspapers give a surfeited world a rest from Guiteau's thoughts, and desires, and acts? It is of less than the least importance what the wretch thinks, or wants, or does, so that he meets his punishment. But every driveling idiot of a reporter who learns a word of his doings, or thoughts, straightway hies himself off to his newspaper and offends every sense of decency and propriety by embalming the act in the cheap immortality of print. To the wretch this is fame and to the press idiot it is enterprise. To sensible people it is nauseating and disgusting.—[Stockton (Cal.) Herald.

The past week has, owing to the universal mourning throughout the country attendant upon the obsequies of the late President Garfield, been a quiet one in stock circles. Nevertheless, prices have been well sustained and already many signs of activity are manifested. Mining shares are firm and higher prices for copper stocks are expected shortly, consequent upon the continued advance in the price of ingot copper. At the Boston Mining Exchange, notwithstanding that during the most of the week there has been no afternoon session of the Board and on Monday the Exchange was not opened for business at all, the transactions in Maine stocks have been large, if the official reports are to be believed. The total sales for the week comprise 3,500 Copperopolis, 47,000 Milton, 42,700 Deer Isle, 500 Young Hecla, 200 Twin Lead, 200 Douglass and 100 Granger; 94,200 shares of Maine stocks in all. The closing sales on Wednesday last were at the following prices: Copperopolis, \$2.08; Milton, \$1.04; Deer Isle, 81cts.

The people of Ellsworth are to be congratulated upon the establishment of another important business enterprise in their midst. The capital stock of the Ellsworth Foundry and Machine Company has nearly all been taken up, and the organization will be shortly perfected. Mr. Francis Worcester, one of the prime movers in the enterprise, is at present in Boston on business connected with the company. The American says that already the Steam Mill property has been purchased. A machine shop 55x35 feet and two stories high, and a foundry building 46x50 feet, will be erected immediately. Plans for the same have been made, and memorandums for the lumber are in the hands of the millmen to be delivered within two weeks. It is the intention of the company to have the buildings completed and the machinery put in at the earliest day possible. This institution, in the hands of energetic and practical men, will build up an extensive business, and be of great benefit to the mining companies in that district. The mining developments of Hancock county have been greatly retarded by the almost utter impossibility of getting machine work of any kind done without sending to Boston or New York. The Bangor machine companies have been so driven with other work, that the wants of mining companies have been sadly neglected. A good machine shop and foundry at Ellsworth will soon secure all the business it wants.

Western mining communities have frequently, and with reason, had occasion to complain bitterly of the injustice done them by Eastern experts(?) who, having made a flying visit to some camp and given the locality a half-hour's inspection, have returned home to speak in denunciatory terms of the entire district, as showing no mineral of any value, and as being unworthy of the attention of capitalists. It seems, however that the tables are being turned, and our Eastern districts are likely to suffer through being visited by Western mining men of a similar stamp. Mr. C. X. Hobbs, Vice-President of the Newfoundland Railway Company and Ex-Manager of the notorious State Line mines, of Nevada, has been visiting an entirely undeveloped mineral property in Hancock County, Maine, in a locality where very little mining work has been carried on and where no organized company has ever operated. Upon his return to New York he feels fully competent to express an opinion on the "Maine mines," as the following from the Daily American Exchange of Sept. 23d will show :

Mr. C. X. Hobbs has returned from the classic regions of Maine. At the solicitation of a friend who knew what he was talking about, he traveled 500 miles to see a first class copper mine ledge 30 feet wide, adjacent to a convenient shipping point to Swansea, and all that sort of gibberish generality that accompanies confidential *ex parte* descriptions of mining properties. Mr. Hobbs' experience, condensed, reads thus : "Down there in Maine they don't really know what mines are as we know mines. Instead of regular veins or deposits, they have branches here and there. In this particular mine they have big branches of copper ore, high grade enough. They get crazy over these branches and ask you \$75,000 or \$100,000 for what would be a reasonable prospect at \$5,000 or \$10,000. The copper ore in the mine I examined was high grade enough, no question about that, but there wasn't enough in sight to justify any such price as was asked, and I simply said, 'good morning, gentlemen.' There is no defined ledge, nothing you can figure on for the future. The sooner these Maine 'miners' get to understand their business the better it will be for their own interests. Mines are not opened in a day, and it will require heaps of confident capital to develop them, and you can't get capital on a basis of prices that a well developed mine would command."

MINING JOURNALS.

[Chicago Mining Review.]

It is too late to enter into any argument to prove the value of a representative newspaper in every department of business activity. Those papers which are devoted to a special branch of business, and become the centre through which the best thought and most valuable information is presented to those interested in its particular line, are generally appreciated and well sustained. If there is any exception, it seems to be with the mining journals. The newspapers devoted to the different branches of business, such as railroads, furniture, architecture, mechanics, iron working, agriculture, etc., attain large proportions and are crowded with liberal advertisements. *A paper devoted to the mining interests of the country gives, week after week, valuable information concerning districts, States, and turns the attention of capitalists to promising fields and reliable mines.* Mining companies continuously reap this benefit, are built up and made strong by this influence, yet not so much even as a card, giving the location of their place of business, is given to the paper. A stranger coming to the city wishing to purchase stock or transact business with the company, in nine cases out of ten, seeks the newspaper office to gain the information which should have been made public through the columns of the mining journal. There are, it is true, some marked and honorable exceptions, but we venture to say that, in this country, where there are thousands of wealthy mining companies, there would not to-day be a mining paper in existence, if they had depended entirely upon these companies for support. The names and offices even of the country attorney and physician are prominently displayed in the village newspaper, where everyone knows and has known them for years; but in any city not one-tenth of the mining companies, claiming to do business, can be

discovered by any public announcement of their names and location, even in papers devoted exclusively to their interests.

Personals.

MR. R. S. LAWRENCE, of the Boston Advertiser, has been visiting Blue Hill.

DR. S. LAUGHTON, of this city, is now at the Silver Lake Hotel, Katahdin Iron Works.

COL. W. H. DARLING, of Blue Hill, has been in the city during a portion of the past week.

MR. FRANCIS WORCESTER, of Ellsworth, was in this city Wednesday evening en route for Boston.

MR. WILLIAM LUDLOW, formerly of the Copper Falls mine, Lake Superior, has accepted a position as Superintendent of the Young Hecla, at Blue Hill.

PROF. W. F. STEWART returned to Boston from Sullivan on Sunday last. There is some probability that the Professor will remain in the East during the winter.

MR. FREDERIC R. NOURSE, Treasurer of the Sullivan Mining Company, and wife were at the Bangor House Wednesday morning on their way to Sullivan.

The marriage of His Excellency GOVERNOR PLAISTED to MISS MABEL T. HILL was celebrated in Exeter, the home of the bride's father, HON. F. W. HILL, on Tuesday last.

CAPT. E. E. SMALL, of the firm of WIGGIN, SMALL & WILLIAMS, of this city, died on Friday last after a brief illness. The deceased was a universal favorite and will be much mourned in business and social circles.

MR. JAMES W. DAVIS, of Ellsworth, favored us with a call a few days since on his return from a business trip to Boston. Mr. Davis has done much to advance the mining interests of Hancock County and his faith in the future success of the industry is now stronger than ever.

MR. J. A. BURLINGAME, for many years connected with the Mint at Carson City, Nevada, made us an agreeable call a few days since. Mr. Burlingame is visiting friends in this city, and expressed himself as much interested in the mining developments of this State.

WILLIAM WORTHINGTON FOWLER, a grandson of Noah Webster and a son of the late Professor William Chauncey Fowler, known as the author of "Ten Years in Wall Street," and as the financial editor for many years of the Boston Commercial Bulletin, died on Sunday last at Durham, Conn., in the fiftieth year of his age.

A happy wedding festivity took place at Orono last (Thursday) evening. It was the marriage of Miss GRACE, daughter of JAMES WEBSTER, Esq., of Orono, to MR. GEORGE B. GOODWIN of the Boston Post. MR. GOODWIN has a host of friends in the journalistic fraternity who tender him their heartiest congratulations on this auspicious occasion.

MR. C. X. HOBBS, who was in this city a short time since, was not on his way to Newfoundland as stated by us last week, but visited Maine to examine a Hancock County mining property. We were misled by a previous statement in a New York journal to the effect that Mr. Hobbs was about to start for Newfoundland to look after his railway

interests in that island; and, learning of his presence at the Bangor House over Sunday and his departure eastward on Monday morning, we naturally inferred that to be his destination.

President Garfield's Mining Stock.

[New York Stock Report.]

Not the least valuable of the late President's possessions are one thousand shares of the stock of a mining company of San Francisco, the present market value of which is \$20,000. The mine is situated in Arizona, and is one of the most valuable silver mines in that Territory. It is in Pioneer District, Pinal county, about fifty miles from the Southern Pacific Railway. The mine was developed and is chiefly owned by Col. James M. Barney, of Yuma, a pioneer merchant of Arizona, and formerly the heaviest freighter for the Government in that Territory.

Some four or five years ago Col. Rockwell, the devoted attendant of the late President, was stationed at Yuma, and became the intimate friend of Col. Barney. When the latter bought the Silver King mine he gave Col. Rockwell the opportunity of placing a large number of shares among his brother officers, and Gen. Garfield, then a member of Congress, was induced to take one thousand shares at \$4 a share. The stock has already paid the late President \$7,500 in dividends, and is now worth in the market \$20 a share. The late President each year sent his proxy to be voted by Col. Barney in San Francisco. Mrs. Garfield will still receive an income of \$3,000 a year from dividends on the Silver King Stock.

It is a pleasure to feel that a portion of one of our dividend paying mines is likely to afford so considerable an addition to the income of Mrs. Garfield. General Garfield "built better than he knew" when he invested in "Silver King." It is not probable that any other class of securities would have yielded so large returns for the money invested. We trust that this mine will continue its good work while the brave warrior lives, and be a heritage to the children of such noble parents.

Dips, Spurs and Angles.

—Jay Gould's telegraph monopoly spreads from pole to pole.

—Hod Fellows are not Masons, though they may tend that way.—[Miners' Journal.]

—Nevada produces gold, silver, lead, iron, copper, plumbago, nearly all the scientific-named but useless minerals, fruits of every kind, grain, cotton, oranges, grapes, all kinds of vegetables, cattle, charcoal, nitrates, borax, salt, sagebrush and several other things; and yet some people call it a desert country.

—Beans are beans these days. They have advanced 150 per cent. in price in the past month, under a heavy demand from Boston. If the bean boom keeps up, it will be a great blow at prospecting in the mineral regions. A prospector without beans would be like a clock without hands. Beans is the only bond of sympathy between the prospector and the Boston man.—[San Francisco Report.]

—There is one thing to be said in favor of the prevalent Johnny Bull style of coat for unsalted youths—it gives the parental hoof a chance to fracture the oscoeyges of the wearer with greater ease than did the old-fashioned garment, whenever the wearer is found mooning around Araminta's front gate and giving his location dead away with his cigarette headlight.—[San Francisco Exchange.]

—New York City contains more inhabitants than either Alabama, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Kansas, Louisiana, Maine,

Maryland, Minnesota, Nebraska, Nevada, New Hampshire, New Jersey, Oregon, Rhode Island, South Carolina, Vermont, or West Virginia. Manhattan Island contains more people than Maine and New Hampshire together, with nearly all of Vermont thrown in.

—In the north of Scotland, a minister was taking to task one of his flock who was a frequent absentee, and the accused defended himself on a plea of dislike to long sermons. "Deed, man," said the reverend monitor, a little nettled at the insinuation, "if ye dinna mend, ye may land yerself where ye'll no be troubled wi' mony sermons, either long or short." "Weel, aiblins sae," retorted John, "but it may be nae for want of ministers."

—Yesterday was the day set for the vote on the county seat question of Alturas. Now Hailey will let up on calling Bellevue a doby village and a malaria-breeding mud-hole, and Bellevue will cease its slang about that insignificant little place at the mouth of slaughter-house gulch and called Hailey. It has been "hell on the Wabash" over there ever since the beginning of the county seat agitation. Now there will be peace on the Potomac.—[Idaho World.]

—At last some modest but enterprising genius has invented a bicycle for the ladies. It is built just like the masculine affair, we believe, except that the saddle is a kind of a bench like, with a square hole in the middle for the fair rider to—ha—to hang both—both—ha—you just sit on this seat and hang both—both—er—ah—you reach down to the treadle with both of them, you know. Pshaw, the man that will make a bicycle like that ought to be compelled to describe it himself, that's what.—[Colorado Miner.]

—The interior court walls of the Boreel building, the haunts of mining men, are being plastered over with hieroglyphics as mysterious and incomprehensible as those on the obelisk at the Park. The artists in charge call it aesthetic frescoing, or words to that effect. "Aesthetic daubing," explains one of the occupants of a room who has been afflicted by painter's colic. Says another: "The generous agents of this house must have struck a big paint mine and want dividends out of the owner, right quick."—[American Exchange.]

—Among the many important facts that were brought out by the United States survey of the great lakes and the Mississippi River, is the action of sand waves in the Mississippi, at Helena, which, in water from thirteen to thirty feet deep, are moving down the river at an average rate of eighteen feet a day. These sand waves have an average length, measuring from crest to crest, of about 330 feet, an extreme length of about 500 feet, an average height of about five feet and an extreme height of about eight feet from valley to crest. The existence of sand waves of such large dimensions, and moving with such velocity, does not seem to have been observed before on the Lower Mississippi.

—The career of the Pacific Bank, corner of Pine and Sansome Streets, San Francisco, shows what a strict adherence to business principles even in a speculative, gambling community will accomplish. Starting in 1863, it has held rigidly in its management to the maxim "a prudent and conservative course is one of the first principles of banking." In every season of panic it has stood unshaken and unsuspected and to-day it is anchored in public confidence firm as the Pillars of Hercules. An appreciation of this quality together with its business advantages, agencies and correspondents in all the leading cities of the world, facilities for letters of credit, exchange, in short, every branch of legitimate banking business, has made it acknowledged as the best, safest and most prosperous bank in the city.

—Recently it seems to us as though a large number of people throughout this country have nothing to do but write postal cards to newspaper publishers asking for a sample copy of their paper. Perhaps these people think we are pub-

lishing a paper just to wear out our young life, but that is where they fall into a common error. We are trying to acquire a competence, so that we can carry a summer cane, and have a special mug at the barber shop, with our monogram on it, and that is why we ask pay for things sometimes when it seems unladylike and eccentric. People who enclose stamps will be waited upon just as soon as the mailing brigade can catch up a little, but those who enclose a chunk of tuff in a postal card, and look for this priceless repository of electrolyzed brain, will anxiously watch through the gloaming till a late hour, but they will wait in vain.—[Laramie Boomerang.

—The pernicious habit of wearing door keys attached to their watch chains, while the legitimate ticker is doing yeoman's duty at the "Uncle's," is becoming quite too common among our drygoods men. A sad case occurred in this connection yesterday. A lady went with her little girl to a large drygoods shop, and a gorgeous counter-vaulter played with the child while the mother made her investments. Across the bosom of this noble creature, from vest pocket to pocket, stretched a massive watch chain, and as he soothed the babe, not a few ladies admired his paternal deportment and the splendor of his jewelry. At a moment when the gaze of a dozen maids and matrons was concentrated on him, the blessed infant, shrieking "watch! me want to hear watch!" pulled the chain, and lo! from the end thereof dangled a door key. The counter gymnast dropped the child like a hot peanut, and the ladies grinned, while the broken-hearted salesman bounded hurriedly over a bale of sheeting and disappeared in a cloud of tape.—[San Francisco Exchange.

—The Virginia Chronicle thus tells how Mr. Drexler was paralyzed by Col. Fair: "On C street the story of L. P. Drexler's attempt to get a squint at 'that dear little winze' in the Sierra Nevada and Union, is told with evident satisfaction. According to the current report, Mr. Drexler approached Acting-Superintendent Fair, and, in his usual business-like manner, said: 'I want to go down in the mine.' 'Well, I am very sorry,' said Mr. Fair, 'but I don't see how I can help you in this matter.' 'Give me a permit.' 'Mr. Drexler, I am very sorry, but it would not be of any service to you. The men down there wouldn't recognize it. I am not Superintendent you know.' 'I am a Director of the company and have a right to see the new winze.' 'You may be right, but as the Superintendent of the mine is absent, I cannot take the responsibility on myself. You know my position here, Mr. Drexler. I am only employed temporarily, and if I should exceed my authority in this matter I might lose my place." Mr. Drexler was revived by a liberal administration of ice water, and was taken home in a hack."

Census Report on the Copper Industry.

[From "Bradstreet's," Sept. 24.]

Until the Chilian copper fields rose into importance the world depended on Cornwall for this mineral. In 1842 some buffalo hunters discovered a rich mine in the Lake Superior region, which has yielded thousands of tons of copper. At present the world's production of copper is about as follows: Chili and Peru, 34,000 tons; United States, 25,500 tons; Australia, 14,500 tons; Russia, 5,600 tons; England, 5,200 tons, and all other countries, 19,000 tons, making an aggregate of 103,800 tons. The United States is the second copper producing country in the world, and the census of 1880 will show that we produced over 25,500 tons of copper, or, to be more exact, 51,091,188 pounds. This amount of copper would make a cube whose edge would be 45 1-2 feet, or in other words, would cover 25.9 acres with a sheet one inch thick. The copper product has increased since the census of 1870 116.41 per cent. in weight and 70.25 per cent. in value, the fall in price per pound, according to Professor Pumpelly, being almost exactly accounted for by the rise in the value of the paper dollar. In 1870 the Lake Superior region produced 83 per cent. of the entire product; in 1880 it attained 89.71 per cent.

A curious fact, tending to show the increased skill in copper mining and the extensive introduction of steam power and improved machinery, notably the drills driven by compressed air, is brought out by this inquiry. Though the product has increased 116 per cent., the number of employes has increased only 13.7 per cent., while the capital has increased 303 per cent., the horse-power of the steam engines 119 per cent., and the consumption of material 136.5 per cent. The gain in production per hand is 90 per cent. The same labor which in 1870 produced 4,387 pounds of copper, now produces 8,344 pounds.

The following carefully prepared table shows the copper product of the United States for 1880 in pounds of ingot copper, the value of the product, and the total number of persons employed in the industry:

	No. of mines.	Product in pounds.	Value of products.	Total No. of hands employed.
Michigan.....	19	45,830,262	\$7,979,232	5,054
Maine.....	3	83,080	10,125	97
Maryland.....	1	164,640	1,290	6
Missouri.....	3	230,717	25,730	41
North Carolina.....	2	1,640,000	350,000	328
Pennsylvania.....	1	470,503	6,630	10
Tennessee.....	1	.....	.....	4
Vermont.....	1	2,647,804	469,495	619
Wisconsin.....	1	13,087	1,549	7
Total.....	32	62,932,571	\$8,842,961	6,116

The production of the extreme western States and Territories (Colorado, Arizona, Idaho and California), as far as received by the census office, is 5,764,460 pounds, or 11.28 per cent. of the amount produced in the Eastern districts. Eleven new mines in Maine, Maryland and New Hampshire report the employment of 162 men, the payment of \$31,995 wages, and \$7,650 for material consumed. They have spent \$658,470 for machinery, dead work, etc., but have produced no ingot copper. Returns from this class of mines are not included in the above table. The value of the plant in Michigan is placed at \$5,275,185, and of all copper mines in the United States at \$5,824,825. The value of real estate, by which we mean the mine itself as a mineral producer, which value depends, of course, on the average price of copper during a term of years, and on the reasonable expectation of productive life for each mine, is placed at \$24,116,300 in Michigan, and \$24,517,146 for the entire country, and the total capital at \$30,413,551 for Michigan, and \$31,675,096 for the United States. As compared with the iron ore mining industry, copper employs 80.53 per cent. less hands, uses 50.61 per cent. less value of material, and represents 48.61 per cent. less capital. The product of copper is worth 38.19 per cent. of the value of the iron ore mined, but it costs 39.92 per cent. as much in labor to raise it. The average monthly wages in copper mining is \$49.93, against \$32.26 in iron ore mining; in addition to which the miner has the great advantage of more continuous employment. Copper mines involve the employment of skilled and high priced labor.

Mica.

[New Mexico Mining World.]

At no time in the history of mica mining has there been so much interest felt in its production as at present. In pre-historic periods mica was mined in North Carolina, and since then discoveries in limited quantities have been made in different sections of the country. The attractions of mining to miners and operators are confined to the precious metals, the ordinary mineral products, including mica, receiving but little attention. In New Hampshire, and in a few localities in Pennsylvania, deposits of mica have been successfully worked; but not until its discovery in Maine, a few years since, has the industry been regarded with any extended favor. The limited supply of the product has doubtless had its effect with the prospector; and but little attention has been given the subject in New England, except in certain districts where it has been controlled for commercial reasons. To secure the product in paying quantities has at all times been a grave question. The mica of commerce is limited in quality and quantity, and those using it fully understand the necessity of keeping control of the mines opened, and using all possible effort in gaining possession of all localities likely to prove of value. In Maine and New Hampshire, where deposits are known to exist, and where the product is fairly marketable, the supply is not equal to the demand, and it is in New England that the consumers of commercial mica are now looking for supply, with but little encouragement, as the demand is increasing much more rapidly than the product can be marketed. It is said mica exists in inexhaustible quantities; the enthusiastic mine prospector tells us mica is as common as country rock, but he fails to produce the commercial mica so much in demand; indeed the demand is so rapidly increasing, and the number of mines producing the proper sizes and the requisite qualities decreasing, that for those engaged

in furnishing commercial mica, the industry at once promises to be the most profitable. In the general demand for mica, suitable sizes of the best quality command high prices, and must necessarily continue to command prices which will amply pay the investor. Mica mining in New England, located as we have indicated, with the product coming up to the standard requirements of commerce, can but add largely to the interest centered in the mining industry; and where the product is known to exist the matter of mining for it will prove as profitable and as satisfactory as the most conservative investor could desire. The finest mica mines in the world when developed will be found in New Mexico.

A New Eastern Bonanza.

[New York Times.]

The recent discovery near Thebes of a bonanza of ancient Egyptians is one of the most important discoveries of the century. Surface indications of mummies and other objects of archaeological interest had been known to exist for some time in a mountain gorge about four miles east of the Nile, and Herr Brugsch, of the Boulak Museum, made a prospecting tour in that region last June. On exploring a pit 35 feet deep, he struck a vein of enormous richness, which has since been worked for a distance of 200 feet. This vein consists principally of Egyptian Kings, Queens and Princesses, of whom 36 have already been taken out. With these dead Egyptians are also found a large quantity of manuscripts, jewels, gods, and other useful and interesting objects. A careful assay shows that the vein yields about seven mummies to the ton, together with about 30 per cent., by weight, of gods and manuscripts. In point of richness this vein—or rather pocket—has hitherto never been equalled in the annals of archaeological mining.

The discovery of this great Egyptian bonanza ought to attract the attention of those ingenious persons who are constantly forming silver mining companies to the richness of the Egyptian deposits. Royal mummies and ancient papyri are of more value than their weight in silver, provided they are judiciously put on the market, and the Valley of the Nile is probably rich in sphinxes, obelisks, temples and other archaeological treasures. Mining is inexpensive in Egypt, since there are no rocks to blast, and nothing to dig through except sand. It would pay to work a vein yielding only one mummy to the ton, but as a matter of fact mummies are always found in jewelry-bearing strata, so that, after the mummies are taken out the sand can be profitably worked over for gold and silver ornaments and small gods. Any mummy mining company that can make a satisfactory arrangement with the Khedive and begin work almost anywhere in Egypt, will be reasonably sure to strike mummies and papyri in paying quantities, and to make a dividend within six months after driving the first spade into the ground.

As a field for mining speculation, Egypt is vastly superior to Colorado, and the man who could not write a convincing prospectus for a mummy mining company would be utterly lacking in imagination. According to the best Egyptologists, the Egyptian monarchy came into existence about eight thousand years ago, so that there is little fear that the mines of mummified kings can be exhausted in one day. No time, however, should be lost in organizing mining companies and selling stock, for if England and France jointly occupy Egypt, free mining will not be tolerated.

Mining in North Carolina.

[Carolina Watchman.]

The mining interests of North Carolina have suffered more severely from speculation than from any other known cause. There are a class of men, who may with propriety be termed "mining hyenas," going from place to place bonding mineral lands for speculation. This practice is ruinous to the best interests of not only the land holder, but the purchaser. Extensive and valuable tracts of mineral lands have been bought at farm land prices and organized into companies at an advance so great as to load down what otherwise would have been a good paying enterprise, if honorably conducted. Many North Carolina mines might to-day be in operation and producing reasonable dividends if the speculator had been content with reasonable returns. But not so. Each sale must bring a fortune! By reason of this, Northern and English markets are filled with circulars—baits—gotten up in the most approved style, signed and countersigned by bogus mining experts, asking for investments, at figures too startling for even Munchausen to handle.

On the other hand, some good men have gone to work prudently, advancing slowly, overcoming difficulties as they come to them, until now they are established. They make but little fuss, but by steady, legitimate work have gained position. It

is this class of men, and they alone, who give tone and strength to mining in any section.

As regards our mineral interests, North Carolina has seen her darkest days and her future is assured. Her prosperity will come slowly for a while, but the more surely by reason of the experience of past years.

We have gold, silver, copper, lead, iron and mica in vast quantities; but to extract these from their native places is a business, laborious and expensive, and not a lot of figures and maps. It is work—honest, hard work—directed by cultivated brain force that is needed; no other plan can succeed. Those who look on mining in any other light will find themselves badly mistaken. Men who are not afraid to take hold of the pick, when occasion requires, are the men who will make mining a success.

How They Salt a Claim.

[Laramie Boomerang.]

"I wish you would explain to me all about this salting of claims that I hear so much about," said a meek-eyed tenderfoot to a grizzly old miner who was panning about six ounces of pulverized quartz. "I don't see what they want to salt a claim for, and I don't understand how they do it."

"Well, you see, a hot season like this they have to salt a claim lots of times to keep it. A fresh claim is good enough for a fresh tenderfoot, but the old-timers won't look at anything but a pickled claim. You know what quartz is, probably?"

"No."

"Well, every claim has quartz. Some more and some less. You find out how many quartz there are, and then put in so many pounds of salt to the quart. Wild cat claims require more salt, because the wild cat spoils quicker than anything else. Sometimes you catch a sucker, too, and you have to put him in brine pretty plenty or you will lose him. That's one reason why they salt a claim."

"Then, again, you often grub-stake a man —"

"But what is a grub-stake?"

"Well, a grub-stake is a stake that the boys hang their grub on so they can carry it. Lots of mining men have been knocked cold by a blow from a grub-stake."

"What I wanted to say, though, was this: You will probably at first strike free-milling poverty, with indications of something else. Then you will no doubt sink till you strike bed-rock, or a true fissure gopher hole, with traces of disappointment. That's the time to put in your salt. You can shoot it into the shaft with a double-barreled shot-gun, or wet it and apply it with a white-wash brush. If people turn up their noses at your claim then, and say it is a snide, and that they think there is something rotten in Denmark, you can tell them that they are clear off, and that you have salted your claim, and that you know it is all right."

The last seen of the tenderfoot he was buying a double-barreled shot-gun and ten pounds of rock salt. There's no doubt but a mining camp is the place to send a young man who wants to acquire knowledge and fill his system full of information that will be useful to him as long as he lives.

LODES, LEADS AND VEINS.

DEER ISLE.—Supt. Dickson's weekly report, dated Sept. 25, is as follows: "We have resumed work in the winze on 130 foot level; it shows the same as last report, viz: its whole size in ore. When it shall have attained 5 ft. more in depth I shall commence crosscut to connect with the south lateral drift on the 180 foot level. The stope looks splendidly and is yielding beyond our estimates. I could employ to advantage some more miners but find it impossible to get them in this locality."

MANHATTAN.—As a matter of general interest to our readers, we take the liberty of publishing the following extract from a private letter just received from Mr. Wilkie Darling, Supt. of the Manhattan: "I send you to-day, by express, a small box of samples of our Manhattan ore. This is a fair average of the ore that I am now sending to the Portland Smelting and Reduction Works for actual working. Every barrel that I send is worth, and will net, more coin of the realm than a barrel of pork will, and does not cost one-half as much to produce. There is now no room for doubt that Messrs Proctor and Taylor will reap a rich reward for the faith and perseverance they have shown in Brooksville. For fourteen months they have quietly carried on the work of developing their property, asking no aid "financially" or otherwise, and no interests offered for sale. Now they find themselves the owners of a property which will pay large profits in the legitimate production of copper and does not depend for its prosperity upon the fluctuations of the stock market. If my experience in mining will give any

weight to my opinions, I will make the statement to you that there are several mines in Brooksville which will soon be not only self-supporting, but will pay a larger return on the actual capital invested than any other business now carried on in the State."

WALDO.—The Waldo Gold and Silver Mining Company was recently organized for the purpose of operating in the town of Liberty, Waldo county.

FRANKLIN.—A stockholders' meeting of the Franklin Silver Mining Company is called for Oct. 17, at Ellsworth, to vote upon the proposition to sell their property to the Benjamin Franklin Silver Mining Company, a recent organization upon an assessable basis.

Sullivan.

MILTON.—It is rumored, and generally believed, that the long-looked-for vein has been found upon the Milton property, having been cut by the southerly crosscut from shaft No. 2. As the miners are at work almost directly underneath the Bulletin office, it would seem as if that journal might keep its readers informed of the nature and progress of the underground developments. But for many weeks past it has neglected to do so.

PINE TREE.—During the past week the foundations for the hoister and boiler have been completed. Buildings are nearly finished and the machinery is expected to arrive soon; men are busy running timber into the tide, which will be rafted down, and from which a large wharf will be built soon.—[Bulletin, Sept. 24.

Blue Hill.

DOUGLASS.—During the present week the Douglass refining furnace has been running and between four and five tons more of copper metal have been turned out. A Directors' meeting will be held in this city to-day (Friday).

STEWART.—Work progresses satisfactorily. No. 2 shaft has reached a depth of about 70 feet and No. 3 is nearly as deep. There are no special changes to chronicle but everything is encouraging.

YOUNG HECLA.—The directors of the Young Hecla Mining and Smelting Company recently held a meeting in Blue Hill. Capt. William Ludlow of Michigan, was elected Superintendent. It was decided to resume work at the mine at once and it was voted to levy an assessment of 5 cents per share on the capital stock of the Company. See notice in another column.

MAMMOTH.—Supt. Duff is continuing the south crosscut from the shaft and has made good progress. The immense surface showing of ore astonishes visitors to the camp.

ECLIPSE.—The promoters of the Eclipse during the present week have completed the purchase of their property at Blue Hill. This is a sure indication that they mean business. It is understood that the organization of the Eclipse Copper Mining Company will be completed about the middle of October.

British Provinces.

The Woodstock Iron Company are to erect at once a second furnace at their works, Upper Woodstock.

It is reported that Mr. Edward Dimock, of Windsor, N. S., has disposed of a part of his plaster quarries at Wentworth, to American parties for \$30,000.

The Sydney, Cape Breton, Advocate says the copper mines near Coxheath, and also the copper deposits at Eagle Head, have been visited lately by Mr. Revere, a mining expert from Boston, and pronounced very promising.

A Provincial exchange says that a large capitalist has come over from London with a view of testing the accuracy of the reports which have reached the old country as to mining developments in Canada. The phosphate lands about Ottawa have lately risen in value and are attracting much attention.

The Gloucester Silver Mining Company of Bathurst, N. B., offer for sale 5000 shares of stock at \$3 per share, the proceeds of which are to be applied to the development of the mine. The capital of the company is \$250,000 and the par value of the shares is \$5. The mine is believed to be a valuable one and the officers are responsible gentlemen. R. R. Call, Esq., of Newcastle, is President, and John Sivewright, Esq., of Bathurst, Secretary.

MASCARENE.

The Mascarene mining district lies in the southeastern portion of the Province of New Brunswick and is but a few miles distant from St. Andrews on the Passamaquoddy Bay. During

the past few years considerable prospecting has been done in this region and a large number of the prominent citizens of St. Stephen and Calais are interested in these mineral lands.

DICK AND WILLIAMSON.—At present mining work in the Mascarene district is concentrated on the Dick and Williamson mine. Work has progressed continually on this property during the past season. The vertical shaft has now reached a depth of over one hundred feet and a crosscut is being extended on the 100 level to encounter the ore body. Very handsome galena has been found on the Dick and Williamson property and some very excellent specimens are on exhibition in the cabinet of the MINING JOURNAL.

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

The first gold mine in the United States was discovered in South Carolina in 1790.

The Tribune says that next year Denver will supply the market with sulphur and sulphuric acid.

It took an hour and a half to complete the California delinquent sale, at San Francisco on the 15th.

Reported that Senator Fair will remain on deck at the Comstock, having paired with Platt, of Connecticut.

Nearly all the placer mines in North Carolina have been obliged to suspend work on account of the drought.

Said to be a scheme on foot to get together an immense mining property in Eureka District, Nevada, for the London market.

Strike reported in the Martin White, White Pine District. Said to be coming in strong—three feet of ore being exposed that will go \$250 to the ton.

A controlling interest in the famous Santa Rita copper mines in Grant county, New Mexico, has been disposed of by Mr. M. B. Hayes for the snug little sum of \$365,000. This is the largest sale by one man yet made in New Mexico.

There is a prospect of there soon being one dividend-paying mine on the Comstock. The Emigrant mine and mill, of Silver City, are now reducing forty tons of ore daily, and have just shipped their first bar of bullion, valued at \$5,500.

The New Mexican Mining News says that mining men and capitalists are coming into that section with a rapidity unprecedented in the history of the Territory. Those interested in the country's advancement are happy in the thought of the bright future before them.

The cost of working the copper mines of Lake Superior, Michigan, varies from 11 cents to 23 cents per pound of the ingots produced. The cost of the ingots from three of the mines for 1879 was as follows: Atlantic 12.20, Central, 11.16, Quincy 13.71. This is the best that either of these mines has done. Last year the Central's copper cost 11.85 to produce.

CHAPPARAL.—Work in the tunnel has been temporarily discontinued, and the force put to work in the drifts leading from the shaft, where they are stopping out some fine ore. This work was abandoned last winter in consequence of more water than could be handled. Work in the tunnel leading to the main shaft will soon be resumed.—[El Dorado Republican, Sept. 8.

The mining boom can be seen coming, and, too, at no laggard's pace. The formation of big mining companies backed by the wealthy capitalists of the country and the embarking of millionaires of the East upon enterprises in New Mexico has a business ring which is very musical in the ears of the people of New Mexico. This fall and winter will see many improvements and immense development of property in New Mexico.—[New Mexican Mining News.

The Hibernia is now said to be \$18,000 in debt. It is said in New York that the non-assessability of so-called full paid up stock will probably be tested in this case. Judge Daniels' recent decisions are clear on the point that a company cannot evade the law of New York by putting in its property to represent the full amount of the capital, while only a few thousand dollars have really been paid. The apprehensions of danger may perhaps account for the tardiness of the New Yorkers in transferring their stock to their names.

The control of the Comstock is now distributed as follows: Messrs. Flood, Mackay & Fair, known as the "bonanza firm," control Utah, Sierra Nevada, Union Consolidated, Mexican, Ophir, California, Consolidated Virginia, Best and Belcher, and Gould and Curry. Senator Sharon controls Chollar, Alpha, Potosi, Imperial, Confidence, Yellow Jacket, Kentuck, Crown

Point, Belcher and Overman. The clique known in San Francisco stock circles as "The Jews" control Savage, Justice and New York. The Cooks control Alta, and the McDermitt crowd run the Bullion.

We have several times referred to the Adams Mining and Reduction Works, at Charlotte, N. C., from which great results were expected, and in a recent issue we stated, upon the authority of the Salisbury Watchman, that the splendid plant was now idle, with no cause given for the suspension of work. In a communication to the Charlotte Observer, President Adams explains that the suspension is wholly due to his severe illness, which has lasted for more than eleven weeks. As Prof. Adams had the sole superintendence of the construction of the works, without him nothing could be done. He states that work will be resumed and prosecuted to completion at an early day.

The Georgia Gold Belt lies northeast and southwest across the entire northern and part of the eastern section of the State, and loses itself in the eastern portion of Alabama. It extends through a large number of counties. It has been found as low as Columbia county, in the eastern portion of Middle Georgia, and as far north and west as Fannin county, which borders on the State of Tennessee. But few mines have been developed in Columbia and Lincoln counties, but they are claimed to be among the richest in the State. A vein near Goshen, in the latter county, is said to be yielding at the present \$1,000 per month at a cost of but \$215. That portion of intermediate territory which is barren of gold is comparatively small, being much less than one-half of the whole. While many very rich and profitable mines have been opened in the lower portion of the belt the greater portion of the mining has been done in the northern mountainous section, especially in the counties of Lumpkin, White, Union, Dawson and Cherokee.—[Chattanooga Tradesman.

COLORADO.—Mining in Colorado is only now in its infancy, and there is no State in the Union to-day possessing the promising future our State enjoys. To those who have noted the changes that have taken place in mining in this State since it was commenced here, there has been a volume written in little more than a quarter of a century that tells more for progress and the great value of the minerals of this section than has been shown in any State or Territory during the same period of time. The past proves the almost prophetic words of those who have never wavered in their faith in the mineral resources of Colorado, and even their utmost imaginings have been more than verified. We have achieved a grand success, and instead of being an outlying and an un-thought-of section of mining territory, second to all others in importance, this State ranks to-day first in the attractions it offers to those desirous of investing in mining enterprises; and if care is used in selecting men who are to have charge of important enterprises, we predict that within the next two years there will be mines opened in Colorado rivaling the famed silver beds of Old Mexico and South America.—[Denver Mining Review.

EUREKA DISTRICT, NEVADA.—Ruby Hill is greatly excited over a recent strike in the Eureka Tunnel, an enterprise inaugurated four years ago by Gen. P. E. Connor. The San Francisco Daily Report says: "The principal mines in Eureka District are located on Ruby Hill. Prospect Mountain is a high mountain lying back of Ruby Hill to the southward. The direction of the great Ruby Hill ore channel is nearly north and south, and ever since its development in Ruby Hill, miners and others have contended that it passed through Prospect Mountain. So firmly fixed has this belief been, that the people of Eureka have invested in various tunnel enterprises to cut the channel. At and near the surface of the mountain are many gash veins, which have been worked with profit by individual miners or small companies of miners, who found sale for their ore at the Richmond or Eureka Con. furnaces. The Eureka Tunnel penetrates the mountain from its eastern slope, and pierces the heart of the mountain. The strike is a great thing for Eureka, and if the true Ruby Hill ore channel has been encountered and the account given in the dispatch is only one-fourth true, Eureka is destined to become the mining metropolis of the world. The strike is at least 1,000 feet in depth from the surface.

MT. DIABLO.—Mount Diablo stockholders, and, in fact, all parties who are interested in the mines of the Caudalaria district, will read with pleasure the following resume of the last sixty days' run of that company. When the Northern Belle started up ten stamps on Mount Diablo ore on June 5, the Mount Diablo was in debt \$40,000. On August 5 the stamps were hung up, the gross receipts having been \$150,546, upon which the discount was \$25,806, leaving a net product of \$124,730. This amount has sufficed to pay the charge for crushing of \$20 per ton and hauling of \$3.25 per ton, the incidental and

mine expenses, the old indebtedness of \$40,000, and leave a surplus on hand of \$20,000. The company did not stop crushing for the want of ore, but because their principal objects have been accomplished—the payment of the old indebtedness, and the demonstration of the good policy of erecting a mill. There is now a large quantity of ore on hand, and the latest information from the superintendent is to the effect that in making improvements ore enough will be extracted to fill the dumps in a short time. The stopes are all looking well. There is little doubt but that the district will soon be fully supplied with water, and the Mount Diablo, and perhaps other mines, soon furnished with mills of their own.—[Carson Appeal.

MINING OPERATIONS IN CHINA.—The North China Herald says: "The direction of the vice-regal mining enterprise has been given to Mr. Tong King-Sing, who has under his orders a full staff of miners and mining engineers. The field chosen for the first mining operations is a wide track of undulating ground, whose main direction is to the north and west of Tientsin. Enormous beds of coal of old formation have been found, mostly between limestone layers, so that working will be inexpensive, safe and easy. In the same districts there are inexhaustible beds of iron-stone, and iron ores of the better kinds, such as spathose, limonite, hæmatite, are also found in rich deposits. At no great distance from the chief coal mines, and in a country easy of access, copper ore of abnormal richness has been found, and in the hills which bound the vast coal and iron districts, lead, silver, and manganese await the miners' advent. The coal deposits will be worked first. Pits have been selected for opening; tramways are to be laid, and a canal will connect the center of the coal and iron country with the rivers Peh-tung-ho and Pei-ho. At the end of this summer the first product of the coal mines will be brought to Tientsin for sale, and that large market, which now depends to a great extent upon Nagasaki, will thenceforth draw all that is required for steamers or government factories or home use from the Chinese mines, which will also supply Peking and the towns on the Peiho and Grand Canal. The coal is of good quality, of high density, much of it gives but little smoke, and there is almost absolute freedom from sulphur.

FRUITS OF LEGITIMATE MINING.—A correspondent at Calumet, Mich., of the Cleveland Leader, writes: "This busy town of 8,000 people is the outgrowth of the working of the famous Calumet and Hecla copper mines. These mines did not come into existence as producing mines until 1867; yet since that time millions of dollars have been paid to the shareholders, and a large surplus left in the treasury, while at the same time an immense amount of money has been expended in permanent improvements, stamp mills, railroads, machinery, houses for the employes, etc., all of the dwellings of this large town, of the most complete and comfortable kind, together with the ownership of the land, belonging to the company. There are fine Methodist, Congregational, Episcopal, Catholic, and other church buildings, all nicely painted and fenced in. The school ranks very high. The schoolhouse is very large and finely arranged for the health of the children, and cost about \$75,000. There are 26 excellent teachers employed who receive \$24,000, besides a superintendent who gets \$2,150 per year. The music teacher receives \$1,000 per annum. There are attending the school, which is graded, 2,000 pupils. A close and thorough supervision of the school is kept by Dr. R. H. Osborn, the chief surgeon of the mines, who is a thoroughly educated man. It is well known that this is a Boston company, the chief man being Alexander Agassiz, President of the company. One feels that he is breathing a New England atmosphere, and walking in a New England village. There is not a saloon in the town or on the company's property. All this great development of wealth, enjoyment and progress has been brought about in a period of fifteen years. This one instance out of a very many goes to prove that legitimate mining is one of the great instrumentalities of the nineteenth century, the pioneer of civilization and progress whenever it is properly carried forward and judiciously managed.

VIRGINIA.—An old and experienced miner, in a communication to "The Debt Payable," gives a glowing account of Virginia and her mineral prospects. In his opinion the most celebrated mine in the State is the Booker Gold Mine, of Buckingham county, now known as the Morrow Gold Mining Company, of Virginia. This mine was first opened in 1830, and worked with the usual ups and downs incidental to gold mining up to 1857. The capital employed at that time was English, and at the first speck of war the works stopped, and remained so until three years ago, when it was purchased by the present owners. When operations ceased in 1857, much machinery was on the ground—some good dwellings and mill buildings, but when purchased three years since, not a vestige of anything could be seen excepting three old caved-in mining shafts and two almost roofless houses. Now this company have two

engines, and ore-crushing houses each 30x40 feet, two stories; sixty-horse power boiler and engine, five-stamp battery, a Howland pulverizer, air-compressor, air-drill, rock-breaker, amalgamating machinery, etc., etc., a shaft down one hundred and twenty feet, the old works entirely cleaned out, and ten thousand tons of ore in sight, and now only awaiting the erection of reduction or chlorination works to move along at great profit for years to come, as from all appearances the extent of the mine is simply marvelous and incalculable. Between the years 1832 and 1853 the property was three times sold; once for \$450,000, once for \$120,000, and last sold by a Mr. Beebee to the English Company for \$500,000 in gold. So far as is known the mines have yielded over \$1,000,000 in gold, and that at the meagre depth of one hundred feet; to beat this I challenge the history of any mine in America. It must also be remembered that the appliances for gold or any kind of mining are vastly improved since 1857, and I do not hesitate to predict that we in Virginia are now on the eve of a grand opening-up and mining boom. We will soon now have four large companies at work in this county alone, for gold, and having myself had twenty-five years experience in California and elsewhere, I feel that if I did not see better inducements here for gold mining than elsewhere, I simply would not stay here.

Nuggets.

- The annual town fair will be held in Blue Hill, Oct. 7th.
- The mining regions are now being visited by numerous parties.
- The Edgemoggin Mining Company are in want of miners. See advertisement.
- A few good rooms may now be secured for October, at the Silver Lake Hotel, Katahdin Iron Works.
- The three masted schooner Newton, of Baltimore, has been chartered to take a cargo of ore from Deer Isle to Swansea.
- We acknowledge the receipt from Supt. Darling of a box of very handsome samples of ore from the Manhattan mine, of Brooksville.
- The site proposed for the new hotel at West Sullivan is on the north side of the main highway, nearly opposite the Milton Works.
- Several stores in Blue Hill were broken into one night recently. Among the places entered were Pearl B. Day's and Henry J. Billings'.
- A quantity of tools and supplies for the use of the Mt. Mica Mining Company, at Paris, were shipped from Bangor during the past week.
- The Swedes at New Sweden, Aroostook County, are prospering and overrunning their original limits. Two hundred and fifty more are expected to arrive soon.
- A few nights since, an outhouse of the Copper and Gold Exchange at Blue Hill was discovered to be in flames. The fire is supposed to have been of incendiary origin.
- Supt. Hayward of the Faneuil Hall and Sullivan mine met with quite a painful accident recently by getting his foot caught, by some means, in the gear of the hoisting engine at the mine.
- The St. John Sun says that Mr. A. L. Blackman, contractor for the Newfoundland narrow gauge railway, has purchased four box cars, one flat car and a locomotive from the New Brunswick Railway.
- Two new cylinders for dry crushing have been placed in the feldspar mill at Topsham, greatly increasing the capacity of the works. The ground feldspar is sent by rail, in bulk, to the potteries at Trenton, New Jersey.
- Some brilliant specimens of ores from the Longfellow copper mines at Clifton, Arizona, have been on exhibition during the past week at the office of the MINING JOURNAL. The collection was brought East by L. J. Morse, Esq.
- Fifteen sea-green slate quarries are being worked at Pawlet, Vermont, besides several red, purple and unfading green. Four are worked by engines, and the others will follow suit soon. Slate is worth more than for the past four years.
- At the Milton Works in West Sullivan a vessel is being put in thorough repair and if Sullivan is not favored with steamboat communication during the winter months Supt. Shoobar proposes to have this craft make regular trips between Sullivan and Rockland.
- Mr. Lucius Butterfield, of Springfield, recently exhibited to us some handsome specimens of galena from the town of Carroll. There are unquestionably many promising mineral leads in the northern part of Penobscot County and we believe the day is not far distant when they will be developed.

-Several individuals residing in St. Stephen, N. B., are interested in mining areas in Nova Scotia on which very handsome copper ore is found. The ore is fine carbonates and oxides and of very high grade. The specimens come in the form of nodules and are found in a sandstone formation. Samples can be seen at our office.

-The Maine Central Railroad Company are evidently determined to extend their road into Aroostook county. It is reported that the preliminary survey from Dexter to Presque Isle is well under way, and rumor says that if the company are unsuccessful in their endeavor to secure control of the E. & N. A. R. R. a line will be at once extended from Dexter through Dover and Patten, to Houlton and thence to Presque Isle.

-The city of Montreal, which has shown itself alive to the important electrical developments of the age, being the first city in America to illumine its harbor with the electric light, is also likely to be the first city this side of the Atlantic to apply electricity to railway purposes. The Canadian Electric Light Company have ordered the necessary apparatus from Paris and will shortly experiment upon lighting up a street-car. The Electric light is now in nightly use in the dining-room and hall of the St. Lawrence Hotel, and arrangements are in progress to utilize the light at the "Windsor" as well.—[Moncton Times.

-The Morning News of the 28th inst. gives the following summary of mining matters in Portland: "Deer Isle was about 75 cents yesterday, with rather a quiet day. Geo. H. Blake has just returned from an examination of the Franklin Extension mine. It is rumored that the shaft is not on the vein, and the directors will be advised to drift for it. This will have a tendency to depress the price of stock. It was offered at 6 cents yesterday, and no takers. Edgemoggin still hangs fire, but is considered a fair stock to buy. Twin Lead is quiet at 60 cents. Mr. Bryant, of Deer Isle, was in the city yesterday. Sec. Gould had just returned from a visit to the mine, and finds everything looking promising."

-Red Beach is one of the busiest places to be found in Eastern Maine. It is located in the southern portion of the city of Calais and on the shores of the St. Croix. A plaster mill owned by Pike, Newton & Co. runs continually and an immense amount of plaster is made in the course of a year. The gypsum used is brought by vessel from Nova Scotia. The mill is now undergoing some repairs. This is also the centre of a large granite business. The quarry of the Maine Red Granite Company is but a short distance away. Hon. F. A. Pike, of Calais, is one of the most prominent members of the company. A large force of men are employed in the quarry and a great quantity of red granite is being taken out. Polishing works at Red Beach transform this granite into a very handsome article.

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Tremont Consolidated Mining Co.,	Portland,	Sept. 19,	\$200,000.
Old Ironsides Mining Co.,	Portland,	Sept. 24,	500,000.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, SEPT. 23, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Amoex	3 1/2	3 3/4	3	3 1/2	3	3 1/2	...	...	3 1/2	3 3/4	3	3 1/2
Atlantic L. S.	15	15 1/2	14 1/2	...	15	...	...	...	14 1/2	15	15	17
Atlas	...	...	...	...	...	...	...	...	...	...	...	...
Aztec	1 1/2	3/4	2 1/2	3 1/2	2 1/2	3 1/2	...	...	2 1/2	3 1/2	...	...
Blue Hill Copper	3 1/2	4	3	3 1/2	3 1/2	4	...	...	3 1/2	4	...	...
Bruswick	7 1/2	8 1/2	7 1/2	8 1/2	7 1/2	8 1/2	...	...	7 1/2	8 1/2	...	...
Calumet & Hecla	...	...	225	227	220	226	...	...	224	226	...	...
Catalpa	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	...	...	1 1/2	1 1/2	1 1/2	1 1/2
Central	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls	2 1/2	3	2 1/2	3	2 1/2	3 1/2	...	...	6 1/2	7	6 1/2	7 1/2
Contentment	...	...	...	...	...	...	...	...	...	...	...	...
Douglass	2	...	2	2 1/2	2	...	...	...	2	...	...	...
Dana	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver	1/2	3/4	1/2	3/4	1/2	3/4	...	...	1/2	3/4	1/2	3/4
Empire	...	...	...	...	...	...	...	...	...	...	...	...
Franklin	12 1/2	13	12 1/2	13	12 1/2	13	...	...	13	13 1/2	12 1/2	13 1/2
Harshaw	6 1/2	6 1/2	6	6 1/2	6	6 1/2	...	...	6 1/2	7 1/2	6	7
Huron	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	...	...	4 1/2	4 1/2	...	...
Hanover	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt	...	...	...	...	...	...	...	...	...	...	...	...
International	...	...	...	...	...	...	...	...	...	...	...	...
National	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	...	...	...	...	2 1/2	2 1/2
Oscoda	29	30	...	30	25	29 1/2	...	...	28 1/2	29	28	30
Pewabic	14 1/2	15	13 1/2	14 1/2	14	14 1/2	...	...	14	15	12 1/2	13 1/2
Phoenix	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac	...	...	...	...	...	...	...	...	...	...	...	...
Quincy	39	39 1/2	39	39 1/2	38	39	...	...	38	39 1/2	...	40
Ridge	4	4 1/2	4	4 1/2	4 1/2	4 1/2	...	...	4 1/2	5	...	...
Silver Islet	31	32	30	32	30	32	...	...	31	31 1/2	30	31
Star	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan	3 1/2	4	3 1/2	4	3 1/2	4	...	...	...	...	...	...

PHOSPHATE LANDS

In the richest zone of this mineral in the Ottawa district, adjacent to the "Goldring Mine."

On Tuesday, Oct. 11th,

at the rooms of the subscriber, 91 St. James Street, Montreal, will be sold the

MINES, MINERALS AND MINING RIGHTS

in and upon the undermentioned lots belonging to The Laurentian Phosphate Mining Company, Limited.

Portion.	Lot.	Range.	Township.	Acres.
E 1/2	14	7	Templeton	100
N 1/2	16)	7	"	200
N 1/2	17)	7	"	
N 1/2	10	8	"	100
N 1/2	15	8	"	100
E 1/2	10	9	"	100
N 1/2	23	12	"	100
..	22	13	"	200
..	23	13	"	200
W 1/2	25	13	"	100
S 1/2	9	14	Hull	100

1300

The company offers for sale the Mines, Minerals and Mining Rights in and upon and under these lots, amounting in all to 1300 acres, principally in the Township of Templeton. About 21 Pits have been opened on the property, all of which have shown Phosphate to exist in paying quantities to mine; the object in opening these was not to mine, but to develop and show the beds and veins as they exist. Nos. 22, 23, and 25 in 13th Range of Templeton have been most worked; on these there is a small amount of almost solid apatite analysing 90 p. c. Tribasic Phosphate.

The above are accessible at all seasons by good roads and very convenient for shipment, either by water or railway.

Map of the Mineral District on view, also Professor Selwyn and Vennor's reports can be consulted; the latter is very exhaustive and specific after a personal inspection.

Correspondence solicited.

In view of any purchaser buying the above 1,300 acres (the whole of the Company's lands) will be entitled to their charter of incorporation, together with Scows, Drills and all the Mining tools and other moveables belonging to this Company.

Sale at **ELEVEN o'clock.**

JOHN J. ARNTON.

Montreal, Sept. 5, 1881. Auctioneer.

THE

Mascot Mining Co

MINES AT GORHAM, N. H.

Office, Portland, Maine.

Capital \$500,000. Shares 100,000.

Stock Forever Unassessable.

DIRECTORS:

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C. W. HOBBS, Secretary and Treasurer, Portland, Maine.

C. C. LANE, 7 Exchange Place, Boston.

CHAS. H. LEWIS, 4 Sears' Building, Boston.

FRANK H. WILLIAMS, 22 Water St., Boston.

CONSULTING GEOLOGIST:

PROF. J. H. HUNTINGTON, 35 Congress St., Boston.

ENGINEERS AND METALLURGISTS
BINNS, KIDNEY & HOLLIDAY, 33 Hawkins Street.

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FINANCIAL AGENTS:

F. H. WILLIAMS & CO., 22 Water St.

ORES—Argentiferous Galena and Copper. PRESENT OUTPUT—Six tons daily. VALUE PER TON—Seventy-five dollars. COST OF REDUCTION, including freight, smelting, separation and refining—Twenty-seven dollars per ton.

Forty miners, and ten blacksmiths, carpenters, teamsters, etc., employed. The September development work will ensure an October output of twenty tons daily.

ASSESSMENT NOTICE.

Young Hecla Mining and Smelting Company.

At a meeting of the Directors of the Young Hecla M. & S. Co., held Sept. 22, 1881, it was voted to levy an assessment of five cents a share upon the stock of the company, payable Oct. 15, 1881. The by-laws provide that after the expiration of thirty days from the day fixed for the payment of an assessment, the Treasurer may sell a sufficient amount of the stock upon which the assessment remains unpaid to pay it, together with expenses. As the Company are about to resume work at the mine it is desirable that all assessments should be paid as promptly as possible, and the stockholders are requested to remit to Charles P. Wiggin, Treasurer, Bangor, Me., the sums due on the stock held by them, together with the certificates, in order that they may be marked assessment paid.

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Voluntary Licitation.

SALE BY AUCTION

of the celebrated

GOLDRING

Phosphate Mine!

The Subscribers have received instruction from the co-proprietors, Messrs. C. H. LETOURNEUX, R. A. R. HUBERT and ADOLPH E. OUMET, to sell at their Auction Rooms, No. 56 St. Peter Street, Montreal, on

Monday, 10th October next,

the celebrated **GOLDRING MINE**, with Buildings, Tools and Furniture. This property comprises **1,600 Acres** of land, more or less. The lots adjoin one another, and from an analysis made by J. BAKER EDWARDS, of the Phosphate, on 4th September, 1880, yielded **90.10** per cent.

The Mine is situated in East Templeton, County of Ottawa. This Township, according to the Geological Map, is considered the richest in Phosphate; only distant from Q. M. O. & O. Railway and the Ottawa River about ten miles, which makes the shipping either by rail or water easy. The roads leading to the Mine are good, and the transportation of the phosphate at all seasons done at moderate rates. Several large and substantial buildings are erected—Boarding House for Miners, dwelling for Superintendent, large building for phosphate, Powder Magazine, Store for Provisions, Forge with Tools, Office for the Company, Tramway Cars, and a line of Telegraphy connecting direct with the Dominion Telegraph Co., at Montreal; a large quantity of tools of the best make. The property is wooded, chiefly with hardwood.

Anyone desirous of visiting the property can do so in the space of 24 hours, including going and coming, from Montreal. There is a guardian on the property, who is there for the purpose of showing the property. From the station at East Templeton the public road leads direct to the mine.

The conditions of the sale will be one-third cash, one-third in six months and one-third in twelve months, with interest at the rate of six per cent. on the balance unpaid. Each bidder will have to deposit \$1,500. Further information to be obtained from Auctioneers.

Sale at **ELEVEN o'clock A. M.**

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Mining and Smelting

COMPANY.

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Capital, \$500,000.

100,000 Shares. Par Value, \$5.00 each. Treasury Fund, 20,000 Shares.

President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.

Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

BLUE HILL CENTRAL

Mining and Smelting

COMPANY.

OFFICE.....BANGOR, ME.
MINES AT.....BLUE HILL, ME.

CAPITAL, \$500,000.

100,000 Shares. Par Value, \$5.00. Treasury Fund, 30,000 Shares.

Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

Silver Hill Mining Company.

Office, 11 CENTRAL STREET,

Room 4, Boston.

Mines at Garland, Me.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50.

25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.

Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

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CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY,
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Lafan, Jeremiah Wooster.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding. Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Rodloff, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
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President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

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OF THE
Mining Districts

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CHANGE OF TIME, June 27, 1881.

	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	6.00	10.00		5.03
Arrive Bangor,		7.03	11.15	6.00
Leave Bangor,	7.35		2.00	7.00
Arrive Bucksport,	8.40		3.15	8.07

The 6.00 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
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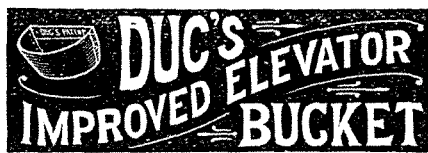
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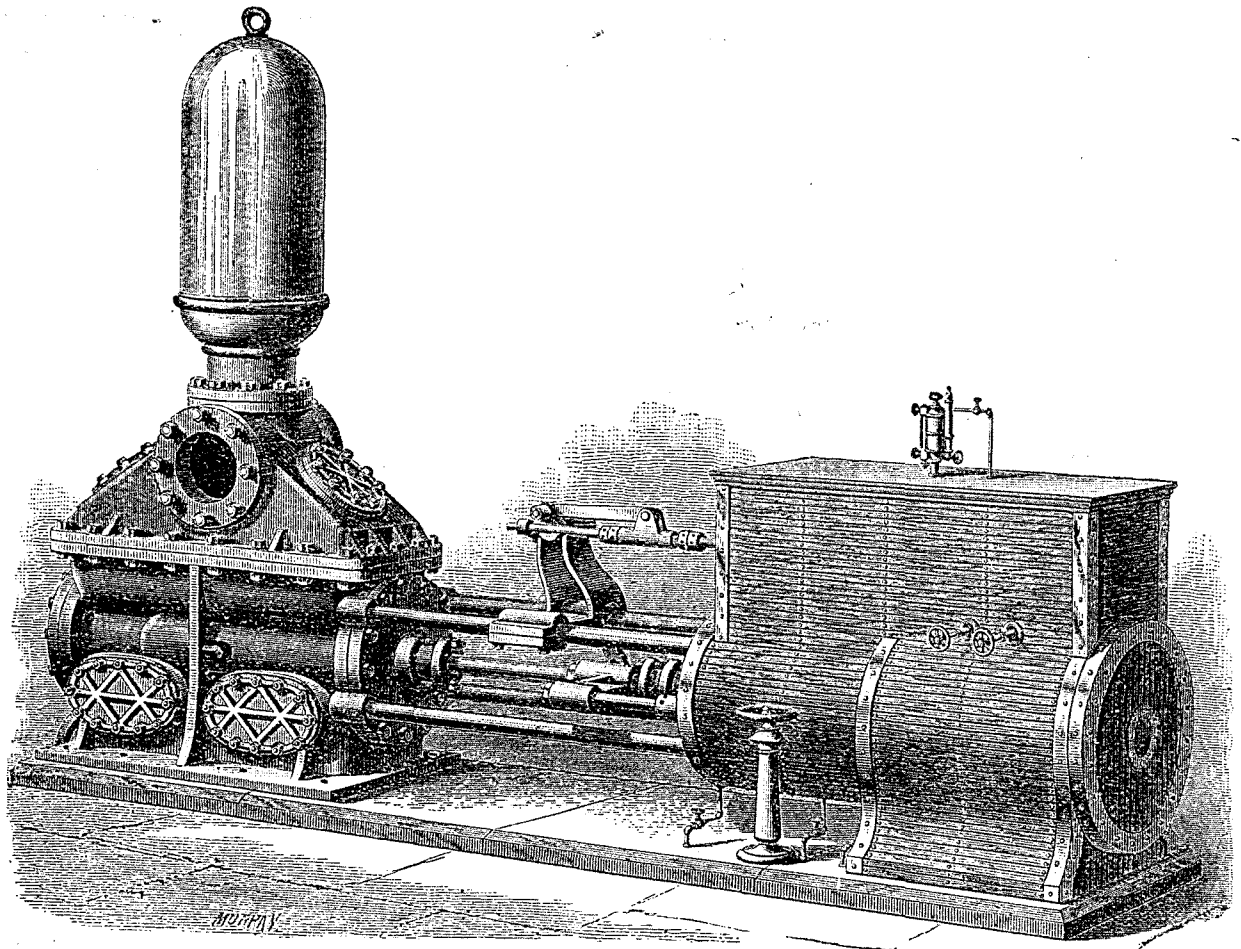
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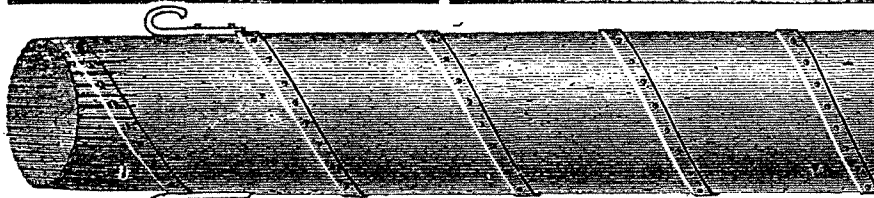
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Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, OCTOBER 7, 1881.

Mining securities, judiciously selected, are among the most profitable investments known.

A prospect, no matter how valuable, cannot be made a good mine without a liberal expenditure of money.

Stringency prevails in the Boston and New York money markets and the share market is accordingly somewhat depressed.

In the Eastern mining districts things are getting down to a regular business like manner of work, and there never has been a time since the first prospects were made when public attention has been so anxiously turned toward this new industry with faith in its ultimate success as a paying enterprise, as at the present time.—[Sullivan Bulletin.

This is about the time for those who speculate in "coppers" or other mining shares to bring forth from the hidden chamber of memory that solid bit of sense embraced in the advice of old Jacob Little, the father of operators on 'Change, in New York, which reads, "If you will gamble in stocks and intend to make money, buy 'em low and sell 'em high!"—[Exchange.

Parties who would gladly share in the profits arising from fortunate investments in mining stocks, but who are fearful of the attendant risks, are frequently asking how they may know where to invest. There is no easier or better way in which to acquire the necessary knowledge, and familiarize one's self with the whole field, than to read from week to week some one of the reliable mining journals of the country.

The trivial circumstances which often lead to the discovery of rich mineral deposits have been the subject of frequent remark. Indeed, the vast majority of the prominent mines of the world have been brought into existence by accident. But the first instance which has come to our knowledge of the discovery of a mine by the sense of smell, has recently occurred in New Brunswick, as will be seen by reference to a British Province item in another column.

The fact that one-half of the territory of the United States is mineral-bearing and the mining interest is rapidly assuming colossal proportions and is already of immense value and importance, demands recognition. The Government has for some time supported a department of agriculture and it is a question whether the industry of mining for the precious metals—iron, copper, and lead—has not grown to be of sufficient worth to be entitled to the same care and assistance which is bestowed upon other and less important vocations.—[Chicago Mining Review.

Investors must bear in mind the fact that shares in a good mine are not necessarily a safe investment. The present and prospective value of a certain stock depends far more upon the management than upon the mine. Instances are innumerable where a company have, by economical and intelligent management, made a paying institution out of what would, under ordinary circumstances, be considered a poor mine; while, on the other hand, there are many mines having an abundance of high grade ore, easily worked, and in most favorable localities, which have never paid a cent to their stockholders and never will until after they have been sold out by the sheriff.

Both on the Pacific Coast and in the East, a great many people labor under the impression that as soon as a shaft strikes mineral it is a mine ready to ship ore and pay profits or dividends. It is seldom taken into consideration that hoisting machinery, shaft houses and other buildings must be erected, stations or plats made and levels driven in different directions, so that stoping can be carried on advantageously. Where there is a great deal of water encountered, the delay is much greater and also the expense. In such instances costly and heavy machinery is required, which must be set on solid masonry, and pits and cisterns excavated at stated distances down the shaft, all of which requires a great deal of time and money.—[Ruby Hill Mining News.

The past week has been an active one for Maine mining shares but transactions have been largely limited to a few prominent stocks. On the Boston Stock Exchange there have been scarcely any sales of mining stocks and there are no special changes to note. On the Boston Mining and Stock Exchange several of the Maine stocks have been dealt in very heavily. Deer Isle has come very prominently to the front and has engrossed a very large share of the business of the Exchange. It will be remembered that for some weeks this stock remained at about 75c. During the present week it has however made giant strides and very heavy sales have been recorded daily. On Wednesday it sold at \$1.19 to \$1.20 and \$1.40, \$1.43, \$1.44 and \$1.45 buyer

60. Twin Lead has also made a decided advance and Wednesday sold at \$1.04 to \$1.06 and \$1.16 to \$1.18 buyer 60. Milton is strong at \$1.04 with \$1.14 offered buyer 60. The day previous, Tuesday, a block of 20,000 shares was sold buyer 60 at \$1.20. On Wednesday, Copperopolis sold at \$2.10 to \$2.12, Young Hecla 34c to 36c, Empire at 30c and Peabody 56c.

REPORTING MINING INFORMATION.

[Placer (Cal.) Herald.]

When a man has but little, his general disposition is to make it appear that he is pretty well fixed. When he has much, he becomes indifferent as to appearances, or as to what others think of his circumstances. With miners this same characteristic is even stronger. When a miner finds a ledge he talks as though he was independent. When he gets a small hole in the ground, he considers his prospects first-rate, and is glad to have the reporter visit him and write up his claim, but when he strikes the real stuff itself, and his mine is paying big, he suddenly becomes indifferent, and about all the reporter can get out of him is: "Oh, yes, we are taking out a little gold, but expenses are very heavy;" or "we are doing pretty well, but don't want anything said about it." Our experience is and has been that the man who has got but little of substantial interest to report is free with his information, while the man who could furnish an item of solid merit that would really help the district generally keeps clear of the reporter, and has but little to say when found and run down. Of course to this, as well as all other rules, there are exceptions, but the exceptions are not common. There are mines being worked in this part of the country now that if the truth were told of them would make a good showing, but the exact truth is difficult to obtain. We may say, "we hear" so and so, but that is not just exactly the kind of information that does the most good. Mine owners and mining superintendents could assist the publisher very materially in overcoming this difficulty if disposed to do so, and publishers would be pleased if they would. For our part we shall always be glad to know what they are doing. If their work, however, is "dead work," let them say so, and leave speculation as to what they expect out of the report. It is no discredit to a mine that a certain amount of "dead work" has to be done on it. In all cases more or less is necessary. If they are taking out ore let them say so, and if they are crushing let them tell frankly whether it pays or whether it don't. Such mining information, reliably reported, will be read and carefully considered, and would do good. Generalities have but little weight.

Personals.

HON. F. M. LAUGHTON, President of the Stewart, is in Boston this week.

E. C. NICHOLS, Esq., of this city, has gone to Boston on business connected with the Peabody Mining Company.

SAMUEL CAMPBELL, Esq., President of the Cherryfield Silver Mining Company, was in the city early in the week.

W. J. WEBB, Esq., the well known broker, has made a brief sojourn at the Katahdin Iron Works during the past week.

E. M. HERSEY, Esq., President of the Twin Lead, has returned from his business tour to Minnesota and is now passing a few days in Boston.

MR. E. C. HOLSKE, of pedestrian fame, is now sporting and local editor of the Mining Herald, of Shenandoah, Schuylkill County, Pennsylvania.

FRANK H. WILLIAMS, of the brokerage firm of F. H. Williams & Co., has purchased a seat and been admitted to membership in the Boston Stock Exchange.

B. S. GRANT, Esq., of the Sullivan Mining Company, and a party of Boston gentlemen passed through this city Tuesday evening on their return from a trip to the mine.

PROF. HENRY W. ADAMS, of the Adams Mining and Reduction Works, died at Charlotte, N. C., last week. Prof. Adams was a native of Massachusetts and had been in North Carolina but about nine months.

MR. ISAAH S. EMERY has returned from New York and will pass a few weeks in our city. Mr. Emery is now Assistant General Manager of the American Palace Sleeping Car Company and is located at No. 2 Wall Street.

HON. E. L. FREEMAN, Editor of the Central Falls (R. I.) Visitor, in Company with Mr. Crawford also of Central Falls, is visiting the scenes of his youth in Camden and Lincolnville, and, with dogs and gun, enjoying such sport as the vicinity affords.

DR. HANSON, of this city, has returned from a trip to Nova Scotia. During his stay in Halifax he attended the Dominion Exhibition and beheld a very extensive collection of minerals from the Provincial mines. He also made a visit to the Montague gold mining district.

RIGHT HON. EARL OF AIRLIE, Countess castle, Forfarshire, Scotland, died of congestive chill at the Windsor hotel, Denver, recently. The earl was fifty-three years of age, and was on a visit to Colorado in order to give his personal attention to important mining and real estate interest he possessed there.

MR. JEWETT, of North Vassalboro, who had saved about \$400 by a year's hard work in the Colorado mines, was on his way home to his family when the train was boarded by robbers near Independence, Mo. The whole amount was taken from him, together with his watch. Being a poor man the loss comes very hard.

HON. E. R. MUDGE, one of Boston's merchant princes, died on Saturday last after an illness of very brief duration. He was one of the most successful business men in New England and enjoyed in the highest degree the respect and esteem of Bostonians. The deceased was born in the vicinity of Bangor in the town of Orrington and leaves a fortune of several millions. His public benefactions have been munificent.

Dips, Spurs and Angles.

—Deadwood numbers four ex-members of Congress among its citizens. That is always the way when a mining camp abolishes the vigilance committee and tries to be respectable.—[Boston Globe.]

—"Elephant" is the name of a new town in Colorado, and it is so built that it is hard to determine which is the tail end.—[Detroit Free Press. The name will be more

appropriate when a trunk line is built through it.—[Lowell Courier.

—The Geological Congress in session at Bologna can make itself famous by determining the period in which the sausage was invented in that city, and also the age of the specimens exported to this country for the discouragement of lunch fiends.—[Boston Globe.

—The following is a verbatim copy of a note tied to a handful of mineral on exhibition at the State Fair last week: "From the Lehigh grupe of mines from Bartlett moun the head of ten mile this property is four sale dreck to Arthur Leghown Kokomo Colorado."—[Colorado Miner.

—It is probable that most newspaper men have been impressed more or less with the fact that just before the hour of going to press, when there is a rush of copy which must "go up," five compositors can not set as much type as two can when copy is scarce and the editor is clubbing his brains for ideas.—[Rome Sentinel.

—Grand Manan, according to the Island News, has a curiosity in the shape of a "pie-bald, patchwork, variegated, concreted, moltened, crucibled, congealed, conflagrated, horn-blended, marmorean rock, bearing the mysterious tracery of a chemist-artist of another world!" That should attract an immense crowd of curiosity seekers to the Island next summer.

—Not many moons ago an airy guest registered at one of our principal hotels and, after seating himself for dinner, a waiter rushed to serve him. In the absence of the printed "bill of fare" the principal dishes were called off. His order was: "Give me a little of everything." In a few minutes he was served with a huge steaming plate of hash. The "carte blanche" order had been literally filled, and finding that he had been outflanked, amid a gentle murmur from the other guests at the table, he hastily finished the dish, saying "that was just what I wanted."—[Florence Mining News.

—The Toronto Globe complains that the Ottawa government has lately ordered the purchase of weigh scales in the United States and rejected similar articles of Canadian manufacture; has purchased uniforms abroad, in spite of the fact that there are hundreds of tailors in the Dominion who would gladly have undertaken the work; has asked for prices of a New York firm with a view to ordering postal cards from the States, while there are many Canadian printers prepared to furnish a supply; and has ordered the printing for the Intercolonial Railway in New York, in spite of the fact, as the Globe asserts, that the work would be done as well and as cheaply in Canada.

—A German paper has been compiling the statistics of the world's correspondence by post and by telegraph. The latest returns which approached completeness were for the year 1877, in which more than 4,000,000,000 letters were sent, which gives an average of 11,000,000 a day, or 127 a second. Europe contributed 3,036,000,000 letters to this great mass of correspondence; America, about 760,000,000; Asia, 150,000,000; Africa, 25,000,000; and Australia 50,000,000. Assuming that population of the globe was between 1,300,000,000 and 1,400,000,000, this world gives an average of 3 letters per head for the entire human race. There were in the same year 38,000 telegraph stations, and the number of messages may be set down for the year at between 110,000,000 and 111,000,000, being an average of more than 305,000 messages per day, 12,671 per hour, and nearly 212 per minute.

—Extensive ledges of mica have been discovered in East Compton, about ten miles from Plymouth, N. H. The mica is pronounced equal or superior to the Groton mica, and is one of the most advantageous spots for working. The bed is only three miles from the proposed Pemigewasset Valley railroad. Operations will probably begin on it soon.

New Brunswick Mining Regulations.

[From the St. John Sun.]

Since the late sale of mining rights for Gloucester and Restigouche, which realized the handsome sum of \$3,425, the attention of the public has been more directed to the subject of mines and mining than for many years past.

We were surprised on looking over the mining regulations for New Brunswick, approved in Council, 21st Dec., 1872, to find them so loose and unfair. Under these the course pursued by any one desirous of securing a right to mine on Crown land is this:—The party wishing a license applies at the Crown Land Office for a right to mine within a tract not exceeding five square miles, naming the county. This is offered for sale by public auction at the Crown Land Office at the upset price of \$20 per square mile. If there is no opposition the applicant gets his right at that rate. He may then have another right offered, or indeed as many as he pleases immediately after the sale of the first. The first purchaser is allowed 12 months after the day of sale in which to select his ground, the second purchaser having twelve months and ten days, and so on; each purchaser being allowed ten days more than his predecessor.

The result of this is that when the purchaser pays his \$20, the right of search for minerals for the whole county is tied up for a year; for certainly no one would prospect for a mineral vein which could be taken away from him without any chance of competing for it.

When the purchaser locates his mining right he is entitled to a lease for a term of 25 years. Under this lease he is bound to pay five per cent. on the value of all other minerals raised or dug from the premises, excepting coal, in case the profits of the undertaking exceed six per cent.

Had the tax been five per cent on the profits of the Company's operations, no one could have complained very much, but when five tons out of every 100 tons of ore are declared the property of the crown, without its having to contribute one cent towards the expense of raising it, the burden becomes most onerous. The lease, by these regulations, is also required to contain a covenant for renewal, or that the crown may renew possession and take the improvements at a valuation to be made by arbitrators, without naming what improvements are to be valued or what are to be considered improvements. Thus, after a company has developed a mine, and by its shafts and drifts exposed a very valuable vein of ore, it may be taken away by the crown, at the end of 25 years, merely paying for the improvements made by the company and nothing for the ore that may be exposed.

We think, therefore, that taking these matters into consideration, it is high time the regulations should be altered and that the subject of our mines and minerals should receive the attention which it demands. The whole subject should be studied up, and the mining regulations of other countries examined by some person competent so to do, who should be required to report on the advisability of adopting such portions of them as may be suitable to the wants and requirements of the Province. Nova Scotia appears to be very far ahead of New Brunswick in this matter. There they have a Commissioner of Mines, Mr. Gilpin, a very competent and useful officer, to whom the Province is indebted for several very valuable and useful reports, and there they also have, we are informed, excellent mining regulations.

French Capital in Canada.

[St. John Daily News.]

Our readers are perhaps not aware to what extent French capital is becoming a factor not only in Provincial but also Dominion affairs. So far as we have seen even the Montreal papers have not clearly set forth the number and character of French enterprises established in this country within the past two years. The following information will therefore be new, and very useful for reference:

I.—A new line of steamers, with fortnightly service is to run between Rouen and Montreal in summer, and Halifax in winter. Four vessels of 3,000 tons each have been chartered, and an order has been given for building four new vessels. The French Government have granted a subsidy of \$100,000 per annum for ten years, and the Canadian Government \$50,000 per annum for three years. Sir Hugh Allan, who was recently in Paris, is supposed to be connected with the company.

II.—When the projected line of steamers between Brazil and the Dominion broke down, the French took it up, and we are assured of a service from France to Brazil via Canada and La Plata. The company has been formed by the zeal of Mr. Bentley, Consul-General of Brazil in Montreal and of Mr. Lefavre, ex-Consul-General of France at Quebec. France gives a subsidy of \$100,000 per annum for ten years; Brazil, \$50,000 for the same time; Canada, \$50,000 for three years; and La Plata,

\$45,000 for five years. Other South American States will contribute, if steamers touch at their ports.

III.—Reinairt & Co., bankers in Paris, are leading members of the Canadian Pacific Railway syndicate.

IV.—The same bankers are said to be forming, or ready to form, a powerful French Syndicate, for the purpose of leasing or buying outright the North Shore Railway. There is logic in this, seeing that this is clearly the eastern branch of the Canada Pacific railway. Reinairt & Co's bonds are rapidly being taken up in Paris.

V.—The same company are engaged in selling large tracts of railroad lands in the Northwest to French capitalists for colonization.

VI.—A company has been formed in Paris, with a capital of 12,000,000 francs, for the development of the mineral deposits in the Laurentian range.

VII.—Another company in France, with a capital of \$1,500,000, have already entered upon phosphate mining along the Du Lievre river, where they have paid \$100,000 for the land.

VIII.—Still another French Company, with \$100,000 capital, has taken up lands in Ottawa county to develop its rich iron mines.

IX.—There are in this Province two Credit Foncier companies with \$10,000,000 of capital each. They have already lent, within a few months, over \$500,000 each to farmers at 6 per cent., and their operations extend to Ontario, Manitoba, and New Brunswick.

X.—Our Provincial Government obtained with ease a loan of \$4,000,000 at exceedingly favorable rates.

XI.—There is the French company of Canadian Phosphates, with a large capital and headquarters at Bordeaux; their agent in Montreal is C. O. Ferrault, Esq., French Vice-Consul.

XII.—There are the great enterprises of the Union Sucriere or beet sugar manufacture with which our readers are already familiar.

This catalogue is long enough surely, and full of significance. France is a very rich country, and if her first ventures succeed with us, as we believe they will, we may look for an influx of still more capital in the future. The rapid development of the great resources, not only of the west but the east, may therefore be safely counted upon.

CORRESPONDENCE.

Sensible Advice to Prospectors.

(Special Correspondence to the Maine Mining Journal.)

A noticeable fact has been observed by all who have personally given attention to it—that is—that in nearly all the developments that have been made in Maine, not only has the ore changed in character at some considerable depth, say 100 feet or more, but that the veins have become wider and more mineralized.

A great many prospects have been started and but few have been continued, the parties interested in some cases being unduly excited at the first outlook, spending too much money upon surface work and buildings, and being unable from want of means to pursue the work of deep excavations, just when that work would have probably shown the best results. To sink a shaft 100 feet deep—in theory—will only cost say \$2,000 or about twenty dollars per foot; in practice—well, I will leave that to those who have tried it to determine how much.

The writer is now engaged in sinking, not a shaft, but by means of a drilling machine, a hole six inches in diameter. In ordinary slate rock it goes down about four feet per day. The crushed rock is taken out and at about every foot the rock is assayed. In the locality where it is being worked, the rock from surface to the depth of 25 feet showed by assay no metal of value; from that depth our assays show both silver and gold, the quantity increasing as the depth grows greater. So that it seems clear that the mineral vein, whatever its ultimate value may be, did not come to the surface, but was capped over by country or other rock.

This prospecting work can be done at a cost of from \$3 to \$5 per foot depending upon the character of the rock. There is not only great saving in cost but what is sometimes of yet as great importance to the prospector—much time. For with no untoward accident, a shaft [hole six inches in diameter] can be sunk 100 feet deep in 25 or 30 working days.

It seems to the writer that this drill and working of it would have saved and may do so in the future a great amount of money and vexation. This article is not written to advertise the machine, but to give parties who would like some knowledge of what is down below an opportunity to find out, at a small outlay, and parties desiring further information can by applying to the MINING JOURNAL obtain the address of the writer. *

Smelting of Copper Ores.

(Special Correspondence to the MAINE MINING JOURNAL.)

Sulphuretted ores, which generally contain more or less iron and other foreign metals, require a complicated treatment which depends upon the fact that the copper has a greater affinity for sulphur than the associated metals; so that if a double sulphuret of copper and iron be partially oxidized by roasting in the open air, and then melted in a furnace, the iron in an oxidized condition unites with the foreign matters to form a more or less fusible cinder or slag, while the copper still retaining its sulphur, separates in the shape of a dense brittle mass known as regulus or matte.

To facilitate this process, various ores are often mixed together in order to secure greater fusibility, and oxidized ores are sometimes mixed with highly sulphuretted ores, by which means the copper of both is got in the form of regulus. This regulus also holds any gold or silver which may have been in the ore. The regulus or concentrated copper ore thus obtained, still containing a portion of iron and sulphur, is again roasted and fused with some flux, whereby a richer regulus is obtained; and this operation is repeated until a nearly pure disulphide of copper results.

For the extraction of the copper from this two plans are adopted.

The first, followed generally in Wales and most European works, consists in partially roasting the refined regulus, by which a part of the sulphur is removed as sulphurous acid, and the combined copper is converted into oxide; and then causing the latter to react upon the yet unoxidized portion, the sulphur of which fixes upon the oxygen of the oxide to form sulphurous acid, while the copper of both is left in the metallic state.

The second plan consists in continuing the roasting and oxidization of the purified and pulverized regulus until the whole of the sulphur is expelled. The copper, being then in the condition of oxide or suboxide, is treated directly with charcoal.

The details of subsequent purification are so various that a description would occupy too much of your space. Chemically pure copper is produced only for laboratory purposes and for alloy in gold and silver coinage and is not desirable for commercial use.

LODES, LEADS AND VEINS.

MOUNT MICA.—Active mining operations commenced this week at Mount Mica. Mineralogists from all parts of the country are cordially invited to visit Mount Mica at Paris, Oxford County, and behold this wonderful property.

ATRATO.—The stockholders of the Atrato Mining Company recently held a largely attended meeting in Portland. The best of feeling was manifested and all the votes passed were unanimous. The plan authorized for obtaining funds for further operations in the rich fields to which the company has the exclusive rights, is to virtually reorganize the company in such a manner as to place one-half of its capital stock in the treasury for a working capital, and to obtain subscriptions at once for a sufficient portion of this treasury stock to insure ample funds to fit out a second expedition for the purpose not only of sub-aqueous but also of hydraulic and quartz mining, as soon as deemed expedient. The company has valuable mining machinery now stored at Quibdo, and will have very large mining claims from the government. If it is judged necessary, steam-boat communication will be established between Carthagena and Quibdo, which branch of the company's proposed operations the subsidies from the governments of several of the States of Columbia, together with the freights obtainable, will undoubtedly make very profitable, besides securing free transportation of its own men and supplies, and prompt and regular communication with the home office. It is deemed very important that the subscriptions for the treasury stock be obtained promptly, so as to assure the fitting out of the expedition before the most favorable season for resuming operations in the streams is too far advanced. The probability is that those who expect to obtain stock at the bottom price will have to subscribe for it very soon. The plans of the company if carried out will no doubt make the stock heretofore issued very valuable, and the holders of that stock will therefore naturally be predisposed to help on these plans by adding some of the new stock to that already held by them. Subscriptions for a considerable amount have already been promised and an opportunity to subscribe will be offered for a few days at the company's office, where further information concerning the plans and prospects of the company will be cheerfully given. The capitalization of the company when reorganized will not be less than \$500,000, one-half of which will be exchanged for the old stock and the other half, as already stated, placed in the treasury.

ESSEX CONSOLIDATED.—The work on the Essex Gold Mine (consolidated) of Lyman, N. H., is progressing in a more than satisfactory manner to the directors. The drift on the 130-foot level has been pushed in to a distance of nearly 60 feet, and the gold bearing quartz vein shows a width of from eight to twelve feet. The vein on the new cut is gradually widening, as the descent is made, and is now nearly three feet in width. The ore taken from this is remarkably rich, assaying several hundreds of dollars to the ton. The company has at the present time some three hundred tons of fine ore on the dump, and as soon as the concentrators for which it has contracted are completed, which will be in the course of a week or ten days, milling operations will be actively prosecuted. The Essex has been making no stir or noise before the public, but has been quietly developing into a first-class mining property.

NORTH CASTINE.—The Superintendent reports the mine looking nicely and the ore coming in bigger and better than before.

DODGE & JONES.—Work continues in the prospect shaft on the Pine Tree vein on the Dodge property and an improvement is noticed with every foot gained in depth.

PEABODY.—The property of the Peabody Mining Company, whose list of officers will be found in another column, is located on Columbian Mountain, near Lawson, Clear Creek County, Colorado. Two shafts are down fifty feet each and arrangements have just been perfected for sinking fifty feet further. The Superintendent, Mr. C. L. Janes, reports the shaft as being in a promising mixture of quartz and mineral, a sack of which, weighing seventy pounds, recently treated at the Georgetown agency of the Boston and Colorado Smelting Works, yielded at the rate of 232 ozs. silver, or \$213.86, per ton. Mr. Janes states that the Peabody Lode has produced some of the richest ore in the county.

COPPEROPOLIS.—Work on this property is progressing rapidly, in sinking the shafts, and bringing to a state of completeness such necessary buildings and other work as must be done so that work in the mine shall not be interfered with by the coming winter season.—[Bulletin, Oct. 1.

Blue Hill.

TWIN LEAD.—Supt. Duff reports to Secretary Mason under date of Oct. 2nd as follows: The work at the mine is progressing as fast as possible with our present available means. We are now sinking on the south vein in very good ore and every foot in depth improves in quantity. From recent assays by Mr. Barclay we find the sulphurets carry a larger percentage of copper than vein No. 1. This being the case our aim now is to find a body of ore massive enough for smelting without too much cost for hand dressing.

DOUGLASS.—The Douglass Copper Mining Company have sold 15,000 pounds of their ingot copper to a large manufacturing establishment in Boston at 18 cents per pound and the copper has been shipped from Blue Hill during the present week. It is understood that eight thousand more pounds of copper were refined at the works on Tuesday. The President of the Douglass has given through the columns of the Boston Advertiser the following address to stockholders:

To the Stockholders of the Douglass Copper Mining Co., of Blue Hill, Me.:

I am now enabled to show from practical results that your confidence in the ultimate success of the Douglass copper mine has not been misplaced. The immensity of the Douglass lode, its richness, and the ease with which the ores could be extracted, have long been established facts in the minds of the management. The question of reduction has, however, been a difficult problem to solve, but I am happy to assure you that we are now masters of the situation. Our reduction works are running to our perfect satisfaction, and we are producing and shipping to the market a splendid grade of ingot copper. The mine is to-day on a self-sustaining basis. With the completion of our plant to more nearly accord with the output of the mine, we shall not only earn the cost of production, but leave a handsome surplus to the stockholders.

Respectfully yours,
H. GREGORY, JR., President.

Sullivan.

MILTON.—Work is going along with that steady perseverance which has always been characteristic of this company. Three Burleigh rock drills are kept unceasingly at work in the drifts and these laborers must eventually result in success.—[Bulletin, Oct. 1.

PINE TREE.—The buildings on this property are getting along well and will soon be finished; and all necessary work that must be done prior to putting the machinery in place is being attended to steadily and energetically. The hoisting frame is

nearly completed; the wharf timber is nearly all in the tide and will soon be rafted to the mine from which improvements on the water front will be made.—[Bulletin, Oct. 1.

British Provinces.

It is reported that Henry E. Wood, a Leadville assayer, has gone to Nova Scotia to examine some of the reported rich mines in that Province.

Some time ago we referred in our mining column to a discovery of specular iron ore in the county of Guysboro' by Messrs. G. W. Stuart and J. B. Gladwin. Reports now reach us that it is likely to develop into a mine of great value. A shaft has been sunk 10 feet deep and 15 feet square, neither wall yet visible. Surface indications would lead to believe the vein to be at least 25 feet high. The quality of the ore unearthed is pronounced by expert miners to be equal to any yet discovered. The mine is some six miles from the sea, and a road is being built to it. From the reports received from time to time concerning this "find" we should not be surprised if it proved one of the most fruitful in the Province.—[Halifax New Era.

The Halifax New Era of Oct. 1st says: "The Ohio Company, which has been working the iron mines in Hall township, ceases operations to-day. It is now twenty months since the company first began taking out ore and shipping it to other blasting furnaces in the States, and in that time they had taken out 30,000 tons of ore. The royalty paid amounted to \$28,000, a reduction being made last year after a certain quantity had been taken out. The cost of mining averaged \$1.75 per ton, so that there was quite an amount of money left in this locality by the owners, whose enterprise made the iron ore enterprise boom. The works at the mines have been dismantled, and the machinery will be shipped to the States at once."

A Halifax correspondent writes the MINING JOURNAL: "The gold mine at Moose River, near Halifax, N. S., purchased by Mr. James Brady and associates from Mr. James G. Foster a few months since, shows such favorable results that the purchasers have begun mining operations on an extensive scale. The improved methods and machinery introduced by Mr. Brady although many of them are common in older and larger mining countries are largely new and adopted for the first time in practical gold mining in Nova Scotia. Notwithstanding the fact—now generally admitted—that in no mining country can improved methods be used to greater advantage than in Nova Scotia there has been a strange persistency in avoiding their adoption whilst they have been found essential to the successful working of the famous mines of other countries."

For the last two or three months an expert in matters connected with explorations for anthracite coal has been at work at and near Lepreaux, in the vicinity of the shaft which was sunk in 1877. This gentleman is employed by a few persons, here and in Philadelphia, who are anxious to settle the question as to the existence of anthracite in this locality. Amongst those who are taking an interest in the exploration is a principal owner of anthracite mines in Pennsylvania, who will invest in an anthracite property in New Brunswick, if the result proves favorable. Up to the present a thorough search has been made over a large area, but, while the formation seems very favorable, nothing of practical advantage has been found. The expert is now boring at a point several miles distant from the shaft formerly sunk, a point where the indications seem most favorable. Between the inflow of water and the presence of gravel the operations of the boring party are necessarily slow. The expense of the experiment will be considerable, but the finding of anthracite would be an event of importance in our history. If anthracite does not exist at Lepreaux it will be well to have the fact established. It is altogether likely the question will soon be settled, one way or the other.—[St. John Sun.

DORCHESTER COPPER MINES.—For some months past prospecting for copper has been carried on quite extensively in the vicinity of Dorchester by Mr. Couch, an American gentleman, from Newburyport, which if current reports be true has resulted in the discovery of very rich deposits. Mr. Couch has secured the mining right of six or seven farms through which the veins of copper run. He has already disposed, we hear, of several shares of the mine to a party of New York capitalists for the handsome sum of \$140,000. Mr. Couch conducted his operations with great secrecy, being only known in the matter as a resident of Moncton. The vein is understood to run through the rising ground about a mile back from the Penitentiary hill, from which it is separated by a narrow valley. Other prospectors had been previously at work but found no paying quantities, though in one case they made quite a large excavation within a few feet of the vein that Mr. Couch has since traced out. If reports are to be credited, the mine is likely to prove one of the best paying on this continent, and if

so, there will be little difficulty in placing it on the market. The discovery of the vein is the most remarkable part of the story. It is said that the air in the vicinity is at times impregnated with a coppery odor, and that this at first attracted attention. Following up the clue, the vegetation on the hillside was found to be killed, caused by the trickling down of water strongly tinctured with verdegris. With such surface indications an experienced miner had little difficulty in striking copper deposits, though it was the work of months to follow the course of the vein, and determine its thickness, through the farms on both sides of where the strike was first made.—[St. John Sun.

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

Ruby Hill, Nevada, has had a snow-storm.

The Chapparral Company's mill started up on the 27th inst.

Jim Anderson, of the Ruby Hill Mining News, has purchased the Eureka Leader.

Dakota produced 7,332 ounces of gold, valued at \$123,544, during the month of August.

Gen. Thomas Jordan, editor of the New York Mining Record, has been added to the Hibernia board of directors.

An extensive vein of pure copper was discovered last week twenty miles north of El Paso, in Texas. Specimens analyzed carry gold.

Leadville Consolidated promises an immediate dividend of \$20,000, another November 15, and a probability of dividends for some time.

The excitement over the discoveries in what has been christened "Safford" district, Nevada, still continues, and the camp seems likely to become permanent.

The Rocky Mountain Mining Review says "The output of Colorado will be larger by about one-half this year than last, and still our mining interests are in their infancy."

Everything is reported "booming" in Idaho. New mills are going up and large and steady ore shipments are being made. Dividends are already in sight in many of the mines.

It is understood the Iron Silver Mining Company will pay a dividend of \$100,000 in October. The ore bodies show no signs of exhaustion though the production is double that of any other mine in Leadville.

The Copper Belt Mining Company is the name of a new Connecticut organization, having a capital stock of \$100,000, and owning valuable claims at Marysville, Piute County, Utah. Operations are to be commenced November 15th.

It is reported that the Sierra Nevada crosscut went through four feet of low-grade ore on Thursday night last and came into porphyry. Senator Fair says the assays were not as high as he expected. The ore, however, being from the edge of the vein, he hopes to find better further on.

The death of Prof. Henry W. Adams, of the Adams Mining and Reduction Works, will not, according to the Salisbury Watchman, prevent the prosecution of the proposed business of the works. A brother-in-law of Prof. Adams will take charge and carry out the ideas which led to their erection.

SANTA RITA COPPER MINES.—The Silver City Herald says: "Santa Rita is already a perfect beehive; but the company propose to increase their force to fully four hundred men. These copper mines are destined to become more famous than ever. Capt. Slawson, the Superintendent, is evidently the right man in the right place."

Gold and silver mining stock companies are becoming an institution peculiar to the enterprising capitalists and business men of Washington, says the Washington Herald. Several companies for the development of some of the rich gold and silver mines of Arizona and New Mexico have been organized in Washington within the present year.

Mr. John R. Bothwell telegraphs from Hite: "New double shaft going down in 12-foot ledge, furnishing ore for 20 stamps. Air compressor, pumping and hoisting machinery in place, and air pipe laid from the river. Dam thoroughly repaired, and all improvements ordered by President Clark in progress or completed. Everything running smoothly and economically."

In exact figures the loss sustained by the burning of the mill of the Mass. & New Mexico Mining Company, was \$40,924. The insurance is for \$30,000, distributed among nineteen different companies. Agents of these companies have been in town,

during the week, figuring upon the loss, preparatory to an adjustment. Preparations for rebuilding the mill will be commenced at once.—[Silver City Herald.

According to Professor Pumpelly's preliminary census report, the iron mines in the United States produced, during the census year 1879-1880, 7,006,417 tons of iron ore, the principal producers being Pennsylvania with 2,173,415 tons, Michigan with 1,834,712, New York with 1,239,959, New Jersey with 799,545, and Ohio with 604,241 tons. Professor Pumpelly estimates that the 801 mines in the United States have a capacity for producing 13,395,233 tons.

A valuable iron ore in the form of black sand exists in large deposits on the east beach to Block Island, and D. C. McCotter and another man from Brooklyn, N. Y., are going to use it in making steel. New processes and a machine for separating the black sand from the silicon have been invented, which clears 100 tons of sand in ten hours. Large buildings will soon be put up on the island, and, as the supply of sand is practically inexhaustible, the industry is likely to become important.

HITE.—The Hite Mine and Mill, says the Mariposa Gazette of Sept. 17th, are idle at present. Extensive improvements are being made. A 140 horse-power compressor with a 64-inch cylinder is being put in. The power is obtained from the sand-mill, about 4,000 feet below on the river. The dam is also being repaired. A new shaft is being sunk from the lower level, which produces better ore than has been taken from the mine for some time. With the additional facilities herein named and the excellent prospect of a fine body of ore before them, the Hite Gold Mining Company are assured of success in the near future.

Large ore deposits of almost unprecedented richness have lately been surveyed in Lapland by practical mining engineers. The district is near the village of Jukkasjarvi, in Swedish Lapland, about ten miles from one of the arms of the West Fjord. Analysis shows 79 per cent. of metallic iron in this ore; and the quantity is said to be sufficient, at the present rate of consumption, to supply the entire world with iron for many years. It is intended to construct a railway from Fagernaes, on the West Fjord, to the district in question, in order to develop its resources; and it is stated that the attention of English and Dutch capitalists has already been directed to the value of the ore by one of the Swedish officials.

The President of the Ophir Mining Company has just returned from a trip to the Company's mines near Breckenridge, Col., and reports: "The tunnel of the Arcada mine, one of our group, is yet upon an immense fissure vein, and as we advance the ore is becoming more abundant and of a higher grade. We have followed the vein 70 feet, and have a well-timbered tunnel throughout. The whole vein of 12 feet in width shows mineral, but there are several richer portions or crevices in the main vein of well-defined mineral in place, and which runs from 55 ozs. to 143 ozs. silver per ton. These richer streaks or crevices are becoming more numerous as we advance, and also of a higher grade. At first there was but one rich crevice, now there are not less than five, and all better than the first one discovered."

MISSOURI COPPER.—Considerable interest has been aroused amongst dealers, in metals especially, and the St. Louis public generally, by reason of the receipt on last Monday of a shipment of genuine Missouri copper, from the furnace of the Ste. Genevieve Copper Company. The shipment comprised 436 ingots of copper, (4,921 lbs.) and it is as pure as any copper that has been received in this market, assaying over 99 per cent. pure metal. The Ste. Genevieve refinery has been completed but a short time. It is under the management of Mr. Frank Nicholson, a graduate of Washington University. The product is thoroughly inspected and dressed and is freed entirely from arsenic or antimony, and will rank in purity with the celebrated Lake copper. Col. O. D. Harris, the banker at Ste. Genevieve, is the president of the company. We shall watch with interest the results of this attempt to develop another field of enterprise in our State.—[St. Louis Commercial Gazette.

The Epitaph reviewing the Tombstone mines says: "While there are no marked features to report for the last week there have been no set backs in the yield of ore, which is ample to keep the mills running up to their fullest capacity. This of itself guarantees a larger bullion output for the month of September than has ever before been recorded of the district. This, alone, is of the utmost importance to the welfare of Arizona, as it gives an assurance that the summit of prophecy has not yet been reached in this, the most favored district of the Territory, which fact gives prospectors and capitalists encouragement to continue their efforts in developing the resources in other localities. It is believed by those best posted

in our mineral resources that the prophecy of Baron Von Humboldt is to be realized in this, that Arizona is the treasure house of the world. It only requires that the works of nature be supplemented by intelligent industry and the judicious use of capital to demonstrate the fact that there are more rich mines in this territory than any other like area in the United States, if not the entire continent. The developments of the last two years go far to prove this fact."

NEVADA NITRE COMPANY.—The Carson Appeal says: A Heberling, Assistant Assayer of the Mint, returned Saturday from Humboldt county, of this State, where he had been spending a few days at the works of the Nevada Nitre Company. The property of this company, which consists of Governor Kinkead, Superintendent Croford of the Mint, and other well known citizens of this place, is situated about twenty-five miles from Lovelock's, the latter being a station on the C. P. railroad, and is in Humboldt county near the Churchill line. The company has been formed for the purpose of extracting nitrate of sodium, a deposit of which is found near the earth's surface at a distance of from two inches to two feet. It is also frequently found in crevices of the rocks, and always appears in crystal form. Nitrate of sodium is prepared for the market by dissolving in water and re-crystallizing; and pure nitrate of sodium is used for the manufacture of nitric acid, sulphuric acid, nitro-glycerine, Hercules powder, common blasting powder and other explosives. The Nevada Nitre Company have located several miles in their claim, and it is their intention to go extensively into the production of the marketable article of nitrate of sodium.

The famous Burro Copper Mines, located near Silver City, N. M., have recently been sold to Denver capitalists, for \$150,000. The Grant County Herald gives the following particulars: "Samuel H. Eckles, for the past two or three months, has had the handling of the group of copper mines in the Burros, known as the Colton, Milton, Boston, St. Louis, Copper Mountain, Emma, Mary, Parker, and Anything, belonging to Jas. M. Yankie, George Parker, Jas. Bullard and one or two others. The mines were located by Charlie Thayer and others several years ago, and considerable money was spent on them at the time, but more recently, assessment work having been neglected, they became subject to relocation, and were taken up by the parties first named. Sometime since Mr. Eckles succeeded in inducing Paschal R. Smith and F. J. Marshall of Denver, to look upon the property favorably, and as a result of his negotiations with these gentlemen, the sale has been effected, as stated. We are reliably informed that it is the intention of the new proprietors to commence active work upon the property without delay; that a smelter of great capacity is to be erected, and that operations will be upon such a scale as to give employment to about five hundred men. Of course, as these mines are situated but eighteen miles west of Silver City, this must be the point of supply, and the direct and indirect advantages resulting will be enormous. With the Santa Rita company to the east, and the Burro company to the west, jointly operating 1000 men, what will become of the constitutional croaker, and the fellow who prophecies the downfall of the town, because *he* cannot see what is supporting it?"

Nuggets.

- Boston is reviving the World's Fair project.
- Efforts are being made to establish a pulp mill at Machias.
- A slight fall of snow occurred in this vicinity on Wednesday.
- Large numbers of Maine people are in Boston this week attending the Fairs.
- The bulls and bears now dwell together in peace. This is the long and short of the matter.
- There have been several very heavy sales of timber lands consummated in this city during the past few days.
- The Denver Stock Exchange will have the largest as well as the finest building for that purpose in the country.
- Mr. A. J. Emery, formerly of Bangor, is Secretary of the American Palace Sleeping Car Company of New York.
- A bar of bullion from the Mascot mine of New Hampshire is on exhibition in this city at the office of Wiggins, Small & Williams.
- We are indebted to Dr. A. C. Hamlin, President of the Mount Mica Mining Company, for a magnificent cabinet specimen of lepidolite.
- Mr. E. B. Smith on Monday brought to this city a large

quantity of fine samples of ore from the Tapley mining property in Brooksville.

—The Henry Morrison brought up three tons of ingot copper from the Douglass mine last night, and it was reshipped on the Boston steamer.—[Rockland Courier.

—Messrs. F. H. Williams & Co. will probably soon remove their brokerage establishment in Boston from 22 Water Street to more commodious quarters on Devonshire Street.

—The canning business is rapidly extending into hitherto untried fields. A rabbit canning factory is to be started at Liverpool, Nova Scotia. Half a million pairs of rabbits are wanted for this season.

—The Ellsworth American says: "We are informed that Francis Worcester, Jr., of Sullivan, has purchased the residence of the late Dr. M. R. Pulsifer with the intention of making it his future home."

—The Penobscot division of Gilbert, Crandon & Co.'s Express line has been purchased by Messrs. Danforth and Crockett of this city who will continue the business under the name of the Bangor and Boston Express.

—St. Souveur Hotel at Bar Harbor with contents was destroyed by the flames on Tuesday night. Several other public houses at this famous resort had a narrow escape from becoming victims of this dread devourer.

—There are offered for sale at a bargain if applied for immediately two assay furnaces, and beakers, crucibles, evaporating dishes, chemicals, etc., for an assay office. Apply at the office of the MAINE MINING JOURNAL.

—A New Brunswick exchange says that the N. B. Railroad Company intend surveying a route for a continuation of their road from Presque Isle to Houlton and thence to Mattawamkeag, to connect with the E. & N. A. Railway.

—Mining men visiting Deer Isle will find excellent accommodations at the Haskell House. Mr. H. R. Haskell is a thorough landlord and keeps a first rate house at North West Harbor, the nearest settlement to the mines.

—Mr. John H. Bacon has recently enlarged his printing establishment on Kenduskeag Bridge and now has one of the finest offices in Bangor. Mr. Bacon is a young man of fine taste, an artist in his line, and well deserves the success which he has entertained.

—The North Shore Miner gave in its last issue an elaborate map of the mining districts on the north shore of Lake Superior. The Miner is an enterprising publication and is thoroughly devoted to advancing the interests of the rich mineral section it represents.

—The Portland Morning News says: "Deer Isle is booming. People who bought it at about 75 cents are feeling jubilant. You may pick them out on the street by the broad smiles they carry. Edgemoggin can be bought for 25 cents. Franklin Extension is in demand at 10 cents cash, or 15 to 18 cents buyer 60."

—Attention is called to the advertisement of the New England Mining Development and Investment Company. Allusion has been made in previous issues of the MINING JOURNAL to the organization of this corporation. The offices of the company are 12 West Market Square in this city and 22 Water Street in Boston.

—During the present week a paper named "The Commercial Bulletin" was issued in this city for gratuitous distribution. The publication contained considerable interesting and original matter and the general appearance of both the reading contents and numerous advertisements was highly creditable. Mr. Lawrence T. Smyth was the publisher.

—A cotton factory of large proportions is being built at Milltown, N. B., on the St. Croix, a short distance above Calais. Work is being pushed to completion with all possible celerity and it will not be very long before this important establishment will be in successful operation. The people in that vicinity believe that the St. Croix is destined to be the scene of very large and thriving manufacturing enterprises.

—The engineers engaged in making the railroad survey between Bucksport and Ellsworth have their work now about half completed. The railroad will cross Toddy Pond at the narrows. Two routes will be laid out between Bucksport and the narrows and also between the narrows and Ellsworth. By this railroad Blue Hill will be brought within eight miles of railroad communication and a branch will probably be built to that enterprising mining town at an early day.

—On a recent trip to St. Stephen, N. B., it was our privilege to

PEABODY SILVER MINING COMPANY,
Property situated on Columbian Mountain, Col.
Stock unassessable.
President, J. W. Johnson, Boston; Vice President,
E. C. Nichols, Bangor; Secretary, S. P. Johnson, Bangor;
Treasurer, E. R. Walker, Boston; Directors, J. W. Johnson, S. C. Hursh, W. C. Bradley, N. W. Gannett, C. T. Plimpton, A. C. Goss, E. C. Nichols.
Treasurer's and Transfer Office, 386 Washington St., Boston.

A. M. DEVEREUX, Music Store.

Wholesale and Retail,
**MASONIC BLOCK, - MAIN STREET,
BANGOR, MAINE.**

General Agent for
Chickering & Sons Piano Fortes.
Business Manager for
The Wilcox & White Organ Co.
For Maine and Maritime Provinces.

It is my principle in business to sell nothing but first-class goods, and those at a fair price.

Sheet Music and Musical Merchandise.

Sheet Music bound; Piano and Organ Stools and Covers; Small Instruments.
Old instruments taken in exchange for new.
New instruments sold on time at cash prices, with 6 per cent. interest added.
Try this Music Store and see how you like it.

THE Mascot Mining Co

**MINES AT GORHAM, N. H.
Office, Portland, Maine.**

Capital \$500,000. Shares 100,000.
Stock Forever Unassessable.

DIRECTORS:

R. S. LAWRENCE, President, 23 Crawford House, Boston.
C. W. HOBBS, Secretary and Treasurer, Portland, Maine.
C. C. LANE, 7 Exchange Place, Boston.
CHAS. H. LEWIS, 4 Sears' Building, Boston.
FRANK H. WILLIAMS, 22 Water St., Boston.

CONSULTING GEOLOGIST:

PROF. J. H. HUNTINGTON, 35 Congress St., Boston.

**ENGINEERS AND METALLURGISTS
BINNS, KIDNEY & HOLLIDAY**, 33 Hawkins Street.

SUPERINTENDENT:

J. M. JOHNSON, Gorham, N. H.
FINANCIAL AGENTS:
F. H. WILLIAMS & CO., 22 Water St.

ORES—Argentiferous Galena and Copper. **PRES- ENT OUTPUT**—Six tons daily. **VALUE PER TON**—Seventy-five dollars. **COST OF REDUCTION**, including freight, smelting, separation and refining—Twenty-seven dollars per ton.
Forty miners, and ten blacksmiths, carpenters, teamsters, etc., employed. The September development work will ensure an October output of twenty tons daily.

FOR SALE

— AT A —

GREAT BARGAIN,

if applied for immediately.

Two Assay Furnaces, Beakers, Crucibles, Evaporating Dishes, Chemicals, etc,

for an assay office. Apply at office of

MAINE MINING JOURNAL.

ASSESSMENT NOTICE.

Young Hecla Mining and Smelting Company.

At a meeting of the Directors of the Young Hecla M. & S. Co., held Sept. 22, 1891, it was voted to levy an assessment of five cents a share upon the stock of the company, payable Oct. 15, 1891. The by-laws provide that after the expiration of thirty days from the day fixed for the payment of an assessment, the Treasurer may sell a sufficient amount of the stock upon which the assessment remains unpaid to pay it, together with expenses. As the Company are about to resume work at the mine it is desirable that all assessments should be paid as promptly as possible, and the stockholders are requested to remit to Charles P. Wiggin, Treasurer, Bangor, Me., the sums due on the stock held by them, together with the certificates, in order that they may be marked assessment paid.

T H E

Maine Mining Journal

WILL BE FOUND ON SALE

Each week at

A. K. Loring's, Washington Street, Boston.
George H. Marquis', Portland.
Bangor News Co.'s, Bangor.
Caldwell's, Belfast.
Sargent's, Castine.
James Nichols & Co.'s, Calais.
O. P. Treat's, Calais.
Harry B. Parker's, Blue Hill.

Price Six Cents.

R. H. GAIRDNER,

GENERAL BROKER and MINING AGENT.

28 St. Francois Xavier St., Montreal.
Iron, Phosphate and Asbestos Mines for sale.

NO MAN CAN AFFORD

to buy one dollar in the clothing line without inspecting the stock of Alton Milliken & Co.

Fine Goods a Specialty.

ALTON MILLIKEN & CO,
Cor. Harlow St. and Kenduskeag Bridge.

TO OUR READERS.

When answering or referring to our advertisements, you will benefit yourselves as well as us by mentioning this Journal.

NEW ENGLAND

MINING DEVELOPMENT

— AND —

INVESTMENT CO.

OFFICES:—12 West Market Square, Bangor, and 22 Water St., Boston.

President, F. M. Loughton; Treasurer and Secretary, F. H. Williams; Directors, F. M. Loughton, John S. Jenness, F. H. Williams, J. H. Moyle and Daniel Dunn.

YOUNG HECLA

Mining and Smelting COMPANY.

Office at Bangor, Me. Mines at Blue Hill, Me.

Capital, \$500,000.

100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.

President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.

BLUE HILL CENTRAL

Mining and Smelting COMPANY.

**OFFICE.....BANGOR, ME.
MINES AT.....BLUE HILL, ME.**

CAPITAL, \$500,000.

100,000 Shares: Par Value, \$5.00.
Treasury Fund, 30,000 Shares.

Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

Silver Hill Mining Company.

Office, 11 CENTRAL STREET,

Room 4, Boston.

Mines at Garland, Me.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.

Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

Blanchard Slate Co., OF MAINE.

Quarry in operation at terminus of Bangor and Piquetaquis Railroad.

Quality and natural advantages unsurpassed. Dumpage and drainage unequalled. Railroad transportation adjoining. Stock for sale. Sections leased on favorable terms. Capitalists invited to inspect.
A. C. HAMLIN, President, Bangor.

CHAPPARAL GOLD MINING CO.

Location of Mill and Mines:

**KELSEY MINING DISTRICT, EL DORADO COUNTY, CAL
CAPITAL, \$2,000,000.—PAR VALUE, \$10.**

Stock full paid and unassessable.

Registrars of Transfers, Farmers' Loan and Trust Co
Office, 61 Broadway, Rooms 7 and 8, N. Y.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund \$5,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Burrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Lafan, Jeremiah Wooster.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farrum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffin, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Roddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp., July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 Shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Hohmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.,
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

COLBY'S MAP
OF THE
Mining Districts
— OF —
EASTERN MAINE.

(Size 16x24 inches), showing the exact location of nearly two hundred mineral properties. It is an invaluable guide to the Mining Regions, and should be in the possession of every mining man.

Price only 25c. Pocket Edition 35c.
Sent postage paid on receipt of price. Address
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Bangor, Maine.

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Manufacturers and Dealers in
All Kinds of FURNITURE.
Feathers, Mattresses, Upholstery Goods,
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63 & 65 Main St., Bangor.

J. A. BUZZELL,
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DEALER IN
BOOTS, SHOES, HATS AND RUBBERS.
NEW STORE. NEW GOODS.
Remember the place,
28 Main St., Bangor.

H. N. DORITY,
Livery Stable,
SEDGWICK, ME.
Connection made with Steamer Lewiston at Sedgwick for Blue Hill and Brooklin. Leave Sedgwick for Blue Hill on arrival of Steamer Wednesdays and Saturdays. Leave Blue Hill for Sedgwick Mondays and Thursdays.

HELP Yourself by making money when a golden chance is offered, thereby always keeping poverty from your door. Those who always take advantage of the good chances for making money that are offered, generally become wealthy, while those who do not improve such chances remain in poverty. We want many men, women, boys and girls to work for us right in their own localities. The business will pay more than ten times ordinary wages. We furnish an expensive outfit and all that you need, free. No one who engages fails to make money very rapidly. You can devote your whole time to the work, or only your spare moments. Full information and all that is needed sent free. Address Strixson & Co., Portland, Me.

SEND YOUR ORDERS
— BY —
GILBERT, CRANDON & CO'S
EXPRESS.

For Bangor, Machias, Portland, Boston, and all intermediate towns,
Connecting with all points west and south from Boston, and at Rockland with points east to Machias and west to Portland, leaving Bangor every boat at 11 A. M.
Low rates and satisfaction guaranteed.
N. M. JONES & Co., Agents,
24 West Market Square,
At E. G. Ingall's Jewelry Store.

Bucksport and Bangor R. R.
CHANGE OF TIME, June 27, 1881.

	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	6.00	10.00		5.03
Arrive Bangor,		7.03	11.15	6.00
Leave Bangor,		7.35		2.00
Arrive Bucksport,		8.40		3.15

The 6.00 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
STAGE CONNECTIONS.—At Bucksport, daily, for Castine, Penobscot, Blue Hill, Ellsworth, Sullivan and Mt. Desert.
L. L. LINCOLN, Supt.

Portland & Boston Steamers.
One of the first-class side-wheel steamers of this line will leave Franklin Wharf, Portland, at 7 P. M., and India Wharf, Boston, at 5 P. M., daily, (Sundays excepted.)
CONNECTIONS are made at Portland with GRAND TRUNK, PORTLAND & OGDENSBURG, MAINE CENTRAL, KNOX & LINCOLN Railroads, and with Steamers of the BANGOR & MACHIAS LINE; and at Boston with all lines for points South and West.
Tourists will find this one of the finest OCEAN TRIPS on the New England coast.
WM. WEEKS, J. B. COYLE, JR.,
Agent, Boston. Gen. Ag't, Portland

Bar Harbor Stage Line.
Stages leave the Bangor House every morning (Sundays excepted) at 7.40 A. M. Every evening (Sundays excepted) at 7.45 P. M. Leave the Penobscot Exchange at 7.45 A. M., and 7.50 P. M.
Fare from Bangor to Ellsworth, - - - \$1.50
" " " " Bar Harbor, - - - 3.00
F. O. BEAL, Prop.

PENDLETON HOUSE
Blue Hill, Me.
IS NOW OPEN TO THE PUBLIC.
Livery Stable connected with the House.
JOHN M. MERRILL, Proprietor.

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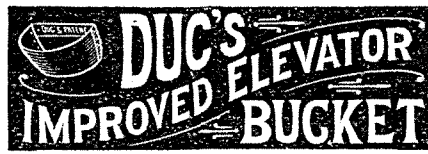
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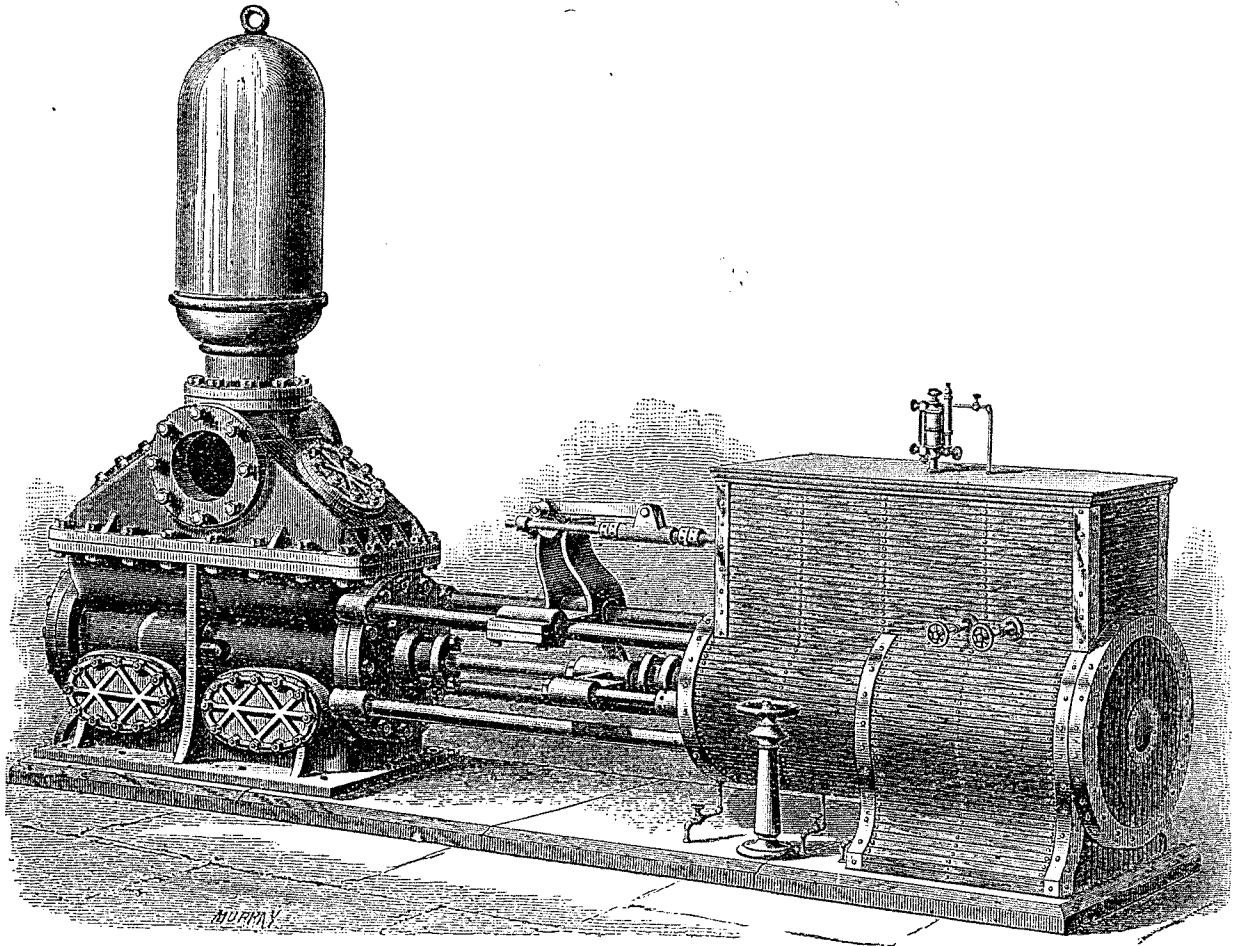
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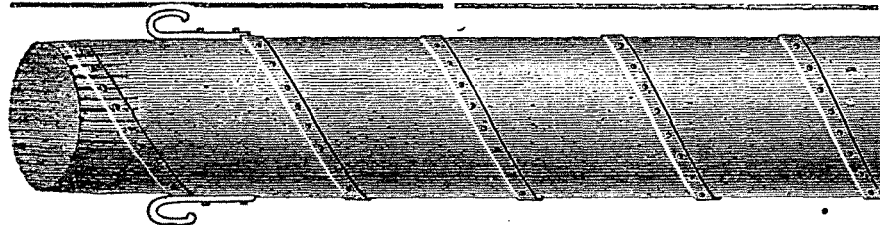
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BANGOR, FRIDAY, OCTOBER 14, 1881.

Every part of the mineral-bearing country, from Maine to Mexico, is gradually thrilling with the pulse of new life, as vitalized energy and capital touches these promising fields of enterprise and industry.—[Conservative.

Time must be allowed for changes in all things and business. In mining this is particularly the case. Delving through walls of solid rock is about as slow work as can be imagined, under even the most favorable circumstances. When floods of water pour in and heat stifles, one wonders that anything worthy of the name of progress is seen.—[Mining and Scientific Press.

Mr. C. W. Bryant's communication to the MAINE MINING JOURNAL, descriptive of the treatment of copper ores at Swansea, is being extensively copied into our Western exchanges, credited to the San Francisco Report. It is very hard to make these chaps admit the existence of mines, mining operations, or a mining publication in Maine. In a recent issue of the San Francisco Exchange, in its column of Arizona mining news, appeared Supt. Dickson's weekly report upon the Deer Isle mine, transferred bodily from our columns. The time is not far distant, however, when the Deer Isle will be so widely known that the mistake of locating the mine in Arizona will not be likely to occur, even on the Pacific coast.

The Boston Evening Star has recently published a series of editorial articles reflecting severely upon the mining reporter of the Daily Advertiser. Not only this, but it has made direct charges and challenged contradiction. Our opinion of the manner in which the mining department of the Advertiser has been conducted has been freely expressed

in the past. We have, however, not the slightest personal ill-feeling toward the "mining reporter" in question, and as we long since became convinced that the Advertiser's mining column had ceased to have influence, either for good or evil, it is not our wish to assist in stirring up any animosities at the present time. We merely call attention to these charges, as they constitute a matter of importance to all Eastern mining journalists and mining men. They come from a responsible source and are either true or false; they remain unrefuted.

The mining share market has not materially changed its condition since our last report. Copper stocks generally have an advancing tendency with, however, but little demand. At the Boston Stock Exchange the total sales of Maine stocks for the week ending Wednesday last were as follows: 50 Blue Hill at 3; 100 Blue Hill at 3 1-2; 100 Douglass at 2; 100 Douglass at 1 7-8; 300 Douglass at 1 3-4; 50 Sullivan at 3 1-2. At the Mining Board the deal in Deer Isle has been the feature of the week, it having advanced from \$1.20 to sales at \$1.70 regular and \$1.96 buyer 60 days, receding, however, to \$1.54 bid and \$1.56 asked at the close of the session on Wednesday last. Closing prices of other Maine stocks for Wednesday were as follows: Copperopolis \$2.08 bid, \$2.10 asked; Granger 15c asked; Twin Lead \$1 bid, \$1.05 asked; Milton \$1.02 bid, \$1.04 asked; Sullivan \$3 bid, \$4 asked; Young Hecla 42c bid, 44c asked. A sale of 200 Edgemoggin (new stock) was reported on Wednesday at 50c.

A change has come over the spirit of investments in mining stocks. The day when business men shrugged their shoulders convulsively and turned away from opportunities to place their money in this kind of securities has passed. The public has learned that there are mines, and that a man who is possessed of ordinary sagacity may judge with considerable correctness of the stability and integrity of those men in whose hands the management of the concern is placed, albeit they may themselves be ignorant of the intrinsic value of the ore, its nature as regards reduction, or the facility with which it may be marketed. It is a very satisfactory guaranty of success when those who have made a long study of mineral veins and mining and who have an unspotted record for candor and honesty, vouch for the fact that a mine will pay handsome profits over and above all expenses. It matters not whether it be located in the middle of Mexico or the centre of South Africa, if the fact is incontrovertibly proven that the ore is sufficiently rich, readily mined, and economically transported to afford a cash profit with a liberal margin to the stockholders. Such necessary conditions are fulfilled in a large number of schemes now prominently before the public, either paying immense dividends or preparing to do so. The experience of the past, disastrous though it was in a measure, will never re-occur; however, its valuable lessons have been taught to the very best of business men throughout the country. That they have taken the lesson, studied it well, and placed new confidence in mining and the stocks which represent it, is proven by the fact that there is to-day a very much greater volume of business done in handling them in the central markets of

the world than at any previous time.—[New Mexico Mining World.

A few months since, Mr. C. W. Bryant, a Director in the Deer Isle Silver Mining Company, went over to Europe in the interest of the Company for the purpose of making an examination of the various processes for the treatment of ores there in use, with a view to securing a market for Deer Isle ores. Mr. Bryant returned home early in August, and reported to the Co. that a large establishment in Swansea would purchase the ores outright, paying so much per unit for the zinc, lead and copper, and per ounce for the silver and gold contained in them, the price paid being based upon the market value of the several metals. This offer was, of course, highly satisfactory to the Company, and at a meeting of the Directors held in Portland, at which the above report was submitted, the following action was taken: "That the Superintendent be directed to push the work of getting out and preparing ore for shipment as rapidly as possible, and that President Harris and Mr. Bryant be authorized to make all necessary contracts and arrangements to ship the ore to Swansea from the present time to Jan. 1, 1883, according to the time of the contract proposed by Messrs. Richards, Powell & Co." In view of these facts we are at a loss to understand the present policy of the Company, if the statements which have recently appeared in the Boston papers are to be believed, in contracting to send the 1000 tons of ore already on the dump to the New England Smelting Works. That these Works can treat the Deer Isle ores 50 per cent. cheaper than they can be treated at Swansea we do not believe; indeed, it has not yet been demonstrated that they can treat them at all. It is no disparagement to the New England Smelting Works to say that, as at present constructed, they are not adapted to nor designed for the treatment of such complex and refractory ores as those of Deer Isle. Consequently we cannot see the wisdom of throwing up a certainty of a fair profit for what is, at best, a doubtful experiment.

Personals.

SUPT. SHOENBAR and wife returned to Sullivan last week from Boston.

COL. W. H. DARLING, of Blue Hill has been in the city during the week.

DR. A. C. HAMLIN has left for Yorktown to attend the great celebration.

JACOB STERN, Esq., of this city, has gone to New York on mining business.

MR. P. A. MELVILLE, of the St. John Daily Telegraph, has been visiting friends in Bangor this week.

MR. A. M. MASON, of the brokerage firm of Mason & Reynolds, has been on a trip through the West.

W. D. LEWIS, Esq., passed through this city Wednesday morning on his way from Boston to Blue Hill.

W. W. FISKE, the Ellsworth assayer, has gone to Boston and New York to dispose of mineral prospects.

HON. F. A. PIKE, of Calais, is visiting the May Lundy mine, in California, of which he is one of the principal owners.

HON. STEPHEN JENNINGS, of Boston, was in the city early in the week and called on the JOURNAL. He was en route to St. John on a business trip.

CAPT. JOHN W. BENNETT was in the city a few evenings since and called on the MINING JOURNAL. The Captain has for several weeks been engaged in mining operations at Sullivan. During a portion of the present week he has visited a mining property in Guilford in which he is interested.

COL. CHAS. DUFF, Supt. of the Twin Lead and Mammoth mines, came up from Blue Hill on Saturday and made a brief stay in the city. While here he made a pleasant call on the MINING JOURNAL and expressed himself very enthusiastically in regard to the bright prospects of both the mines under his charge.

COL. D. H. JACKSON, for many years a Comstock superintendent, and one of the most prominent and widely known mining men of the Pacific Coast, is at present visiting in Boston. Col. Jackson is looking over the entire mining field of the country, having recently visited Mexico, Arizona, Old Mexico and Alaska, and it is probable that he will pay a visit to Maine before his return West.

MR. S. Z. DICKSON, Supt. of the Deer Isle, has been in Boston during the past week and on Monday evening was tendered a banquet at Young's Hotel. By invitation of Mr. T. Brigham Bishop, a large number of the members of the Boston Mining and Stock Exchange were in attendance. President Harris and Director Bryant were present, numerous speeches were made and the occasion was a very pleasant one.

MR. HUGH FLETCHER, of the Canadian Geological Survey, arrived in Sydney last week from Inverness. During his stay he visited the Manganese Mine at Loch Lomond, owned by Hon. F. T. Moseley, and a Copper Mine near Coxheath, owned by Mr. Burchell and others. In both cases Mr. Fletcher expressed himself pleased with the ore. During the past summer he has been engaged in Inverness and Victoria, and his report on the minerals of that section of the Island will be of great interest.—[Cape Breton Advocate.

—F. H. Williams & Co., the well known brokerage firm, have removed their Boston office from 22 Water Street to 64 Devonshire Street. Their new office is large and commodious and splendidly adapted for their large and steadily increasing business. Their new establishment is very favorably located in the central part of the city.

—The first blast furnace west of the Missouri, which was lighted at South Pueblo, Colorado, a few days ago, is turning out regularly and easily fifty-four tons of pigs a day. The superintendent promises a run of eighty tons a day. All the coal and iron used is mined in this State, and the iron made is of the first quality. The officers of the Colorado Coal and Iron Company say they will turn out Bessemer steel rails in December, thus saving a thousand miles carriage on new rails for railroad extensions west of the Missouri river.—[Silver World.

—We are in receipt of a valuable work, entitled "Outlines of Determinative Mineralogy," by C. Gilbert Wheeler, Professor in the University of Chicago. The publication is an elementary guide to determinative mineralogy and is intended for the use of the practical mineralogist and prospector and also for instruction in schools and academies. A careful review of this work convinces us it is one of great merit and that it is destined to come into quite general use. In this manual, minerals not found in the United States are for the most part omitted. By thus eliminating minerals rarely encountered it is claimed that the book is rendered much more useful than the larger works. Throughout the work, the names of species and the physical and chemical characteristics are those given in Dana's Mineralogy. The price is only \$1 and copies can be obtained by addressing the MAINE MINING JOURNAL.

The Mammoth Copper Mine.

A MAMMOTH MINE INDEED, AND IN THE HANDS OF A STRONG COMPANY AND AN ENERGETIC MANAGEMENT.—ONE OF THE MOST PROMISING PROPERTIES IN THE EASTERN STATES.

In November last, nearly a year ago, our readers were informed of a new and important discovery in the already famous copper district of Blue Hill, which as a surface showing far eclipsed anything hitherto found in the vicinity if not, indeed, in the State. It was simply an immense bed of copper ore of a tolerably high grade and good smelting character, and of unknown extent. Its location was in one of the deepest depressions of Blue Hill Basin, directly across the pond and not far distant from the Douglass Works.

The discovery was made at a time when the water of the pond was extremely low, and was brought about by noticing the discoloration in several small streams which emptied themselves at this point and which were traced up to their source. An examination of the ledge, which was wholly covered with soil several feet deep, revealed its mineralized character, and Messrs. Darling and Grindle, who made the discovery and conducted the early explorations, believing they had struck a rich thing immediately made a purchase of the property. They then proceeded to lay bare the ledge for a space some sixty by thirty feet, throughout the whole extent of which the same showing of rich ore everywhere presented itself. Feeling now assured of the possession of a bonanza, and not caring to operate a mine themselves, they awaited a purchaser.

During the past season the property has been visited by many persons, all of whom admitted that it was a wonderful showing, but owing to the facts that the true geological nature of the deposit had not been determined and that considerable scepticism prevailed in the district concerning the existence of a true ore channel outside of what had hitherto been considered the limits of the mineral belt, some time passed before a sale was effected. Finally after a thorough examination of the surroundings by competent and reliable experts, the property passed into the hands of the Messrs. Lewis, of Boston, E. M. Hersey, Esq., of Bangor and Col. Duff, the well known Superintendent of the Twin Lead. Systematic developments were at once commenced, under Supt. Duff's direction, for the purpose of determining beyond all possible doubt the permanency and reliability of the deposit. It was Col. Duff's opinion that this extensive surface body of ore was the outcrop or overflow of an extensive vein, the trend and extent of which could only be ascertained by underground explorations. Accordingly a shaft was sunk to a depth of 24 feet, from the bottom of which a crosscut south was run for a distance of 24 feet. Both shaft and crosscut were driven through ore the entire distance, the mineralization consisting of an admixture of magnetic iron and copper sulphurets. This was not, however, entirely satisfactory to Supt. Duff who was confident of the existence, somewhere in the vicinity, of a massive and concentrated ore body. His surmises have proven to be correct. A crosscut was commenced on the north side of the shaft, towards the pond, and had been advanced but six feet when an immense clay seam or "gouge" was encountered, beyond which was found a body of as rich copper sulphurets as has ever been uncovered in the district. The crosscut has, at present writing, penetrated this immense vein for more than twenty feet, and the opposite wall is not yet reached.

During the progress of the work already accomplished, more than five hundred tons of good smelting ore have been removed, four hundred and fifty of which are at present on the dump—more than enough to pay all the expenses of development up to the present time. Fifty tons of the ore were smelted under the direction of Mr. A. E. Barclay, Supt. of the Hersey Copper Smelting Works, Blue Hill, and yielded five tons of matte averaging from 28 to 30 per cent. copper. This ore was entirely from the surface and the smelting was accomplished without difficulty, after roasting in heaps.

These developments are amply sufficient to show that this is a "Mammoth Mine" indeed, so far as human intelligence is able to foresee; and, while in itself a most valuable addition to the rapidly growing list of producing mines in Maine, it is also of immense importance as showing that the wealth of the Blue Hill copper belt has not as yet half been told and that its limits are far more extensive than the most sanguine had supposed.

It is an extreme source of gratification to be able to inform our readers that this valuable property is now in the hands of a most excellent company, organized upon a sound and substantial basis, and officered by men whose methods are not only above suspicion, but who combine all the intelligence, energy and experience required to successfully manage a great mining property. The officers are as follows: President, E. M. Hersey, Bangor; Treasurer and Transfer Agent, G. W.

Pickering, Bangor; Secretary, John R. Mason, Bangor; Assistant Treasurer and Secretary, W. D. Lewis, Boston; Directors, E. M. Hersey, T. N. Egger and Samuel Sterns, of Bangor, W. D. Lewis, Boston, and Charles Duff, of Blue Hill. The capital stock of the company is \$500,000, divided into 250,000 shares of \$2.00 each, par value. 50,000 shares are placed in the treasury and the stock is assessable. The principal offices of the company are located in Bangor, and the stock will soon be called at the Boston Mining Board. The company intend to push developments as rapidly as possible, and to this end a substantial shaft house will be at once erected, steam machinery put in, and everything put in readiness for the winter's work. As it is at present an almost utter impossibility to procure coke for the smelters at Blue Hill, it is probable that the ore will be shipped, for a time at least, either to Boston or Bergen Point, N. J. Ultimately the entire product of the mine will be treated at Blue Hill.

That our readers may know we are not alone in considering the Mammoth a promising mine and one of the most important discoveries yet made in the East, we append below an unprofessional report upon the property, by Prof. Frank Stewart.

TREMONT HOUSE, BOSTON, October 8, 1881.

W. D. Lewis, Esq.

DEAR SIR:—In compliance with the request that I shall give you a written opinion in reference to the Mammoth Copper Mine, I cheerfully do so at once.

As my visits to the Mammoth Copper Mine property at Blue Hill, Me., were wholly unprofessional, and merely out of personal curiosity, what I may state at this juncture must not be considered as an accurate geological report upon the mine and its surroundings, but simply as an opinion, based upon recollection. While on a visit to the various copper-bearing districts near Blue Hill during the month of April last, I listened to many conflicting statements in regard to the permanency and prospective value of the then recently discovered Mammoth copper deposit, and without authority or invitation from anybody, I concluded to satisfy my own mind in relation to the true status of this remarkable ore deposit. A careful investigation of the premises convinced me that the Mammoth is not only a permanent and reliable ore channel, but that it is apparently the most massive copper deposit in Blue Hill district. I am aware this may seem like an extravagant assertion, in view of the fact that many of the older and more fully developed lodes in that locality are known to possess colossal dimensions; but when it is known that at the discovery point of the Mammoth, there is a thoroughly mineralized outcrop, which is nearly sixty feet in lateral diameter, and when it is further known that these copper ore channels invariably become more expansive as they descend from the surface, it will probably be admitted that the above assertion is not an exaggeration.

The position of the Mammoth lode is palpably confirmative of the theory that strongly-marked surface depressions in mineral-bearing localities are trustworthy indicators of the richest metalliferous deposits. In other words, nearly all metal-bearing ore bodies contain elements which are readily attacked by acidulated waters and by atmospheric action, and thus become oxidized and easily removed by eroding agencies. Most of the various metalliferous deposits of southeastern Maine rest in a wide zone of slaty Huronian strata, which has been greatly worn and gullied by ancient glaciers. Those mighty engines of the surface erosion attacked points of least resistance, and therefore followed and scooped out the crowns of the friable, oxidized ore channels, thus making marked depressions in the topographical outline of the country, and also leaving unmistakable indications of the still undisturbed deposits below. The discovery point of the Mammoth lode is directly on the southern margin of a pretty fresh water lakelet known as Douglass Pond. The strike of the Mammoth lode is due east, by the compass, under the bed of this sheet of water. This Pond, which lies between the Douglass and Mammoth mines, owes its existence to the eroding foot of a tremendous glacier which, in its irresistible course towards the sea, attacked the friable ore channels of the mineralized basin, and literally ploughed out the present bed of the lakelet. It may be asserted as an axiom that in mineralized districts the deepest surface depressions usually indicate the richest ore deposits, and as the Mammoth lode rests in the most deeply eroded portion of the Blue Hill basin, it is fair to infer that the ore channel is exceptionally massive at greater depth from the bed of the lake. In fact, the topographical feature lines at its point of location, its geological position, and lithological environments, as well as the actual exploitation which has been performed upon it, all confirm the conclusion that the Mammoth is one of the most massive and one of the most reliable copper deposits yet discovered in New England. As stated above, the ore channel of the Mammoth strikes due east under and through the bed of Douglass Pond. Of course the most practical method of extracting the ore will be by either driving down a shaft on dry land, or by erecting a series of coffer-dams in the pond. The water of the pond is quite shallow, so that either of these methods is feasible, but as the work of sinking at the point of discovery on the shore is now being vigorously prosecuted, I would advise, for the present, at least, to continue the exploitation at that point. Already a prodigious quantity of high-grade sulphuret ore has been extracted from the Mammoth lode, and the quality of the ore appears to improve with every fathom of excavation. This ore is a fine yellow sulphuret of copper containing some iron and occasional samples of native copper. In fact the output of the Mammoth is almost identical in appearance and in chemical elements with of the Douglass, Blue Hill, Twin Lead and other neighboring properties.

In concluding this voluntary statement I desire to add that if the Mammoth, with proper development, does not prove to be a highly remunerative mining property the deductions of modern geology in relation to ore deposition are all valueless.

Yours respectfully,
W. F. STEWART.

NORTH CAROLINA.—As expected, there is being quite a move in the mining sections. Sales are frequently reported and there are several fine properties now being examined with the view of purchase by men of capital. We beg to offer just one word of advice to parties desiring to sell; do not place extravagant figures on undeveloped property. This drives off capital and does the whole mining business harm. Be reasonable in your demands, remembering that however much there is in the ground, it costs lots of money to get it out. Bonanzas are not struck every day and the majority of mines only pay a reasonable per cent. on amount invested and spent in working; so do not forget to be reasonable. Don't think this is meant for anyone else; it is meant for you.—[Carolina Watchman,

Precious Metals in the South.

[New Orleans Sunday Times.]

"We look too high for things close by."

Doubtless there are 50,000 men from the Southern States who are seeking fortunes among the mineral regions of the Rocky Mountains. Many are laborers in great bonanzas at from \$3 to \$4 per day; some are prospectors, and many are buyers and speculators in mining properties. In Daniel Boone's time, and still later, says the history of Kentucky, the Indian tribes of southeast Kentucky and eastern Tennessee brought very large quantities of native silver to the whites to trade for goods. It had been smelted or reduced into rough bullion by some process unknown to the whites. So, is it not strange that Kentuckians should not have taken this hint from the history of their State, and engaged experienced prospectors to locate the veins which produced that silver?

The other Southern State interested, and whose citizens and capitalists are to be found in every mining camp, is Missouri. The St. Louis Smelting and Refining Company erected the first smelter and worked the first ore at Leadville, Col. The cream of that great camp was carried off by capitalists of St. Louis before stock tricksters began their mine killing operations there. Texas has thousands of operators in Arizona, New and Old Mexico. There are several mining companies of Florida operating in Colorado, New Mexico, California and Arizona. Louisiana is sparsely represented. There are two organized companies in New Orleans. One of them, the Hanselman Willets-Muney Company, has seventeen mines and fractions of mines in Custer County, Col. Edward Enderle, of this city, is on the ground superintending the work. Thomas Hunton, attorney-at-law, and associates in New Orleans, are interested in mining properties in different parts of the west. The above is introductory to demonstrate how men will go so far away to invest in mining, since now it is down to a solid business basis, while close at home are the same untold millions in hills and mountains, precious metals awaiting man's hand with picks and shovel to explore and extract them.

A prospector, who has had many long years of toilsome experience prospecting in the great mineral regions of the far away west, a few months since passed three months surface prospecting in North Carolina, East Tennessee and Southwestern Virginia. He has obtained a copy of a very old map, copied from an older Spanish map. The map represented this region as almost solid in lodes or veins and deposits of precious metal. He found veins out-cropping clearly and plainly, with perfectly defined walls. Many a mountain of granite rock had veins of mica in it. This mineral is at present in as pressing demand as gold. The largest pieces bring fabulous prices for windows of vessels of war and steamships. Those from 2 inches wide to 5 or 6 to 8 inches in length a lesser price for the coal stove industry, still an immensely profitable one. The third class is a great body of the vein—fully 80 per cent. of every vein—which comes out broken into fragments. For this the demand is greater than the supply, and must remain so as long as it is coming into general use as a lubricator. The railroads pay so much for it that, as the supply is not equal to their demand, other people cannot afford to pay for it as a lubricator. The axles of the swiftest lightning trains lubricated with the micaceous lubricator neither heat nor wear away. Since this discovery was made the Rocky Mountains, supposed to hold all minerals except iron and coal that are valuable, have been prospected over and over, especially near the Arkansas River above the grand canon of the Arkansas and Royal Gorge. Three claims were found in an uncertain, broken condition in 1876. They cannot be made to yield well or much. Twenty months ago a 14-inch vein was discovered south of Santa Fe. It sold for \$19,000 cash when 10 feet deep. It will be seen by the notes below that North Carolina is supplying about all the world is receiving, and yet cannot furnish enough. It is wanted as a lubricator for all kinds of machines.

The North State Mining Company, of North Carolina (English capitalists), have a vein of mica 8 feet in width, 4 feet of which is solid mica. This is of the lightest color, free from iron stains and very flexible. This company own 4 1-2 miles of fine iron ore, which lies in beds from 10 to 40 feet wide. They have 125 men at work on the iron ore. They are building a railroad from Statesville through Salisbury to their mines. They are erecting smelters and mills. One mill was completed early in August, and they began crushing August 20.

The Conrad Hill Copper and Gold Mine people, near Salisbury, are pushing work, and are advertising for 300 more hands. In the same vicinity, the Silver Valley Mine is working 75 hands.

The Baltimore and North Carolina Mining Company are erecting a mill. This property is 5 miles west of Ashboro. The ore is quartz, mining up to \$80 in gold per ton. (The average

yield of gold ores of the Black Hills for 8 years has been \$7.50 per ton).

The Hoover Hill gold mine is owned by English Capitalists. The owners are driving shafts and tunnels, constructing tramways, etc. Their new mill will be at work by October 1. The Atlas and Bame mines, near Salisbury, comprise 1,351 acres of ground, purchased by Mr. Leopold Graf, a capitalist of Newark, N. J. This ground is proven rich; it lies between Gold Hill and Dutch Crook mines.

The Clarissa mica mine, near Bakersville, county seat of Mitchell County, is a 4-foot vein of mica, owned by Mr. J. G. Heap and John Clapp. They have several shafts, the deepest of which is 325 feet. They are working a very large force, running six shafts, which average 85 feet. The same parties own and are working the Sink Hole mica mine and the Cook mica mine, all in the same vicinity.

The Reed Gold Mining Company, of Cabanus County, are finding, in washing, nuggets weighing from 1 to 5 ounces. This county furnished the Indian tribes of a large region of country gold for their ornaments. Every creek and stream bottom of that county shows placer gold mines. The Becks mine, 10 miles from Lexington is being worked with quite a large force. At the Stelle mine, near Salisbury, they have struck a rich pocket running into hundreds of ounces in gold to the ton. The Ward Mine, near the same place, is a valuable property.

The Weed Mine, recently purchased by Thurlow Weed, is paying well. It is located near Lexington, Davidson County. Without at present mentioning any of the other hundreds of properties of North Carolina, these will show far greater development than the Southern people ever dreamed of as going on in the South. North Carolina is hardly tickled as far as her vast mineral wealth is concerned. Not a thousandth part of her precious metal-bearing ground has been touched. The prospector mentioned above found precious stones in great abundance near the mountains and below the mountains for many miles. Red garnet is more abundant in the valleys and along streams and in their beds in Catawba County, than elsewhere discovered in the world. Amethyst, topaz, limpid crystals, opals, and other valuable stones, are abundant. It requires study and experience to detect them, for, like the diamond, all are covered with a rough outside. No more profitable mining field can be found than Western North Carolina, and the field is not confined to North Carolina alone, but Tennessee, Southeastern Kentucky, South Carolina, Georgia, Alabama, Northeastern Mississippi and Virginia show nearly as well. There is more mining machinery in North Carolina than in New Mexico and Arizona together to date, and that tells the story. Nickel, platinum, cobalt and the various argentiferous ores of galena—ores of lead—are abundant also.—[New Orleans Times.

Newfoundland's First Railroad.

A STATEMENT REGARDING ITS PROGRESS AND CONDITION—
RICH MINERAL AND AGRICULTURAL DISTRICTS—THE LINE
TO BE COMPLETED IN EIGHTEEN MONTHS.

One of the officials of the Newfoundland Railway Company, who has just returned from St. John's, was seen recently by a reporter of the Daily American Exchange, and he gave an interesting account of the progress that is being made on the road. The main line will, when completed, be 340 miles in length, its termini being St. John's and Hall's Bay, while branches will extend to the west coast, Harbor Grace, Carbonear and Brigus. The road throughout the greater part of its length runs through fine mineral and agricultural lands, the productions of which are said to be of the richest character. It traverses the great Valley of the Exploits, which contains 800 square miles of valuable agricultural lands, beside being within the mineral belt. In this section, however, nothing in the way of ore has so far been found except copper and lead. The timber is stated to be of very large growth, and the soil to be most productive. Gold has been discovered near Aden, in the vicinity of the northern terminus of the road.

It is expected that the entire main line will be completed in about eighteen months, as track-laying has already begun, and a very large force of men is at work. This force will be augmented in a week or two, and the work pushed with as much alacrity as possible. The company, it is stated, has plenty of money; the greater part of the rolling stock necessary for its present equipment is now on the way, and it is expected that its most southerly division will be in operation in a short time. Apart from the branches mentioned above, the company, provided necessary legislation can be obtained, proposes to build a northern extension, starting from Indian Brook, a short distance above Hall's Bay, and running north to a point near Hawke Bay. A branch of the Northern Division, which will be known as the Humber River branch, will leave the main line at River Head and run down the entire length of

the river from which it takes its name to an arm of the Bay of Islands. There also will be a division known as the Continental, which will branch from the main line at Bishop's Falls, and extend westward through a rich agricultural and mineral country, to a point near the mouth of the Great Codroy River, in the vicinity of Stormy Point. In this immediate region there are valuable gypsum deposits, besides coal seams, which, so far as prospected, measure six feet thick. With the further development of the country, towards which the mining interests are doing much, the company expects its road to be a great success.

LODES, LEADS AND VEINS.

AMERICAN CHAUDIERE.—Dr. Donham reports that the American Chaudiere Company have taken out gold enough during the past summer to more than pay expenses.

SONORA ANTIMONY.—The stockholders of the Sonora Antimony Company held their annual meeting in Portland last week. The election of officers resulted in the choice of the following: Directors, R. F. Briggs, S. A. Carleton, James Edwards, Geo. A. Brackett and Chas. R. Batt; Vice President, James Edwards; Secretary, G. S. Fernald; Assistant Secretary, Orin S. Kopp; Treasurer, Chas. R. Batt.

MASCOT.—The Boston Daily Advertiser of Oct. 11 contains a column and a half devoted to the Mascot mines, of Gorham, N. H., comprising reports from the President, General Manager, and Superintendent, and statements by Prof. J. H. Huntington and Thomas Binns, Metallurgist, all of which are highly flattering. Our space will only permit the extraction of a few items. Upon the "Mascot" claim a tunnel for the purpose of tapping the vein has been driven 100 feet, and an estimated distance of 20 feet further will be required in order to penetrate it. In the "Galena King" two openings have been made, both of which are in good ore which becomes more massive and richer the deeper the workings extend into the mountain. The "Galena Queen" will not be worked at present, although it has been prospected to determine the course of the vein. During the past thirty days about 100 tons of ore have been shipped to the New England Smelting Works at East Boston, on which the Company have received \$2,000, with an unsettled balance remaining. The Company are now building a large hotel, to furnish accommodations for their workmen. The New Hampshire Reduction Company propose to immediately commence the erection of a concentrating mill with a capacity of 50 tons per day, for the concentration of the second-grade ores of the Mascot.

NATIONAL MINING AND INVESTMENT CO.—The National Mining and Investment Company propose to commence operations in a few days. Prof. Bartlett and some of the Directors visited Acton last week and located the shaft near the junction of the two veins which come together on the property of the company. Ore will be taken out at once and sent to the Portland Smelting and Reduction Works for treatment to ascertain its value.

NEW ENGLAND MINING DEVELOPMENT & INVESTMENT CO.—The New England Mining Development & Investment Company announces in another column that subscriptions to its capital stock will be received at the Bangor and Boston offices of the company during the first two days of next week. The capital is \$50,000, and stock is to be paid up. We believe the operations of this company will be of decided benefit to the corporations whose stock it handles, as well as to the stockholders in such corporations in their individual capacity; and, if we judge from the profits which have been made by individuals associated on a much cruder plan, we may be assured that the holders of shares in this new enterprise will not be without their reward.

MT. MICA.—A force of miners under the charge of Supt. Carter is actively employed at Mt. Mica. The top or cap of the mountain is being removed for the purpose of better exposing the mineral vein.

KATAHDIN IRON WORKS.—Foreman Clark of the Katahdin Iron Works called on the MINING JOURNAL this week and gave very excellent reports of this busy place. The Works are running continuously and turning out about one hundred and twenty-five tons of superior pig iron per week. During the past week another very heavy ore deposit was struck. The Bangor and Katahdin Iron Works Railroad is being rapidly pushed and will be completed to Brownville this fall.

NORTH CASTINE.—Supt. Leavitt was in the city early in the week and expressed himself very enthusiastically in regard to the North Castine. His confidence in the mine is now stronger than ever before.

TAPLEY.—Frequent mention has been made by us of the

Tapley Copper Mine of Brooksville and our readers have been thoroughly informed in regard to the great value of this remarkable mineral property through extended notices in these columns. It is with pleasure we learn that arrangements are being perfected looking to the speedy development of this mine which has been lying idle too long. Mr. W. J. Webb, of this city, is now engaged in placing the Tapley on the market and an excellent opportunity is offered investors. The following extract is made from a circular just issued: "It is proposed to organize a Company to develop this property, and as soon as the Company is formed the stock will be listed on the Boston Board, and it is believed that the stock will be one of the strongest and liveliest of Maine Copper stocks. The Company will be organized on the assessable basis, with a capital of \$500,000 divided into 200,000 shares, per value \$2.50 each, 50,000 shares of which will go into the Treasury. The small number of 50,000 shares will be offered to subscribers at the low price of 50 cents per share. Of the money raised by the sale of the stock, \$10,000 will go into the Treasury. This, together with the value of the ore already mined, is sufficient of itself to erect furnaces and run the mine without selling treasury stock or levying assessments. In order to make the Company strong, subscribers agree to pool the stock for the space of three months after date of organization."

EDGEMOGGIN.—Supt. Sherman reports work in the Edgemoggin progressing finely. The water is all out of the shaft, fifteen feet of which is already timbered. Work will soon be resumed in the bottom, which is 105 feet deep at present. The Superintendent has procured workmen from Newburyport, and the crew now consists of six miners, one blacksmith and two engineers. When the timbering is completed the force of miners will be increased. The stock of the Company is to be listed on the Boston Mining Board and will be called at an early day. Shares have recently advanced in Portland from 22cts. to 40cts.

SULLIVAN.—Supt. Cahill reports to us under date of Oct 12, as follows: "On the night of the 11th, from 3 holes we broke and hoisted over 6 tons of the richest ore from the bottom of No. 1 shaft yet found in the mine. The greater portion of it is literally covered with native silver. The ore vein is making stronger to the east as depth is attained. There is no question now of the ore shut extending and widening east as well as west. West drift, 4th level, is also looking remarkably well. We are putting in station on the 4th level and soon as complete sinking will be resumed. Everything in and about the mine is looking first class."

Blue Hill.

DOUGLASS.—The mine continues to make a superior showing. The smelting works are running successfully under Supt. Williams. One cupola furnace is in full blast continually. Some changes have been made in one of the reverberatory furnaces which has improved its working. Masons are at work on the new roast kiln and it is understood another cupola furnace will shortly be erected.

ECLIPSE.—A meeting of subscribers to the stock of the Eclipse Copper Mining Company was holden in this city yesterday (Thursday) afternoon—and an organization perfected and officers elected. The Company has a capital of \$500,000 divided into 250,000 shares of a par value of \$2.

STEWART.—Work progresses steadily and satisfactorily. Supt. Dunn has been engaged in timbering a portion of shaft No. 2.

BLUE HILL.—Everything at the Blue Hill is running along smoothly. Supt. Moyle is pushing work in every department of the mine and excellent results are being accomplished.

TWIN LEAD.—It is with pleasure we chronicle very gratifying intelligence from the Twin Lead. This mine for nearly two years has been in active operation and a very great amount of development work has been done. Supt. Duff has been untiring in his prosecution of mining work and has been supported by an enterprising management. There has never been a question in the minds of intelligent mining men in regard to the existence of great bodies of rich ore on the Twin Lead property but the surface outcroppings were not of that nature to conclusively prove the location of these ore channels and the earlier exploitations did not show the good results anticipated. The management, however, with commendable pluck and perseverance vigorously prosecuted the work of development and success has finally crowned their efforts. The south vein recently cut through by the crosscut from the incline shaft proved to be of very large proportions and the winze which is being sunk on the vein now exhibits a pay streak two and a half feet in width of massive high grade copper sulphurets. A very encouraging feature of this discovery is that the ore body is rapidly widening. In the previous workings a large amount

of low grade concentrating ore was exposed and now with a fine body of smelting ore in sight the Twin Lead has a promising future.

YOUNG HECLA.—The Young Hecla mine is once more the scene of active operations. The Hecla property is unquestionably one of very great value and under the present excellent management it is certain to develop into one of the best mines in the Blue Hill district. Supt. Ludlow has commenced work on the south side of the road and is sinking a shaft to strike the large vein which runs easterly from the Blue Hill through the Young Hecla and Twin-Lead properties. The ledge does not crop out at this point and the first exploitations have to be through the soil.

GRANGER.—The Granger mine was closed down on Saturday last on account of a lack of funds with which to carry on further operations. This is a most unfortunate condition of affairs, but it is one for which neither the mine nor the management is responsible. It is attributable solely to the company's system of organization, and is merely a repetition of the experience of thousands of companies owning valuable properties but who were dependent upon treasury stock and mortgage bonds for a development fund. The Granger is a good mine, well equipped, and the money spent in opening it up has been most economically and judiciously expended. The want of success which attended the treatment of the ore recently shipped to Boston was no fault of the ore itself. The property is too valuable to long remain idle, and we believe that a re-organization of some kind will soon be effected, and work resumed at an early day.

British Provinces.

The coal shipments from the port of Pictou, for the week ending Oct. 3d, were as follows: Halifax Company, 655 tons; Acadia Co., 1019 tons; Intercolonial Co., 1094 tons; Vale Co., 1715 tons; total, 4483 tons.

Mr. Ellershausen, whose enterprise in developing copper mines is well known, is said to be negotiating for the purchase of the Alpha Copper Mine at Polson's Lake, Antigonish County. We would be glad to see this mine fall into the hands of some party having enterprise enough to test its value. It is now some 40 years since this mine was first discovered, and mismanagement and confusion have followed it through the whole course of its history.—[New Era.

The Satemo Gold Mining Company are rapidly pushing forward their operations at Tangier. The crusher will soon be in operation. At Salmon River fifteen stamps are running steadily. Prospecting is being successfully conducted at Chezzetcook. A number of gold bearing leads have been discovered by J. H. Anderson and others, who are greatly encouraged by the number of exposures found. Rich indications of gold have also been discovered Northwest of Salmon River.—[Halifax Herald.

Mr. Wallace Broad, of the Canadian Geological Survey, who has been in New Brunswick during the past summer, has about completed his work in the field for the present season, and is now engaged in tracing plans in the Crown Lands Office, Fredericton. He has concluded the survey at York County, except a small portion of it north of Stanley, and has also made considerable progress in Carleton County, as far up river as Woodstock. He was assisted this season by Mr. W. McInnes, of Fredericton.

GLOUCESTER.—Mention has been previously made in these columns of the Gloucester Silver Mining Company, of Bathurst, New Brunswick. By an advertisement in another column it will be seen that a limited number of shares of the treasury stock are offered for sale at \$3 per share. The par value of these shares is \$5 and there are but 50,000 shares. The property is believed to be a most valuable one, and is located in a mining district which is rapidly coming to the front and which has already acquired a high reputation in mining circles. The company is officered by gentlemen of high standing throughout the Provinces, and the General Manager in charge of developments at the mines has had a large experience in conducting mining operations in Colorado and the West. The project is worthy of attention.

The Victoria Oil and Mining Company, organized sometime ago, to develop the resources of Cape Breton, are meeting with good success. The company is principally composed of Boston capitalists, prominent among which are the following:—Charles E. Powers, Jonathan Door, J. A. L. Whittier, S. K. Hamilton, George A. Smith, Albert Palmer, and Isaac P. Gragg. The capital stock is \$500,000, divided up into 100,000 shares. This island is rich with minerals of almost every description and now that capital and push has been infused into its resources, there is no doubt but that it will grow up and flourish.

Numerous veins and leads of coal of a very superior quality, have been discovered, and now that this necessity is becoming scarce in the Upper Provinces, we expect Cape Breton to come to the rescue, and fill up the gap.—[Halifax New Era.

NIGADOO.—We acknowledge receipt of the prospectus of the Nigadoo Silver Mining Company of Bathurst, N. B. The following is the report of W. H. Secombe, General Manager: "Since we commenced work about five weeks ago, we have traced the vein from the bed of the river where it was first discovered—and where some nice specimens of galena were found—a distance of one hundred and fifty feet up the bank and altogether away from the influence of the river to a spot in every respect suitable for a shaft. Here we have sunk a distance of twenty-five feet. The vein is fully eight feet wide, well defined and carrying two good walls, and is composed of the requisite characteristics for producing galena in large quantity. From within a few feet of the surface the shaft throughout has yielded rich specimens of galena, and from present appearances it is fair to assume that, as developments proceed, large deposits of ore will be found. At present we have ten men employed and the work is progressing as satisfactorily as could be desired."

THE DORCHESTER BONANZA.—Some ten years ago a party of American speculators became interested in certain outcrops of copper ore in the vicinity of Dorchester and having tested some of the specimens and being struck by their richness, they sunk various shallow test pits into the surface conglomerate and finding no paying quantities of ore finally became discouraged and came to the conclusion that the surface specimens were relics of the *diluvial detritus* or deposits from glaciers supposed to have been sliding around there before man was created. They consequently quit operations and went away. About three years ago a practical miner, Mr. James Grant, who had gained experience in prospecting in Nova Scotia, happened to visit Dorchester and hearing of the previous operations went into prospecting on his own account, and in a very quiet way delved into the woods and hills pretty thoroughly and found the indications much better than he had any reason to expect. On sunny days the odor of verdigris in some small ravines on the hills he found so strong as to be quite offensive, and he noticed that the cattle would seek those spots to lie down in, as the flies found the smell of copper too strong for them to follow with comfort. Small streams, too, quite black, he noticed oozing out from between boulders which killed the herbage wherever they flowed. Detached pieces of ore dropped by old glaciers he rightly concluded would not have so general an effect, and having communicated his views to a couple of Moncton gentlemen the three went into it on equal shares with a view to developing whatever might be there. A Londonderry capitalist offered to put in \$50,000 and enter as a fourth, but just then the Beliveau craze arose and the owners of land where the copper lay suspected there might be money in their hands, too, and refused to negotiate mining leases, or do any thing else. Thus the matter rested until a few months ago when Mr. Edward F. Couch, of Newburyport, Mass., appeared on the scene and infused new life into the enterprise. Mr. Couch bought out the right of Grant and his two partners and then devoted himself to obtaining control of the lands. By this time Beliveau Albertite had gone up and the faith of the farmers in the copper indications grew correspondingly less. Mr. Couch, therefore, without much difficulty, obtained leases from Wm. B. Chapman, Weldon Chapman, Ann Chapman, John S. Chapman, Geo. King, Wm. Turner, Geo. W. Chandler, Alfred Cole, Chas. Crossman, Patrick McGuire, Alpheus Palmer, and others, securing to himself mining rights over a large area of the rocky ridge extending northeastward from the penitentiary. He then, with a few picked miners sworn to secrecy, began operations. On sinking pits through the conglomerate to the formation below he found the strata much disturbed, evidencing tremendous upheavals and shiftings of the earth's surface in the remote past. In one place the stratification is perpendicular, as if a piece of the earth's crust had been stood up upon edge and there, wedged in between two walls of sandstone, is the brown seam of copper, one which, if reports be true is as near pure copper as it can be. Men are kept on guard over this seam night and day, so that one has no chance of seeing for himself the dimensions of the seam. It is reported, however, that a company of capitalists are investing from \$100,000 to \$200,000 in the speculation with Mr. Couch, and Professor Merrill, an eminent New England Geologist, sent on here as an expert, by the Company, expressed himself as agreeably surprised at the results of his tests. Various members of the Company have visited the vein during the last two months and Mr. Howe, a somewhat celebrated conveyancer from Boston, has been here during the past week overhauling the deeds and tracing out and making abstracts of the titles to the lands for the satisfaction of the Company before the bonds are finally signed. It appears more

like a seam than a vein and occurs in the mill-stone grits—a most unusual situation for copper. The leading seam is said to be five feet thick. The parties interested are very uncommunicative, but they intend pushing operations on a large scale.—[Chignecto Post.]

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

Sierra Nevada has levied an assessment of \$1 per share.

Colorado's bullion output this year will probably be about \$23,000,000.

It is rumored that the Standard Mine of Bodie will be listed on the London Stock Board.

In New Mexico, Friday, four men in one town and three in another were hung by Judge Lynch.

Another rich strike is reported in the Starr-Grove, drift No. 2, south, having developed an extensive ore body.

The Charlotte (N. C.) Observer says the Hopewell Copper Mine, near that place, is now shipping large quantities of ore to Baltimore.

An Upper Lake, Cal., despatch says that the bodies of four men, caught by the caving of the shaft at Sulphur Bank mine were recovered Saturday. All died from suffocation.

The St. Louis Mining World, and the Western Coal Journal, have been consolidated and will hereafter be published in St. Louis, under the name of the St. Louis Mining News.

The furnaces of the Copper Queen, at Bisbee, Arizona, during the four days ending Sept. 30, produced 104,935 pounds of copper bullion. On Oct. 4 the company shipped 205,297 pounds of copper from San Francisco.

The amount of charcoal consumed in Leadville is simply enormous. Over 500,000 bushels are used every month by the various smelting works. The price of charcoal at Leadville ranges from 12 to 14 cents per bushel.

There is considerable talk of a large iron manufacturing city springing up in the coal and iron fields of Southern Utah. Already three important railroads are pointing in that direction, and capital is at the head of the future Manchester of the Rocky Mountains.

The anthracite coal mines are confined to eight counties in Pennsylvania, in which there are 273 collieries, having an average yearly capacity of 149,348 tons of 2,000 pounds. The maximum yearly capacity of all the collieries reported is 40,772,000 tons. The actual output was about 28,000,000.

Arizona mines are doing well despite floods and the redskins. The Western, which but two or three years ago was but a \$10,000 prospect hole, has paid since July, 1880, over \$1,100,000. The Tombstone has produced \$900,000 in dividends, while the Silver King has paid \$725,000, with flattering prospects for the future.

The Gem Nickel Mine, Silver Cliff, Col., reports striking rich ore in the crosscut on the 100-level, in shaft No. 2, which is about 300 feet south of shaft No. 1. Shaft No. 1 shows two feet of solid ore, worth over \$1,000 per ton in nickel, cobalt, copper and silver. Estimates of products, mounting into millions, are based upon this discovery.

Equity proceedings have been instituted in the Philadelphia civil courts on behalf of the present officers of the Iowa Gulch Mining Company against a number of persons, charging them with having bought a tract of land and foisting on the public 200,000 shares of stock of the Iowa Gulch company at prices averaging \$2 a share, the alleged mine proving upon examination to be worthless.

The man who does not believe that Colorado will be a great manufacturing State should carefully examine the Ruby Camp Anthracite coal, containing two per cent. more fixed carbon than the Pennsylvania product, and the Cebolla iron alongside of it. Limestone may be had anywhere in the State. These are three ingredients necessary to the building up of a great industry. All that is necessary is the capital and the pluck to erect the furnace and the mills.—[Denver News.]

Speaking of the San Pedro mine, the Bernalillo Times, New Mexico, says: The owners of this mine have now 2,000 tons of copper rock and 15,000 tons of gold ore on the dumps. They have an artesian well 2,000 feet deep and are boring another. A stamp mill and smelter are in operation every day. The stamp mill is working 25 stamps, and an extension of 150 feet

is to be built, and 100 additional stamps put in. The smelter runs copper of a fine quality. This mine employs 400 men.

The San Pedro & Canon del Agua Company are in a canon of hot agua, in other words the Slough of Despond. It appears that the owners now have something to help them bear their stock. Nevertheless, we must say that there is no need for so bad a break in the market as that which was made last week on this stock. If the boundaries should be shown to take in too much ground, or if the company should lose their most valuable mine, they would still own some of the most desirable property in the Territory of New Mexico.—[N. M. Mining World.]

NORTH CAROLINA EMERALDS.—Prof. Hidden, of the Hidden Mine, Alexander county, was in town last Saturday, having with him, to be shipped North, the emeralds which were found in this mine on the 20th inst., as noted in the Landmark of last week. They are of unusual size and surpassing beauty. One of them, 3 1-4 inches in length, is almost perfect in formation and a gem of rare beauty. Prof. Hidden says he is familiar with all of the principal mineral cabinets of the country, and as fine emeralds as these were never before found on the American continent.—[Statesville Landmark.]

COPPER IN UTAH.—The Salt Lake Tribune says: "J. M. Rockefeller is up from Milford and has laid on our table a noble specimen of the Old Hickory mine, which is situated a little back of Milford, in Beaver county. The Old Hickory is an immense copper vein, the croppings showing fully 90 ft. in width, and while there is not 90 feet of solid copper, there are in this ore channel several veins running from 5 to 7 feet in thickness and carrying fine ore. "Rocky" has been sitting by his bonanza for years and has said all the time that it would come out all right in the end. He has at last incorporated the property. Geo. W. Roberts is the general manager, and twelve men are employed in opening up the mine."

The Contention, or Western Mining Company, has brought suit against the Head Centre Company. The Western Company sets forth a claim to all that portion of the Contention lode and mine which lies between the vertical plane in which the north end lies, and a parallel vertical plane 640 feet southerly therefrom. The value set upon the above described piece of ground is \$500,000, and the plaintiff prays for judgment for the mine and \$225,000 damages. A writ of injunction has been issued against the Head Centre Company, and the Western has entered upon the ground in dispute and put men at work sinking a shaft. This will be an important suit, and foreshadows one against the Flora Morrison, which adjoins the Contention on the west.

By direction of United States Attorney-General McVeagh, and in pursuance of a recommendation from Commissioner MacFarland, a suit was filed September 15th to oust the Canyon del Agua Company from the grant which they now occupy, about forty miles from Las Vegas, New Mexico, on the ground of a fraudulent survey of the same. Congressman Hazleton, of the Fifth Wisconsin District, and Judge Downs, of Las Vegas, are appointed special solicitors to manage the case on behalf of the United States, and to act in co-operation with U. S. Attorney S. M. Barnes. The case is one of great importance, involving a very valuable property, and upon which the Canyon del Agua Company have already expended nearly a million dollars for its development.

SEPTEMBER DIVIDENDS.—Alice (Montana), \$40,000; Black Bear (Cal.), \$7,500; Boston and Montana, \$20,000; Chrysolite (Col.), \$100,000; Christy (Utah), \$6,000; Copper Queen (Ariz.), \$25,000; Con. Gold (Ga.), \$4,000; Deadwood Terra (Dak.), \$30,000; Eureka Con. (Nev.), \$25,000; Evening Star (Col.), \$25,000; Exchange (Nev.), \$3,000; Great Western Quicksilver, \$12,500; Green Mountain (Cal.), \$9,375; Hecla Con. (Montana), \$15,000; Homestake (Dak.), \$30,000; Idaho (Cal.), \$37,250; Indian Queen (Cal.), \$7,250; Jocuistita (Mexico), \$100,000; La Plata, \$15,000; Northern Belle (Nev.), \$37,500; Ontario (Utah), \$75,000; Robinson Con. (Col.), \$50,000; Silver King (Ariz.), \$25,000; Standard Con. (Cal.), \$75,000; Tip Top (Ariz.), \$20,000; Tombstone (Ariz.), \$50,000; Western (Ariz.), \$75,000. Total dividends for September, \$919,375.

SILVER ISLET.—The North Shore Miner of Sept. 27th says: "The heavy storm last week had a disastrous effect on the immense new crib work which has lately been built. The two cribs heavily loaded with rock have been carried out into the Lake a long distance, and the work which has been carried on during the present season at an immense cost is, comparatively speaking, of little value. The loss resulting from this storm will be very great, and has been estimated at about five thousand dollars. The tremendous force of the waves that move such immense bodies can hardly be realized, and it is against obstacles of this nature that the management have had to con-

tend. Had the mine, instead of being out a long distance in the Lake, been located on the main land, it would long ere this have been paying dividends. The total cost of building and keeping in repair the large amount of crib work has been a great strain on the resources of the Company."

The Northern Pacific Railroad has within the past seven weeks placed a geological corps in the field, whose work it shall be to examine the agricultural and mineral resources of all the country tributary to the road from Lake Superior to the Pacific. Hitherto the company has possessed little accurate knowledge of these resources. The gentlemen connected with the corps are as follows: Prof. Raphael Pumpelly, in charge; Mr. A. D. Wilson, chief topographer, and Messrs. W. B. Putnam, B. Willis and G. H. Eldridge. Each of the last three named gentlemen will be in charge of a field party to consist of themselves as geologists, a topographer and such others as necessity may demand. The work has been started both at the east and the west, and though chiefly of an economic nature will necessarily involve a large amount of general geology. The final completion of the work will require eight or ten years time. All the gentlemen previous to assuming their present positions were connected with the United States Geological Survey.—[Helena (Montana) Independent.

A Leadville correspondent says that Brick Pomeroy's great project—the greatest in the world's history of mining operations—of putting a tunnel five miles long and 4,000 feet below the summit of Gray's Peak, straight through the backbone of the American continent, has so far progressed that its ultimate financial success is not questioned by any intelligent business man in Colorado familiar with the plan and its workings. Pomeroy's success is one of Colorado's wonders. Two years ago he arrived in Denver worth \$300. To-day it is estimated that he can multiply every dollar of his original capital by 1,000. He is now numbered among Denver's solid men. The capital stock of the Atlantic and Pacific Tunnel Company of which he is President and Treasurer, is \$7,000,000, to be divided into 700,000 shares at \$10 per share. Three hundred thousand shares of this capital stock have been set apart to be sold for cash at \$2.50 each, to defray the expenses of labor, machinery, etc., for carrying on the work. These are being rapidly disposed of, and will soon be gone. The tunnel has already struck a number of exceedingly rich veins of mineral, and will soon be paying its own expenses. This great company is a practical temperance organization. Its constitution prohibits the employment of any man among its hundreds of helpers who uses alcoholic drinks.

It is said that stock companies are finding a profitable business in smelting over the old slag and dumps of the ancient silver mines at Laurium, Greece. These mines, during the 700 years B. C., averaged an annual production of nearly \$500,000, or \$345,000,000 during that period. The product had much diminished in Xenophon's time, about 425 B. C., and he advised the Athenian government to work the mines itself, instead of leasing them to private parties. One thousand slaves were employed. The classic Greek seems to have known about adits and shafts, the latter sometimes measuring 40 feet across. Smelters were erected near the sea coast, as wood could only be had by water. There were stamp-mills consisting of stone mortars and iron pestles. Sieves heralded our present screens. Bellows and charcoal had been got on to. Ore-bearing pillars of rock had, by law, to be left standing at intervals to support the ground, and one avaricious Greek was put to death for trying to get away with some. Mining was as risky then as now, and Xenophon suggested the modern plan of companies of Eastern stockholders. However, the Greek newspaper of those days says nothing of Little Pittsburg bubbles, nor even of claim jumping, mine salting, and the various other ingenious devices of our time, which shows that we're a long way ahead of our old foggy Greek ancestors.—[Colorado Miner.

Nuggets.

—The steamer City of Bangor has been sold to Boston parties for \$15,000.

—Supt. Shoebart is very sanguine in regard to the success of the new hotel project at West Sullivan.

—The Ellsworth American understands that Mr. John Malone will have charge of the Copperopolis House.

—A recent issue of the New York Mercantile Review contains a very complimentary notice of the brokerage firm of Prescott and Hersey.

—Parties desiring a complete assay outfit at very reasonable terms can learn much to their advantage by addressing the MAINE MINING JOURNAL.

—A patent for "ore roasting and calcining furnace" has just

been granted O. W. Davis, Jr., of Bangor, and Geo. D. Colby, of the Katahdin Iron Works.

—The main building of the Centennial Exposition, Philadelphia, has been sold to a syndicate of Pittsburg capitalists whose names are as yet kept secret.

—The Commonwealth Mica and Quartz Mining Company, of New Hampshire, exhibit a fine display of their products, at the Old Mechanics' Fair, in Boston.

—Oct. 17th, a new time table will go into effect on the Bucksport & Bangor Railroad. Trains will leave Bucksport at 5.30 and 10 A. M. and 5 P. M. and depart from Bangor at 7.35 A. M. and 2 and 7 P. M.

—Mr. Isaiah S. Emery, of this city, and Judge D. William Douthitt, formerly of Nevada, have secured prospecting licenses covering about one hundred and twenty square miles of mineral lands, and a contingent interest in ninety-nine additional square miles, in Newfoundland.

—The recent "deal" in Deer Isle on the Boston Mining Board has furnished an opportunity for the Portland shareholders to unload, of which they have been not slow to take advantage. The Portlanders are not lacking in enterprise, but they are sadly deficient in "sticking" qualities.

—Several of the prominent members of the New York Stock Exchange have incorporated a new Electric Light Company. Mr. H. E. Dillingham, formerly of this city, is one of the active promoters and has been chosen Vice President. The corporation is known as the Markland Electric Light Company and is capitalized at \$600,000, divided into shares of the par value of \$1.

—Although some fine specimens of Eastern ores are on exhibition at the Institute Fair, in Boston, the display, as a whole, is not very creditable to Eastern mines. This is not, however, the fault of Prof. Kidney, who has the exhibition in charge, but is owing to the fact that our Maine mining companies did not, to any great extent, give sufficient attention to the matter and render him the assistance they might easily have done.

—The Daily American Exchange of New York says: "There is a rush of visitors to the Hamilton Reduction Works, in this city, to investigate the new process of reducing ores. The works are nearly completed, and will be ready for operation in about two weeks. A contract has been made which gives the company the option of working 100 tons of Virginia ore per day. There are also 1,000 tons of iron pyrites coming from Nova Scotia. A number of orders for machines have been received on condition that the works in this city prove successful, including three orders given yesterday. There is a good demand for the stock of the company coming from those who have faith in the success of the process."

—Mr. Wilkie Darling, Supt. of the Manhattan mine, has purchased the well known Castine House at Castine and proposes to keep an excellent hostelry for the accommodation of the travelling public. The Castine House is a large and thoroughly appointed hotel favorably located for the accommodation of mining men and possessing unsurpassed attractions for seaside visitors. The Manhattan mine, of which Mr. Darling is Superintendent, is distant but a few miles directly across the Bay and the Cape Rosier mine is also not far away. The Bagaduce district is destined to play a very important part in mining circles and the Castine House from its central location will surely receive a large patronage from mining men.

—The United States and Nova Scotia Investment Company was recently incorporated under the laws of Nova Scotia with a capital of \$1,000,000, divided into 40,000 shares of a par value of \$25. Frank W. Allen, of New York, is President and Thomas Doremus, of the same city, is Secretary. The office of the company is in New York. The special charter allows the company to search and prospect for, or mine, quarry, dig, crush, wash and otherwise mine gold or gold bearing quartz and other metals and minerals; also to purchase, hold, lease and sell mines and mining rights and licenses in any part of Nova Scotia, with full power to purchase, take, lease, or otherwise acquire any lands, claims, leases, licenses, buildings or any other property both real and personal and to erect all such works, buildings and machinery as from time to time may appear expedient; and to construct and operate tramways and railroads to and from mines of the company or from any other mines to one or more places of transshipment; to construct and hold dams, water flumes, dwellings, wharves, docks, piers, vessels and all other things necessary or useful to the business of the corporation and to carry on the business of mining, quarrying or otherwise searching for gold and other metals and minerals and crushing, amalgamating, smelting, reducing and refining the same. This charter was procured by Mr. Isaiah S. Emery, who appeared before the Nova Scotia House of Assembly in April last.

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— AND —
INVESTMENT COMPANY

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MINES AT GORHAM, N. H.
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Capital \$500,000. Shares 100,000.
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Sept. 20, 1881.

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COMPANY.
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100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.
President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Laughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.
F. H. WILLIAMS & CO., Financial Agents.

BLUE HILL CENTRAL
Mining and Smelting
COMPANY.
OFFICE.....BANGOR, ME.
MINES AT.....BLUE HILL, ME.
CAPITAL, \$500,000.
100,000 Shares: Par Value, \$5.00.
Treasury Fund, 30,000 Shares.
Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

Silver Hill Mining Company.
Office, 11 CENTRAL STREET,
Room 4, - - - Boston.
Mines at Garland, Me.
Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer, Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.
Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

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CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill; Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, E. H. Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullin, Richard Lafan, Jeremiah Wooster.

FRANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.,
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffin, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

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Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
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Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
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Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Reddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

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McFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

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Treasurer's and Transfer Office, 356 Washington St., Boston.

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Egypt Bay, Hancock, Me. Incorp. July, 1879
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SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
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CHANGE OF TIME, Oct. 8, 1881.

	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	5.30	10.00		5.00
Arrive Bangor,	6.42	11.15		6.05
Leave Bangor,		7.35	2.00	8.10
Arrive Bucksport,		8.45	3.15	8.10

The 5.30 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.

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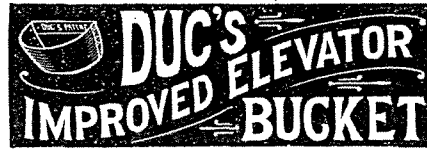
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- BARTLETT. MINES OF MAINE. Prospects, Geological Features, etc. By F. L. Bartlett. 12mo. 85 pages. Portland, 1880. 25c
- BARTLETT. MINERALS OF NEW ENGLAND—Where and How to Find Them. By F. L. Bartlett. 12mo. 46 pages. Portland, 1877. 25c
- BLOXAM. METALS: THEIR PROPERTIES AND TREATMENT. 1 vol., 12mo. London, 1872. \$1.50
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- JANNETTEZ. A Guide to the Determination of Rocks, being an introduction to Lithology. By Edouard Jannettez. Translated from the French by Geo. W. Plympton, C. E. A. M. Illustrated. 12mo. New York, 1877. \$1 50
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- RICKARD. Practical Mining Fully and Familiarly Described. By George Rickard. 8vo. London, 1879. \$1.25
- RICKETTS. Notes on Assaying and Assay Schemes. Illustrated. 2d edition. 8vo. New York, 1879. \$3.00.
- ROSCOE. Lessons in Elementary Chemistry; Inorganic and Organic. New edition. Illustrated. 12mo. New York, 1879. \$1.50
- SCHOFIELD. The Prospector's Manual for the Discovery of Quartz and Placer Indications of Gold and Silver Mining. Paper. Boston, 1875. 50c
- WHEELER. OUTLINES OF DETERMINATIVE MINERALOGY. By C. Gilbert Wheeler. An Elementary Guide to Determinative Mineralogy for the use of Practical Mineralogists and Prospectors and for Instruction in Schools and Academies. Chicago, 1881. \$1.00
- VON COTTA. A TREATISE ON ORE DEPOSITS. By Bernard Von Cotta. Translated from the 2d German Edition, by Frederick Prime. Revised by the Author. With numerous Illustrations. 8vo. New York, 1870. \$4.00

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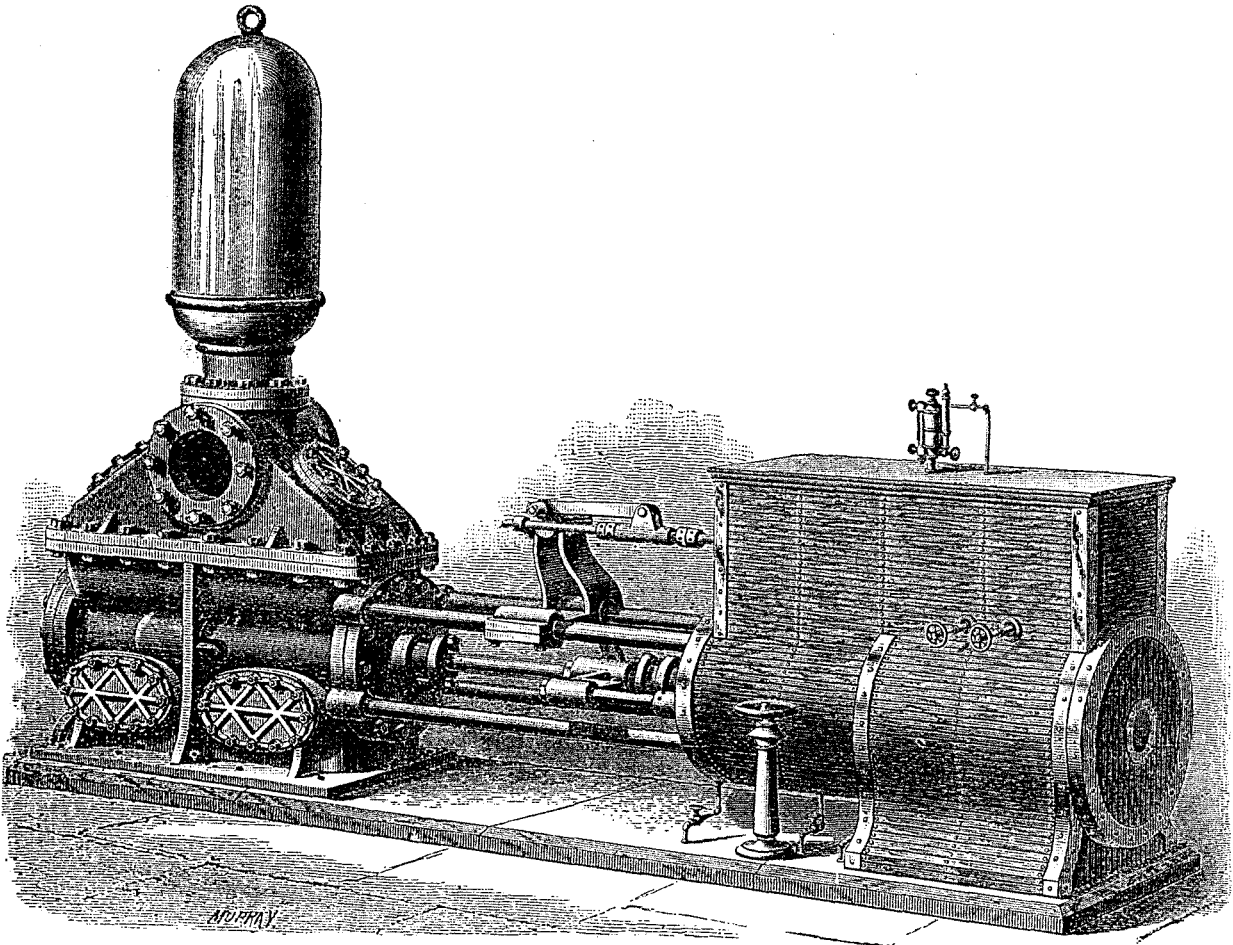
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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

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Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, OCTOBER 21, 1881.

Ingot copper remains about the same, New York quotations being 18 1-2c.

The Autumn meeting of the American Institute of Mining Engineers will be held at Harrisburg, Pa., beginning October 25th.

Treasury stock is the faintest reed upon which a company can rely. It never can be sold when money is most needed. It is the natural target of birds of prey who are looking for something to devour. To keep a market price for it, the promoters must sustain it in the market, and if they are going to do this they might just as well use the money in a straightforward way, in paying labor and machinery bills.— [Leadville Chronicle.]

We suppose there must be a deal of fun in a parcel of handsome and talented brokers getting together on the floor of a Mining Board and tossing a certain stock about from one to another until the "sales" have amounted to many thousand shares while not a half-dozen shares have changed hands, and then publishing in the evening and morning papers a quarter-of-a-yard of reported "transactions;" but to the unappreciative outsider it would seem that full-grown men should be in better business.

The Douglass is a great mining property, and is worth many times the sum indicated by the present market price of its shares. The causes for the steady decline in the stock are fully set forth in another column. The public do not care to invest in a mine, no matter how valuable, which is weighted down with a heavy mortgage drawing a high rate of interest, and whose affairs have not been conducted in a

manner calculated to inspire a great amount of confidence in the ability of the present management to successfully conduct the business of so extensive an establishment as the Douglass Mine and Works.

It is said that a Colorado man has invented an apparatus for saving the scum that floats on the surface of the water as it passes from stamp mills or pulverizers to the concentrators during the treatment of ores containing precious metals. Portions of these ores which are of light specific gravity float as scum on the water, and pass off as waste. It has been found that this is usually rich in the metals desired to be saved, and holds sulphurets, chlorides, oxides, etc., which, being light, usually float on the surface.

In another column will be found a brief communication from one of the Directors in the Deer Isle Silver Mining Company in answer to our comments of last week relative to the new arrangement made in regard to the shipment of their ore. The fact that the New England Smelting Company propose to purchase the ores outright, paying therefor a reasonable price, was not previously understood by us and, of course, puts the matter in an entirely different light. It is the intention of the MINING JOURNAL to call attention to all actions taken by mining companies which have a wrong look about them and the nature of which the public fail to understand, in the hope that an explanation may be forthcoming. In this case the purpose has been accomplished, and the explanation is satisfactory.

The mining share market has been dull during the week, although prices generally remain firm. At the Boston Stock Exchange the only sales of Maine stocks were 100 Douglass at 1 5-8, and 1900 Sullivan at prices ranging from 3 1-2 to 3 7-8. At the Mining Board, however, things must have been lively enough, as something less than a million shares of the various Maine mining companies appear as sales in the "official" reports. The only special feature of the week has been Deer Isle, which has dropped to 75c. Other closing quotations on Wednesday last were as follows, the figures quoted being the price at which the last regular (reported) sale was made, Copperopolis, \$2.05; Milton, \$1; Twin Lead, 90c regular and \$1 buyer 60 days; Young Hecla, 52c; Edgemoggin 50c; Silver Hill 35c.

The extensive additions to the Portland Smelting and Reduction Works are now nearly completed and the new furnaces will soon be in operation. The Acid Works are a complete success and are turning out large quantities of acid each week. The furnaces at the old works have been shut down during the present week on account of the want of proper ores for fluxes. The ores from the Fogg, Rosier and other mines upon which the works have been running contain little or no silica, and the company are now greatly in need of silicious, low grade copper ores such as are kicking about on the dumps of dozens of mines in this State. Ores containing three per cent. and upwards of copper with a considerable amount of silica—the more the better—are what is wanted. Here is the market for, and now is the time for the mines to send in, their ores which they can neither smelt nor sell anywhere else.

We were pleased to receive a call, a few days since, from Col. Henderson, a gentleman largely engaged in the mining and smelting of zinc in East Tennessee. From him we learn that zinc mining has become an important and remunerative industry in that section. The ore is a massive blende of remarkable purity, averaging upwards of 30 per cent. zinc. It occurs in a limestone formation, deposited in irregular bunches or "pockets," and is mined through tunnels driven into the hillsides. Large quantities of the ore are shipped in the crude state to St. Louis, but the greater portion is treated on the ground for the manufacture of metallic zinc and its oxide. The process by which the blende is transformed into metal is very simple and comparatively inexpensive; the manufacture of the oxide is more complicated. To ensure a marketable product, however, the blende must be almost entirely free from an admixture of other metals, and several companies have been obliged to suspend operations owing to the presence of lead in their ores. At present a number of companies are operating successfully in the district, all of which are private enterprises. Zinc metal and its products are used more largely at the present time than ever before, and the various works in the country find it impossible to supply the demand.

THE DOUGLASS COMPANY.

There is no one thing which has been such a drag upon and a detriment to the mining interests of Maine and which has retarded development to so great an extent as the management—or rather mismanagement—of the affairs of the Douglass Copper Mining Company. For a long time looked upon as the representative copper mine of the State (a title to which, fortunately, other properties are now in a condition to lay claim), the daily fluctuations in the price of its shares and the developments at the mine have been watched with more than ordinary interest by hundreds who have only been awaiting the time when stockholders should be receiving returns through the sale of its product, to enter with their own capital these too-long neglected mineral fields of Maine.

No one can be more fully aware than is the MINING JOURNAL of the unavoidable obstacles and hindrances to be met with and overcome by a pioneer company in demonstrating the value of mining property in a new district. Particularly has this been the case here in Maine, where the scepticism of the people and the almost total lack of mining knowledge of any kind have at times proved well-nigh insurmountable barriers to further progress. Nevertheless, viewing the history of operations at the Douglass, from its inception to the present time, in its most favorable light, and feeling disposed to overlook many grievous mistakes and shortcomings in the Company who have actually produced ingot copper, on their own premises, from Maine ores, we are obliged to confess that we cannot conceive of a plausible excuse for the condition in which they find themselves to-day.

The Douglass Company commenced operations under the most favorable conditions. Their treasury stock was nearly or quite all floated at high prices, most of it above par. They have been in pay ore from the grass roots, with no dead work to perform, and some eight to ten thousand tons were quarried out before systematic mining was commenced.

They have been operating about two years and a half, and what now is their condition? The President makes a public statement that the mine is on a self-sustaining basis. It may be so. But even he does not admit that it is earning anything; nor can it until the facilities for reducing its ore are increased, except by the sale of ore on the dump, and the management have never shown a disposition to sell anything short of ingot copper. Funds are needed to further increase the capacity of the works, and not only is the treasury of the company depleted, but a fifty-thousand-dollar mortgage, drawing twelve per cent. interest and falling due on the first of December, 1881, is hanging over their heads.

This being the condition of affairs, a stockholders' meeting has been called, to be held in Bangor, on Monday, Oct. 31, to consider the situation and, if possible, provide measures for relief; in short, for the following purposes:

To consider and determine, how said Company will pay off its mortgage due Dec. 1st, 1881, and whether the Corporation shall offer to sell, and shall sell its entire property to any person or persons, or Corporation; and if so, to whom and for what price; and whether payment shall be received in money or in stock of a purchasing Corporation; or by sufficient guarantee from such purchasing Corporation; and if the latter, what amount or proportion of such purchasing Corporation's stock shall be issued in exchange for, or to redeem as aforesaid; and to provide for the distribution of the assets of the Corporation among its members, in case it votes to stop operations; and if stock of a purchasing Corporation is to be received in payment, what provision shall be made for the distribution thereof, or of its proceeds among shareholders of this Corporation and in what way their rights and interests shall be protected and preserved, and what further obligation this Company shall require from such Corporation; to attend to any other business that may legally come before the meeting.

We trust that Douglass shareholders will see the importance of attending this meeting *en masse*; and those who find it impossible to be present cannot be too careful to whom they entrust their proxies. The very first thing in order, before any definite action can be taken, will be a full and detailed report from the Officers of the Company covering the period of their management of the property entrusted to their charge; this should be rigidly required of them.

We shall have more to say upon this subject in future articles. There is much to be said by someone, and the duty, disagreeable though it may be, devolves upon us. Meanwhile if the officers of the Douglass Company wish to make any public explanations or statements, these columns are, as they always have been, at their disposal.

Personals.

SUPT. DUNN, of the Stewart, was in the city on Saturday.

PROF. F. L. BARTLETT has recently visited Brooksville and vicinity.

PRESIDENT HARRINGTON, of the Copperopolis, visited the mine last week.

SUPT. LEAVITT, of the North Castine, has been in Boston the past few days.

JUDGE TOURGEE, author of "A Fool's Errand," is President of a Philadelphia mining company.

THOMAS NAST, the well-known cartoonist, has recently been visiting Silver Cliff, Colorado, looking after his mining interests.

COL. GRANGER, Supt. of the Granger, and Mr. A. A. HAYWARD, Supt. of the Faneuil Hall and Sullivan, have been in Boston this week.

MR. D. H. RICE, of the Hartford Mica Mines, North Groton, N. H., made us an agreeable call a few days since. Mr. Rice has been visiting friends in this city.

CAPT. J. H. MOYLE, Supt. of the Blue Hill, and CAPT.

WM. LUDLOW, Supt. of the Young Hecla, were in Bangor on Friday last and made an agreeable call on the MINING JOURNAL.

Dips, Spurs and Angles.

An assayer, who didn't know guceiss
Essayed with a damsel to spgleiss;
But her heart was of rock,
And she gave him a shock,
And a motherly bit of advgeiss.

—(St. Louis Mining News.)

—An all-fired good thing—a revolver with every chamber discharged.

—Wind will run a political meeting, but will never sink a shaft nor run a tunnel.

—A half tent, half shanty, at Sentinel Butte, Montana, bears the sign, "Rev. C. A. Duffy, Sample Room."

—"What scent do you prefer—jocky club or heliotrope?" asked the shopman. "Neither," replied Brown; "I prefer ten per cent."

—Two hundred thousand reams of sand paper are made annually in the United States. It is enough to scour the whole country.

—Jamful is the name of a Colorado town. That don't equal a place down in Maine called "Not by a Jugfull.—[Cambridge Tribune.

—A singular exhibit at the Atlanta Exposition will be by a North Carolina firm of over two thousand specimens of the medicinal herbs which grow in that State.

—Patti thinks of giving her first concert at the New York Stock Exchange. She has heard that the price of seats there is \$30,000 each.—[Hartford Sunday Journal.

—People cannot speak of America as untootered. We have, according to statistics, 15,000 brass bands, to say nothing of the private "horus" in which a multitude indulge.

—Schneider claims that his Satanic majesty's address to the fallen angels after being driven out of heaven was delivered in German. He began by saying, "Nicks, come, arouse!"

—The citizens of a Colorado mining town want to borrow Guiteau for a few minutes. If they don't return him in good order they promise to pay the government his full value in cash.

—We don't know what villain is responsible for the following: What is the difference between Opium and Abraham of old? One is the juice of the poppy and the other is the poppy of the Jews.

—A Massachusetts farmer who has cultivated an acre of onions this year reckons that he has crawled twenty-two miles on his hands and knees weeding them. A kneesy way to get a living, but weed rather not adopt it.

—Puck expects to find that Edison's electric light was in use on Noah's ark. If it was, the ancient mariner was ahead of our own times. Nobody in this century has ever seen Edison's electric light in use.—[Lowell Courier.

—Coal is nothing else than ferns, mosses and sea-weeds, petrified beneath the surface of water in the absence of air. There are no less than 850 different species of plants petrified into coal, of which 250 at least are gigantic ferns.

—A mining company has been organized in Maine with a female President, female Secretary, and six female Directors. It is safe to say that, like many another Maine mine, this one will be talked to death.—[Denver (Col.) Republican.

—The man with the iron jaw has been with us, but in

the wantouness of despair tore himself away. He used his jaw peddling books instead of supporting bayonets, cannon balls or three-story brick blocks.—[Portage Lake Mining Gazette.

—The following comes from New Mexico: A printer borrowed 25 cents in the office of the Socorro Sun, invested it and made five dollars and with the latter capital started to prospect. He located a claim and recently sold one-third for \$30,000.

—The wife of the Bonanza monopolist of California rides in a carriage in Paris that cost \$30,000 and requires an annual outlay of \$2,000 for repairs. Like the lilies of the field, she toils not, neither does she spin; yet Solomon in all his glory didn't ride in so gorgeous a conveyance.

—A New Mexican mining correspondent is thus dished up by a writer from Water Canon, N. M.: "If that tramp printer, who described Water Canon as a dried up gulch, favors this camp with his filthy presence, the miners are determined to treat him to a bath in ten feet of water."

—Recently a man was met in Arizona driving along the road with a pair of mules and an old wagon. "What lay are ye on?" asked a horseman who met him. "Goin' up the canyon to locate a mine." "Can't locate no mine in that canyon. Can't find any pay ore." "So I heard, so I brought it along in this sack." Teamster winks, holds up a chunk of \$14,000 rock, and the two take a drink.

—The New York Daily American Exchange is responsible for the following: A long, lank, lean specimen of a Pacific Coast miner strayed into a Broadway shop the other day. The tonsorial artist was not very busy. He had an abstracted air. The artist said, "Shave, sir?" and responded the miner, "Shave? no! Didn't know this was a shave shop or wouldn't have come in. I've been shaved so much out West that I don't want any Eastern operation."

—Nine different claims to the discovery of America before Columbus are made. They are that the Chinese discovered it in the year 499; that the Northmen visited it in the year 1000; that the Arabs sighted it in 1125; that the Welsh got wind of it in 1170; that the Venetians came to it in 1380; that the Portugese set foot on it in 1463; that the Poles trended hither in their daring barks in 1476; that Martin Behaim patted the great continent on the neck in 1483; and then there is another claim made for Cousin, of Dieppe, date not given.

—The rock of New York Island and its vicinity is almost exclusively micaceous-gneiss. Occasionally, however are found little beds of limestone, which seem to have escaped the immense denudation, which most geologists believe to have taken place on the surface of Manhattan Island. At Mott Haven, to the left of the track, going out of the city, a deposit of maguesian limestone has been cut through, forming a strange contrast to the uniformity of the gneiss, and reminding us that for ages the ocean rolled where corner lots are now so valuable.

—The new metal of which it is proposed to construct pipes in which to lay telegraph wires under ground is described as very light—only about one-sixth the weight of iron—and, being composed almost entirely of pure carbon, is indestructible, whether in the air or under ground; it does not rust or change by exposure, and it is not affected by heat or frost. The most important characteristic claimed for it, however, in connection with underground wires, is its being a perfect insulator. The pipes of the metal need not, it is stated, be buried very deep in the ground, as they may be of a semi-elastic character, adjusting themselves to the slight upheaval and depression of the ground through the action of frost.

—William Morgan, of Wiconisco, while out gunning recently, stepped backwards into an air-hole at Fennel's col-

liery on Short Mountain. It happened luckily that his gun came crosswise over the mouth of the hole, and Morgan had presence of mind sufficient to retain a firm hold upon it. In this manner he hung suspended over an abyss of sixty-five feet in depth, but succeeded in extricating himself. His dog, seeing his master in this perilous situation, attempted to aid him, and in so doing fell to the bottom of the hole. Mr. Morgan procured a rope of sufficient length, to the end of which he secured a basket, and let it down to the bottom. The dog seemed to understand that the basket was intended for his deliverance, ensconced himself in it and was drawn up about half-way, when he jumped out of it and again fell to the bottom. The rope was afterward securely fastened to a boy, who descended and rescued the faithful animal.—[Shenandoah (Pa.) Mining Herald.

CORRESPONDENCE.

The Deer Isle Ore Contract.

DEER ISLE, ME., Oct. 17, 1881.

To the Editors of the Maine Mining Journal:

Your article commenting upon the action of the Deer Isle Company in sending their ore to the New England Smelting Works is eminently good and in accordance with the universal course of your paper in commending what is good and criticising what seems bad. Yet, I do not see that the policy of our company in sending ore to Boston is bad at all. Every mining man will understand that more or less of our ore is not suitable for shipment to Swansea, and in fact it is because we are assorting our ore dump that we have delayed our shipment. The New England Company, as I understand, have a supply of "Mascot" ore, which is a soft, friable galena, and wish our ore to mix with it in smelting, and have proposed to purchase of us any ore we can spare, paying us a good price for it. It will certainly be profitable to us and I do not think we need before sending it to be sure that it will be equally profitable to them. With what little I know about smelting operations I can easily understand that our ore is desirable to them.

I think our stockholders and the public may rest assured that we are doing and shall continue to do all we can to work our mine with vigor and economy, and also get all we can for the mine product, so that before long "Deer Isle will be so widely known that the mistake of locating the mine in Arizona will not be likely to occur, even on the Pacific Coast."

Yours truly,

CHARLES W. BRYANT.

Katahdin Iron Works.

The following interesting description of the Katahdin Iron Works, from the pen of Mr. R. W. Dunn, of Waterville, appeared in the Lewiston Journal of Sept. 21st:

Right among the mountains of northern Maine, in the very wilderness, is found a most successful branch of home industry. The location is in township No. 6, Range 4, about twenty miles northwesterly from Milo on the B. & P. railroad, now owned by the Piscataquis Iron Company, but leased for fifty years to the Katahdin Iron Company. Of the latter company, A. P. Gould, Esq., of Thomaston, is President, O. W. Davis, Jr., of Bangor, Treasurer, and G. D. Colby, superintendent of the works. Other parties have often tried in vain to produce good iron at a cost which would pay. A few years ago the present company took hold of the matter and after many experiments and great expenditure of money and scientific effort, succeeded in producing an iron which is second to none produced in this country.

The ore is found in one of the numerous mountains, a little more than a mile from the works. It is a very rich ore, but alloyed with sulphur, silica, &c. It is taken out by blasting, or by pick and shovel, according to the surroundings. After being carted to the works, it is first placed in the roasting kiln where the greater part of the sulphur is driven off. This kiln is an improvement on those formerly in use here, and still in use by many iron companies. It is the result of long continued study both on the part of Mr. Davis, the business manager, and Mr. Colby, the superintendent of the works. The principal feature consists of a center draught, formed by building a kiln of lesser diameter, but with frequent openings, within the main, or outer kiln. It has proved a perfect success in driving off all but about one-tenth of one per cent. of sulphur from the ore, which exceedingly small quantity is much further reduced in the smelting process. The kiln has been patented by

the inventors. The roasted ore is then placed into the smelting furnace, and with it a quantity of lime rock, in the proportion of about one ton of the latter to thirty tons of the former, a little manganese, and a large quantity of charcoal. The charcoal is produced on or near the premises in large, round-topped brick kilns, holding from forty to fifty cords of wood, each. Fourteen thousand cords of wood are used annually for charcoal, besides one thousand cords for the roasting kiln and other purposes. The fire is kept burning in the furnace continually through the year, and every four hours in twenty-four, the molten iron is drawn out and run into "pigs." The quantity produced averages one hundred tons per week, and sells in New York and other places, at the present time, for thirty-eight to forty-two dollars per ton. That now produced is chiefly used for car wheels. It possesses a quality for hardening at the surface, while it remains softer and very tough within. This makes it especially desirable for car wheels and for other purposes where both strength and a great degree of surface hardness are required.

The iron is carted to Milo, thence by rail to Bangor, at an average expense through the year of four and a half dollars per ton. A railroad is now building to connect the Iron Works with the B. & P. Railroad at Milo, to be running some time next year. This will cheapen the cost of transportation to about three dollars per ton to Bangor. The number of men now employed is more than one hundred, and the number of horses and mules in carting the ore, transporting the iron, etc., is nearly one hundred. The expense paid for labor of men and horses amounts to nearly two thousand dollars per week. During the winter the number of men is increased to three hundred or more, many of whom are employed in cutting and hauling the year's supply of wood, so that the sum paid for labor annually amounts to not far from one hundred and fifty thousand dollars. No one can estimate the amount of ore which is in the mountain, but it is expected that the quantity is sufficient to last at least during the term of the lease, and probably much longer.

The New York Mining Boards,

AS SEEN BY AN OLD CALIFORNIAN—NOTES ON THE CALIFORNIA COLONY AND THEIR DOINGS—SOME OF THE PILGRIMS IN ANGUISH—SMALL FISH IN A BIG POND, ETC., ETC.

[Editorial Cor. San Francisco Exchange.]

NEW YORK, September 20.—After some days spent in the mountains of Pennsylvania, I came to New York yesterday and entered upon the business of seeing sights on Wall street. There weren't many sights! Wall street is a seething, whirling, bubbling maelstrom, in which the most conspicuous figures are seen but a moment, and you hear of them only as they come to the front. I don't see that Wall street gives any more evidence of the character of business of which it is supposed to be the center, than does any other thoroughfare built up with great banking edifices, insurance offices, etc. The quietest place on the street is the Sub-Treasury. The noisiest place is a chop house down near William, whereat the undercurrent of Wall street takes its lunch. The stock boards are all off of Wall street; the big board is on Broad, and the two mining boards are on Broadway, on the block below Trinity Church. They are directly opposite each other, and, of course, both are as jealous as fish women of the business which comes to each other's call. Neither board, however, comes within gun shot of the San Francisco Board in point of business, even when the tide with the latter is at its lowest. It is great fun to go into the American Exchange, for instance, at a session. George Smiley, with his magnificent whiskers closely cropped in deference to New York style, presides as caller and rattles off "Hibernia," "Oriental & Miller," and the other small fry at the various quotations. A cent fluctuation is a big thing. "Seven cents bid," "eight asked" is about a standard quotation for most of Brother Smiley's stocks. I said to him when the call had ended, "This doesn't look like old times, G. W.," "Well, no," said he, "but we are bigger than we look, and we're growing." And then somebody called Mr. Smiley away, and some other body rushed up with a "Hallo, how are you?" It was H. H. Barling, formerly of the California Board. H. H. says the business of dealing in mining stocks in New York is a farce, and that just as soon as the Fall rains come and dry the dust along the railroad ties, he is going to start back to California a-foot. Seats in the American Mining Board, which sold readily a year ago for \$1100, can now be had in lots to suit for \$200 each. Brother Smiley and Mr. Secretary Robb have to watch the till mighty close for their salaries, and the whole institution seems to have the dry rot.

The other Board having the patronage and being somewhat under the wing of the regular Stock Exchange does better. But even this is saying little. If it were not for George Roberts

and the San Francisco party, who have the State Lines, Oriental & Miller, and Hibernia in tow, it would be hard to find any reason for the existence of the New York Board. These three stocks with their one and two cent fluctuations seem to furnish all the business for the small knot of brokers that keep this Board alive. The State Lines are decidedly the leaders of the speculative market. Whether they will ever justify their title to this interest remains to be seen. I was shown a section of the water pipe which burst a few months ago, and to a novice it looked much as if the pipe was made to burst. The rivets were just caught and that was all. It was a wonder the pipe held together long enough to bear the wear and tear of transportation and laying.

PERSONALS.

Frank Tagliabue is here and has an office at No. 30 Broad street. He is associated with Henry Phillips, of Bodie, and is, of course, looking to devour somebody. Frank passes for 35 years old. He's 55 if he is a day.

George M. Pinney has an office at 58 Broadway. The stories that George has got rich again are not so. He has made some money, but has also lost. His head is above water and that is all that can be said.

C. X. Hobbs, having cleaned up on his State Line venture at a big profit, is turning his eyes towards Newfoundland. C. X. has got some kind of a railroad concession from the Provincial Government to build a line from nowhere much to nowhere in particular. Incidentally along the line of the concession are some copper prospects which are said to fill C. X.'s eye, and of which more is likely to be heard in the future.

D. F. Verdenal is upon the fourth story of the Boreel Building in a small suite of offices. I don't see anything of the army of clerks and the great rush of business of which we have heard so much in San Francisco. But D. F. looked contented, and, of course, was hopeful of the future of the State Lines, in which he is interested at the top figures. "Poor Verdie!" said a sympathizing friend, "got caught in his own trap; it is too bad—too bad. George D. ought to have helped him out." Verdenal says he is going back again sometime this winter if times do not get better here.

Friends of Al. Hickox will be glad to hear that since his visit to California he has cleaned up a nice little pile in the Hannibal & St. Joe excitement. Al. bought H. & J. at 45, and sold out a snug lot at 198. When he got through his bank account was fatter by \$40,000. Al. has an office up in the Boreel building and keeps a clerk to receive visitors and answer questions.

W. H. McClintock, ex-Secretary of a score of mining companies in San Francisco, is a member of the American Mining Board. He does business as a broker when he can find any to do. When he can't he goes in on W. H.'s account.

A. W. Whitney, the great American suspensionist, has gone up once more, this time for good. He now lives in Chicago in restful repose.

Copper in Arizona.

THE OLD DOMINION, TAKOMA, BORVA AND OTHER MINES IN GLOBE DISTRICT.

Eastern mining papers have recently contained such glowing descriptions of the prospects of the Old Dominion and other copper mines of this district, while reports from other sources have been of a conflicting character, that a few items of reliable information upon the subject will, we think, be relished by our readers. A representative of the San Francisco Mining and Scientific Press has lately visited and inspected the locality, and from his report as published in that valuable journal, we make the subjoined extracts.

RECENT DEVELOPMENT OF THE COPPER LEADS.

It has been known for years past that there were copper leads in the district, of great promise; but as the search was for gold and silver, little attention was paid to them until last year, when some Eastern capitalists sent an experienced man to "spy out the land." He selected the best claims to be found in the district, and on a portion of them they organized a company already well known in the East as the Old Dominion Copper Mining Co., and on the others they organized the Borva Copper Mining Co. Then there is the Takoma Co., the Globe, the Carrie mine, and various others in embryo. I visited those mentioned, which are the only ones, I believe, which are being actively or systematically developed.

THE OLD DOMINION

Takes the lead, the developments being remarkable both as to quantity and quality of the ore. It is unquestionably a permanent vein of solid red oxide and green carbonate, interspersed with glance, and averaging by many assays 35 per cent. to 40 per cent. copper. It also carries free gold assaying as high as \$200 per ton. It is worked by three tunnels on the vein, a

shaft, and winze connecting principal tunnel with the lower level. This tunnel has entered the hill over 300 ft., and for the last 50 ft. or more, the vein is wider than the tunnel, growing wider as they continue on and as they sink to the lower level. They will have two of Prescott, Scott & Co.'s 30-ton smelters on the ground next week, and expect to turn out 500 to 600 tons of bullion monthly from November 1st.

Besides this mine, they have two claims, known as the New York and Chicago, some seven miles distant, which they are working with equal energy, having a tunnel nearly 400 feet long, shafts of 50 and 100 feet, and their ore is little, if any inferior to the Old Dominion. It differs in character, however, there being less red oxide and more green carbonate and azarite. The ledge is of unprecedented width, vaying in the cropping from 10 to over 100 feet wide.

When looking at these immense veins of ore, averaging over 30 per cent. copper in both cases, and remembering that the Lake Superior ores run from 1 to 6 per cent copper, and that the Copper Queen in Cochise county (this Territory) averages about 15 per cent. copper, one is impressed with the possibilities of such mining property. The company, I learn, have made arrangements to order forward two additional smelters as soon as the first two are fairly running, and repeat this as the mines are opened.

THE GLOBE COMPANY

Base their hopes on their proximity to the mammoth lode of the Old Dominion company, their claim being apparently one of the feeders to that lead. As yet, however, there is nothing beyond surface indications. They are sinking a shaft, run down 80 feet or more, and hope, when they crosscut, to find the vein. It is but 60 days since they commenced operations.

THE TAKOMA COPPER COMPANY

Have been at work some six or eight months, and have uncovered near the surface some handsome glance and malachite. In sinking, they find red oxides and carbonates, but await further developments as to the abundance of paying ore before erecting smelters—a wise policy, and one worthy of imitation, for it takes a good mine to supply a 30-ton smelter day by day.

The Old Dominion Co. estimate that they have about 1,500 tons from their development work to commence with, and can stope down from present workings 100 tons a day for months to come. Meanwhile the mines are being opened farther. Their capacity six months hence must be something enormous.

THE BORVA COPPER COMPANY.

Have 6,000 linear feet on a lead which shows a bold outcrop for a great part of that distance. They only commenced active operations six weeks ago and already have over 100 tons of ore out from their workings. It is similar in character to the New York and Chicago.

THE CARRIE

Is a private enterprise. They have a smelter up, but it has not yet commenced running. Their ore is chiefly green carbonate, and I will leave the smelter to tell the percentage, as it depends on how well they separate the ore from the rock with which it is interspersed.

Other copper enterprises are on foot in the vicinity, but I have described those most worthy of attention. Considering how short a time has been devoted to opening these mines, the result of two or three of them is remarkable, and the output of bullion next year may be a source of surprise to our copper men.

LODES, LEADS AND VEINS.

NEW ENGLAND MINING DEVELOPMENT AND INVESTMENT Co.—The books of the New England Mining Development and Investment Company were opened in this city and Boston at the offices of F. H. Williams & Co. on Monday last. In the two days the subscription books were open to the public, \$10,500 were subscribed in Bangor and a considerable amount in Boston. The success of the enterprise is now assured and this company promises to be a favorite one with investors.

CAPE ROSIER.—The Rosier Company are loading three hundred tons of zinc ore for Bergen Point, New Jersey, and three hundred tons of copper ore for the Portland Smelting and Reduction Works. The mine is said to be looking magnificently. A large force of workmen are employed and the Company are doing an extensive business, raising one hundred and fifty tons of selected ore every week.

MANHATTAN.—The Manhattan has made a splendid strike. A solid mass of four feet of copper sulphurets of very high grade has been encountered in the south drift. The Manhattan has a great future in store for it.

AZURE.—The Argus says the Azure Mining Company have sunk a shaft forty feet on Little Deer Island and are in a vein

of very fine looking ore, growing more promising as depth is attained. Work is progressing rapidly. The vein is about two and one half feet thick. The property is owned by Portland gentlemen.

NEPTUNE.—The Neptune Mining Company has been organized with the following directors: Captain Chas. Deering, of Portland, President; John M. Peck, of Portland, Secretary and Treasurer; John H. Crandon of Columbia Falls, and Dr. S. E. Sylvester, of Portland. The property is located on Cross Island, in Machias bay, and consists of a very rich, true fissure copper vein of over 1500 feet in length, so situated as to be easy of access and easily worked. The company has plenty of room in which to conduct all the operations of a mining enterprise, and an almost inexhaustible quantity of wood for roasting and other purposes. A large gang of men will be put to work immediately to develop the property, which is as promising as anything yet developed in New England.—[Globe.

SUNBURST.—M. Donelan, Treasurer and Secretary of the Sunburst C. and S. Mine, of East Surry, reports developments progressing encouragingly and that the vein is widening out to be the whole width of the shaft. The following is an assay of wall rock, away from the vein:

ELLSWORTH ASSAY OFFICE. }
ELLSWORTH, Me, Oct. 7th. 1881. }

MR. M. DONELAN, East Surry, Me.,
SIR.—The sample of ore from the Sunburst C. & S. Mine, County of Hancock, State of Maine, received from you the 6th inst., for examination, contains in the ton of 2000 pounds, as follows:

Gold, 10 dwts. 3 gr. Value.....	\$10.48
Silver, 2 1-10 ozs. "	2.41

Total Value..... \$12.89
This assay was made from a new character of ore which I took from the south side of your shaft.

Yours respectfully,
WINTHROP W. FISK, B. S.
State Assayer.

Mr. Fisk has made an exhaustive examination of the Sunburst property and the elaborate report, published in pamphlet form, has been received by us. The report is one very flattering to the company. The latest advices from Sec. Donelan are that the shaft is down 43 feet and that the vein is 3 feet in width. The galena which was struck about three weeks ago is coming in more and more every foot gained in depth and the copper is holding out as good as ever. A shaft house is now being put up as fast as possible and as soon as it is finished an engine will be put in so as to have everything snug for the winter's work. It is believed the whole width of the vein will average \$13 per ton in gold and \$19 per ton in copper.

BENJAMIN FRANKLIN.—The Franklin Silver Mining Company has been reorganized as the Benjamin Franklin Silver Mining Company and is now established on the assessable basis. Its capital is \$500,000, divided into 200,000 shares of a par value of \$2.50 and one-half of the stock, or 100,000 shares, is placed in the treasury. The officers are: President, Jeremiah Wooster of Hancock; Vice President, Walter M. Haines of Ellsworth; Treasurer and Secretary, Thos. J. Hodgkins. It is confidently expected that the Franklin mine will soon be once more in active operation.

COPPEROPOLIS.—Steady and energetic work on this property is still the order of the day. The sinking of shafts Nos. 1 and 2 is progressing in a satisfactory manner, and the present showing is very encouraging, and sustains the high opinion in which the property is held by experts and practical miners. The bottom of shaft No. 1 is in high grade ore; shaft No. 2 is improving rapidly. New surface openings which are now being made, clearly indicate the existence of large ore bodies.—[Bulletin, Oct. 15th.

Sullivan.

SULLIVAN.—An immense Cornish pump is being built at Pottsville, Pa., for the Sullivan mine. A large boiler, purchased at Cambridgeport, has already been shipped, and a hoisting engine designed by the engineer who draughted the hoisting works for the Calumet and Hecla, is already under construction in Boston, and will be completed at an early day.

FANEUIL HALL AND SULLIVAN.—Supt. Hayward reports as follows: "The crosscut from the 160-level is now in from the station 120 feet and making good progress. The new compressor will be ready for use about December 1st, when we expect to make more rapid development. Everything at the mine is in a first-class condition, and it is hoped by the Directors and all interested in the property that by Spring this mine will be numbered among the ore-producing mines of Maine. At present it is all dead work; but when the vein is reached the mine will be in a condition to do a large amount of work."

MILTON.—The Bulletin says work progresses from shafts Nos. 1 and 2 in its usual steady and business-like manner and

the managers have good reasons for feeling more sanguine than ever. Drifts, levels and winzes are being driven from the various crosscuts of both shafts and the mine is being thoroughly opened.

Blue Hill.

BLUE HILL.—Supt. Moyle reports work progressing with highly satisfactory results. The second level is now being opened up. The smelting furnace is running continually and doing splendid work. A shipment of matte was recently made to the Revere Copper Company, of Boston.

TWIN LEAD.—Supt. Duff reports the winze progressing downward in the same good ore.

YOUNG HECLA.—Supt. Ludlow is busily sinking the shaft through the soil. A depth of more than thirty feet has been reached.

STEWART.—The two shafts which are being sunk on the Stewart are down 68 and 77 feet respectively. Each shaft is now being timbered down about twenty feet.

MAMMOTH.—Reports from Supt. Duff are to the effect that the workmen are daily breaking a large amount of very superior ore. It is understood a shipment of ore will soon be made. It is reported the Mammoth was listed on the Boston Mining and Stock Exchange on Wednesday.

ECLIPSE.—The Eclipse Copper Mining Company has been organized in this city with a capital of \$500,000, divided into 250,000 shares of a par value of \$2. Of this amount, 100,000 shares are placed in the treasury. The company is also organized on the assessable basis. The officers of the corporation are: President, Hon. Frederiek M. Loughton; Treasurer and Secretary, John R. Mason; Directors, Hon. F. M. Loughton, John S. Jenness, C. E. Hill, C. F. Bragg and Jacob Stern. The property of the Eclipse Company has been described in previous issues of the MINING JOURNAL and is located in Blue Hill to the easterly of the Mammoth.

New Hampshire.

Dr. Truesdale, of Springfield, Mass., is working a galena property in Bristol, N. H. He has a tunnel in 160 feet and is running drifts on the vein.

COMMONWEALTH.—The Commonwealth Mica and Quartz Mining Company are operating at Orange, Grafton county. They have been working about seven months, employ nine men, and are running a tunnel into the hill, following the vein. They also have a shaft down 25 ft. The quality of the mica is excellent and is constantly improving as depth is reached. The Company are prepared to enter into contracts for furnishing mica, quartz and feldspar, in large or small quantities. They make a fine exhibit of their products at the Old Mechanics' Fair, in Boston.

GROTON.—The Groton Mica Company are engaged in developing a promising property at Groton, also in Grafton county. They are meeting with good success, employ ten men and two girls, are running a crosscut and also have a shaft, twenty feet square, down about 30 feet. This company make a fine display of mica at the New England Fair.

HARTFORD.—The Hartford Mica Company employ forty-three men and seven women and girls, and are carrying on business upon an extensive scale. The mine and works are located at North Groton. The company have breasted into the hill some 75 feet and at the end of the tunnel are sinking a shaft, which has already reached a depth of 75 feet below the car track, or tunnel level. About 300 feet of drifts and tunnels have been run. The mica occurs at irregular intervals in large bunches or pockets; the one now being worked is fully forty feet across. Steam hoisting machinery and drills are employed, and about forty holes are blasted per day, requiring upwards of 100 pounds of high explosives. The mica is of a quality which cannot be surpassed and much of it is found in large sheets, the first cutting being 23x18 inches. Four or five cutters are employed, each averaging about 40 pounds per day of cut mica. The mine produces about 7000 lbs. per week of rough mica. The market value of the product ranges from 33 cents to \$7 per pound; the average, however, is from four to five dollars. The demand far exceeds the supply, and the Hartford Company have orders ahead amounting to 6000 pounds. This Company also make a magnificent display of mica, both cut and in the rough state, at the Fair of the New England Manufacturers' and Mechanics' Institute.

British Provinces.

An Ottawa dispatch says: Labor is very scarce here at present. The agents of the French Phosphate Mining Company stood at the doors of the Roman Catholic churches at Hull, op-

posite this city, on Sunday, and offered advanced rates for two hundred men to work in the mines.

Promising silver discoveries are reported by the Fort William Herald, on the north shore of Lake Superior.

The Montreal Gazette says that some of the gold mining lands in Beauce are to be inspected by a French engineer now on his way out here, and if his reports are favorable, it is understood that the Quebec Mining Company, composed of French capitalists, will shortly commence mining operations.

The Inverness Oil and Land Company, of Nova Scotia, in which many Boston capitalists are interested, has just completed negotiations for the purchase of twenty-five thousand acres of additional oil lands in Cape Breton, which, together with the lands they already owned, gives them substantially the control of the oil territory of Nova Scotia. The company have now seven wells finished, all of which will pump oil, and from two of them the oil is now flowing and running to waste. The company will in the course of a month have all its pumping machinery and storage tanks of 125,000 barrels capacity in place, and ready to commence operations.

ITEMS FROM THE HALIFAX NEW ERA.—Mr. James Hudson has resigned his position as Manager of the Albion Mines. Mr. Rutherford, formerly manager of the General Mining Association, whose reputation as a thorough mining engineer is very high, has been appointed in his place. He was some years ago manager of all the collieries of the General Mining Association, in Pictou and Cape Breton.—Mr. Ellershausen visited the Alpha Copper Mine, at Goshen, a few days ago with a view of purchasing the property. The negotiations are not yet completed.—Recent reports from the Chezzetcook gold district tell of new leads of a superior quality of ore having been discovered and work is going ahead briskly. The old leads are keeping up to the mark and the feeling is gaining ground that these mines will eventually prove a profitable investment to workers.

Mr. Leslie Johnston, an old resident of Kingston, Ontario, says the Chronicle and News, exhibited at the Free Press office on Saturday last some very rich specimens of iron ore, mined in the township of Madoc, North Hastings, where Mr. Johnston has been for over a year. The ore contains from 65 to 70 per cent. of pure iron, and is mostly all bought up and shipped to the States, where it is smelted. The ore brings a price of \$4.50 to \$5 per ton on board the cars at Madoc on the North Hastings Railway. Mr. Johnston gives a very interesting account of the richness of the mines around there. The railway is not able to ship the ore as fast as it is mined, but two more roads are being built through the county, and many other improvements are being made. Other metals are found there, gold being considered plentiful near Marmora. One mine there is now being worked by an American company employing 200 hands. Some specimens of lithographing stone from the same district have been tested and pronounced good. There is an urgent necessity for smelting works, and the person who starts something of the kind will reap a rich harvest. The duty paid on the crude ore shipped to the States is 37 cents per ton besides the freight. The iron is as good as any in America for the manufacture of Bessemer steel, and is found at a depth varying from two to twenty-five feet below the surface. Operations are being pushed briskly, and every month has a record of new mines started—miners being brought from England and elsewhere for the purpose. Lucky strikes are made every day. It seems a pity that the ore has to be shipped to the States for smelting. The kind that is purchased for \$4.50 per ton is shipped over there, run through the furnace once, and sold back to Canadian manufacturers at from \$22 to \$25 per ton.

At the thirtieth annual meeting of the American Association for the Advancement of Science, held at Cincinnati in August last, Dr. George Sutton, of Aurora, Ind., read a paper on "The Gold-Bearing Drift of Indiana." He traced the existence of a gold-bearing drift across this State in a northwest and southeast direction, along which line the drift is comparatively rich in gold. Referring to the glacial origin of this deposit, he stated that there was a vast extent of our country to the north of the great lakes, from which the glaciers moved, that was as yet unexplored; and he held it to be probable "that rich gold veins might be discovered beyond the lakes, that would give rise to all the excitement incident to the discovery of new gold fields, and the miner, the capitalist, the speculator, the emigrant and the adventurer may within a short time hurry to a region which is now a barren wilderness; villages, cities and railroads spring into existence as if by magic, and scenes be enacted in the North similar to those we have so recently witnessed in the West."

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

The Montana papers estimate the output of that Territory for the present year at \$4,000,000.

Silver Nugget, of Arizona, has been obliged to close up, and all work has been discontinued.

The Clifton Mine, Arizona, is producing five tons of copper daily; the Copper Queen six tons, and the Huachuca four tons.

The Little Johnnie, a Colorado copper mine, is shipping its ore to Baltimore, where it finds a steady market at a good profit.

The Upper Wood River district is buried beneath several inches of snow, and the output of ore from the numerous prospects and embryo mines is practically over for the season.

The Keystone Courier announces the discovery in Georges township, Fayette County, Pennsylvania, of a rich vein of what is believed to be silver ore. Specimens have been forwarded for assay.

The steel works at Pueblo, Col., are turning out 100 tons of iron per day, all from Colorado ore. They expect to be able to treble their product shortly. When in full operation they are calculated to give employment to 1,200 men.

The Calaveras Water and Mining Company, Cal., will have their great reservoir dam completed early in November, after which active mining operations will begin. The mine will then have an earning capacity of \$1,000 per day.

General Fremont has resigned his position as Governor of Arizona, to the great gratification of the residents of that Territory, to whose interests he has never given the slightest attention. Mr. A. H. Stebbins is spoken of as his successor.

The Horn Silver, of Utah, has at last declared a dividend, of 75 cents per share, aggregating \$300,000, payable Nov. 15. The company are carrying over a large surplus and there is every reason for believing that the dividends will be continuous.

The "O. K." copper mine, in Beaver Lake district, Utah, is now having an air shaft sunk upon it to a depth equal to that of the main shaft, with which it will be connected. It is now down to a depth of 40 feet, in ore all the way which assays from ten to forty per cent. copper.

The importance of Illinois as a coal producer will be appreciated when it is stated that no fewer than twenty-five counties are now engaged in mining the product. The output during the year ending June, 1880, is placed at 3,643,162 tons; and for the year to June, 1881, at 6,000,000 tons.

The recent discovery of nickel and cobalt in the Gem mine, Texas creek, Custer county, Col., has led to a general search for those metals in the other mines of that vicinity, which has resulted in several additional discoveries. The people of the camp are looking forward with enthusiasm to the future.

The existence of gold in East Tennessee has long been known, but, until recently, it has never been found in quantities that would pay for the working. Now, however, it is said that large deposits have been discovered on the East Fork of Little River, in Blount county, about 25 miles from Knoxville. A company has been formed and mineral leases have been secured all along the river.

The Contention Company, of Tombstone, through compromise to avoid a lawsuit, have absorbed the Flora Morrison mine, hoisting works and everything pertaining thereto, also one hundred feet off the south end of the Sulphuret mine. The mines will be connected by drifts on the different levels. No change of officers will occur until the annual election of the Contention Company. A forty-stamp mill is to be erected immediately for these mines."

The Wood River (Idaho) Miner states that the latest "rush" is to the North Fork, about 15 miles above Ketchum, where a ledge 2 1-2 feet wide, of milling ore assaying up in the thousands, was discovered about ten days ago. A prospector slipped from a ledge of overhanging rock into the water. In crawling back onto the bank, he saw copper stains, and native silver protruding from a crevice. A few minutes' work proved the existence of a ledge. Several "extensions" of the find are already recorded.

The Carrie Copper Mining Co.'s Smelter at Globe, Arizona, started up on the 27th of Sept. and except for a few hours delay on account of their pumps, has been running successfully since. They turn out an average of 1,000 lbs. of copper every two hours, more or less, according to the grade of ore they are handling. The furnace is run with three shifts of men, and the company intend to keep it running right along, which

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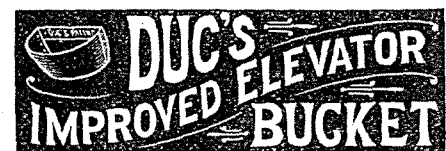
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Young Hecla Mining and Smelting Company.

At a meeting of the Directors of the Young Hecla M. & S. Co., held Sept. 22, 1881, it was voted to levy an assessment of five cents a share upon the stock of the company, payable Oct. 15, 1881. The by-laws provide that after the expiration of thirty days from the day fixed for the payment of an assessment, the Treasurer may sell a sufficient amount of the stock upon which the assessment remains unpaid to pay it, together with expenses. As the Company are about to resume work at the mine it is desirable that all assessments should be paid as promptly as possible, and the stockholders are requested to remit to Charles P. Wiggin, Treasurer, Bangor, Me., the sums due on the stock held by them, together with the certificates, in order that they may be marked assessment paid.

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100,000 Shares. Par Value, \$5.00 each.
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 Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Loughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.
 F. H. WILLIAMS & CO., Financial Agents.

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Mining and Smelting COMPANY.

OFFICE BANGOR, ME.
 MINES AT.....BLUE HILL, ME.

CAPITAL, \$500,000.

100,000 Shares. Par Value, \$5.00.
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Silver Hill Mining Company.

Office, 11 CENTRAL STREET,

Room 4, Boston.

Mines at Garland, Me.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
 25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.

Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

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CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
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President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill; Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.
Office at Ellsworth, Me.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., '880.
Capital, \$500,000; Shares \$5 each.
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President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffin, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arcey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

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Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Roddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

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Capital, \$400,000; Shares, \$10 each.
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SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 365,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
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	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	5.30	10.00		5.00
Arrive Bangor,	6.42	11.15		6.05
Leave Bangor,	7.35		2.00	8.10
Arrive Bucksport,	8.45		3.15	8.10

The 5.30 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.

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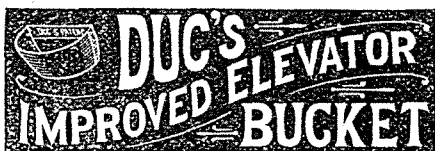
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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

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E. M. BLANDING,
W. F. BLANDING, EDITORS.

E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, OCTOBER 28, 1881.

It is estimated that there are 2,000,000 square miles in the United States underlain with gold and silver.

The above valuable information is given to the world through the mining column of one of the enterprising Boston dailies.

The mining interests of the New England States have reached that advanced stage where "taking the back track" is no longer possible. They *must* be carried forward to a successful issue.

We would again remind Douglass shareholders of the great importance of attending the meeting to be held at the office of Gen. Chas. Hamlin, in this city, on Monday next. It is to be hoped that every share of stock will be represented.

A party of New York capitalists, including Judge R. G. Beardsley, G. W. Scofield, and other prominent New York gentlemen, have recently been visiting the Brooksville mining district. We learn that they were highly pleased with the developments at the Rosier and Manhattan mines.

Mr. C. W. Bryant, of the Deer Isle Silver Mining Company, was in the city early in the week. At the request of the MINING JOURNAL, he kindly consented to give a desultory and informal description of some of the features of ore reduction in Europe, as witnessed by him during his recent trip abroad. Accordingly a number of our prominent mining men met at this office Tuesday afternoon and listened with much interest to Mr. Bryant's remarks upon European methods for reducing and handling ores, and also his impressions concerning their applicability to the ores of Maine and New England. Want of time and space compels us to defer further reference to the subject until our next issue.

THE MARKET.

The mining share market continues dull and devoid of interest excepting, of course, at the Boston Mining Exchange, where the aggregate "sales" of Maine stocks for the week ending on Wednesday last amount to 95,970 shares. Copperopolis has advanced to \$2.10; Douglass has sold down to \$1 and recovered to \$1.25; Milton has made a slight advance to \$1.02 regular and \$1.20 buyer 60 days; Deer Isle has advanced to 85c regular and 95c buyer 60; Twin Lead has fluctuated from 80c to 87c regular, and from 90c to \$1 buyer 30 and 60; Young Hecla sold at 52c regular and 59c buyer 60; Edgemoggin 50c buyer 60; Grainger sold down to 4c. Mammoth made its first appearance on Thursday of last week, starting at 60c, and, under sales amounting to 38,050 shares, advanced to 64c regular and 70c buyer 60 days.

At the Old Board the total sales of Maine shares for the week were 1190 Sullivan, 420 Douglass and 250 Blue Hill. Blue Hill made a sudden break during the week, the cause of which we have not learned, dropping on Tuesday to 1 1-2, but subsequently recovered and closed on Wednesday at 3 1-4 bid and 3 1-2 asked.

THE MAINE MINES.

[Calais Times.]

Recent developments have awakened a renewed interest in Maine mines. This time it is no speculators' "boom" in the stock of mines which exist only in the hopes of their owners, but it is the legitimate reward of a few courageous men whose labor has never ceased—whose faith has never wavered. While others have croaked and ridiculed, these men have been steadily sinking their shafts and erecting their furnaces. The late depression in stocks, and consequent difficulty in raising money with which to develop mines, has had the effect to concentrate work upon a few of the more prominent lodes, while other companies, though perhaps possessing properties of equal value, have been obliged to discontinue through lack of funds.

But the "great scare" has had one good result; it has driven worthless stocks and fraudulent companies out of the market, and the places that knew them shall know them no more forever. From henceforth mining in Maine is as legitimate an industry as lumber or cotton mills. The mistakes natural to the establishment of a new business of such vast magnitude are being rapidly rectified—experience proving a thorough, if an expensive, teacher—and the leading representatives of this great enterprise are now proceeding upon a sound financial basis.

The silver mines of Sullivan and Deer Isle are in an advanced condition, with large quantities of valuable ore upon their dumps; late advices reporting the contracting of 1000 tons of Deer Isle ore to the New England Smelting Co. at satisfactory rates. Many other localities make nearly as favorable a showing; but attention, just now, seems centered upon the Blue Hill camp, where, in the discovery of the already famous Mammoth mine, the mother vein, or bonanza of that region, has doubtless been found. This remarkable lode, although as yet prospected to a depth of only twenty-four feet, has yielded five hundred tons of good smelting ore—more than enough to pay the total expenses already incurred. This property is now in the hands of a responsible company, who will push forward the work of development with energy. Prof. W. F. Stewart has lately paid the Mammoth a visit and written an unofficial letter to the company, which he closes with these remarkable words: "In concluding this voluntary statement I desire to add that if the Mammoth, with proper development, does not prove

to be a highly remunerative mining property, the deductions of moderate geology in relation to ore deposition are all valueless."

This bold statement from one of the first mining experts in the country, taken in connection with that of the Philadelphia geologist, who declared, in a communication to the Machias Union, that the Mascarene veins were the only true fissures East, will attract anew the eyes of science to the mineral resources of this State and the adjoining Province, while the development of the true character and extent of these deposits will be awaited with an interest which their commercial value alone could never excite.

THE NEWFOUNDLAND BOOM.

[St. John (N. B.) Daily News.]

Newfoundland seems destined to go forward with a rush presently. It is having a succession of favors showered on it which cannot but be followed by great results before long. It was only a few years ago that its people got a faint inkling of the mineral wealth stored up on their island. Little is yet known of its value, but wonderful discoveries in regard to its extent and variety have lately been made. But a few years ago also the fact was brought to light that the island included much excellent farming and forest land in localities supposed to be hopelessly barren. Its people had long known that a large amount of good farming land lay along the west coast of the Province, but were forbidden to settle on it, lest umbrage should be given to the French, to whom a concurrent right of fishing along the shore had been granted in the old times by treaty.

During the present year provision has been made by the Island Government for the construction of a Transinsular Railway with several branches, at a cost easy for the Province to meet. This road is being vigorously pushed, and will be in operation from end to end in a year or two. And now within a few weeks past, another piece of fine luck has befallen the Islanders. About the middle of last month, Mr. Whiteway, the Island Premier, returned from the other side of the Atlantic, where he had been bravely fighting the battles of his country. He returned victorious. He had succeeded in persuading the Imperial Government to stand by its proper rights in its own Newfoundland territory. Accordingly he came back authorized to promote the settlement of the Western Shore, to sell land, to grant mining licenses, to establish order and maintain the supremacy of the law, in short to secure for Newfoundlanders the right to occupy and improve their country.

The result of all this in a few years time should be magical. The fishery resources of the Island will still receive due attention. But its other resources will experience a rapid development. Farming will become a great industry. The Island's marvelously rich mineral deposits will be laid bare and will be worked on a large scale. Lumbering and ship building will be largely prosecuted. Cattle raising will become a profitable pursuit. In short the Island will become in probability a great hive of industry. It is splendidly situated. Its climate in winter is warmer than that of adjacent mainland Provinces, while its summer climate is less hot. It is fringed with harbors; and within the coast line free from fog. It is richly watered in every direction, being a land of lakes and streams with an abundant but not excessive rainfall. The Newfoundlanders will scarcely recognize their own country in a few years time, for their ancient colony will be transformed.

—Mr. Harry B. Parker, the enterprising merchant of Blue Hill, has removed to new and more commodious quarters, where with improved facilities he is better able to attend to the wants of his many patrons. Mr. Parker for some time conducted a dry goods store at Blue Hill for Messrs. Warren and Hancock, of Bucksport, but he is now in business for himself.

Personals.

SUPT. MOYLE, of the Blue Hill, has been in Boston several days.

HON. F. M. LAUGHTON visited Boston in the early part of the week.

HON. HANNIBAL HAMLIN and wife leave Bangor to-day on their journey to Spain.

SUPT. LEAVITT, of the North Castine, has been in Bangor several days this week.

CAPT. THOMAS TAPLEY, of the Tapley mine, Brooksville, was in the city on Saturday last.

MR. HARRY B. PARKER, of Blue Hill, was in Bangor on Tuesday and "looked in" upon the MINING JOURNAL.

SUPT. DUFF, of the Twin Lead and Mammoth mines, was in the city Wednesday and made us an agreeable call.

DR. A. C. HAMLIN has returned from his trip to Yorktown. He made the journey from Washington to Yorktown in the Commissioners' Steamer "Excelsior."

PROF. W. F. STEWART, COL. JACKSON, of Nevada, and a party of Boston gentlemen visited Gorham, New Hampshire, on Saturday, and made a thorough examination of the Mascot mines.

MR. WM. M. BRIGHT, one of the contractors of the Bangor & Katalidin Iron Works Railroad, has gone to Newfoundland to participate in the survey of the Newfoundland Railway.

MR. J. D. PRESCOTT, of Boston, arrived in this city on Saturday morning and accompanied MR. E. M. HERSEY on a trip to Blue Hill. Upon their return they spoke very enthusiastically of the Mammoth and Twin Lead.

MR. ERVIN T. JOHNSON, engineer of the Steamer Mount Desert, who recently had his skull fractured by the walking-beam of his engine, has recovered sufficiently to walk out, and will doubtless recover. His escape from death has been miraculous.

WILKIE DARLING, Supt. of the Manhattan mine at Brooksville, was in the city, yesterday, making arrangements for extensive improvements in the Castine House, which he has recently purchased. Wilkie is feeling "immense" over the recent rich strike in the Manhattan. It is reported that the owners have received an offer of a large sum for their property, but they refuse to sell.

MR. E. H. BULLARD, President and Business Manager of the Williams Slate Company, made us a brief call during the week. Mr. Bullard is in the city purchasing machinery and making arrangements for working the quarry upon quite a large scale. The Williams Quarry is located about three miles from Brownville, Piscataquis County. They have a shaft, thirty feet square, down about thirty-five feet, on a good vein showing slate of a most excellent quality.

MR. PAYSON TUCKER, the very popular Superintendent of the Maine Central Railroad, has been offered the Superintendency of the Northern Pacific Railroad at a salary of \$20,000 per annum. It is understood that the offer has been refused and that he will still continue in charge of Maine's principle railroad highway. The princely salary offered is a very flattering compliment to Supt. Tucker and

shows the high esteem in which he is held by railroad men throughout the entire country.

HON. F. A. PIKE, of Calais, has just returned from a visit to the famous May Lundy mine, Homer district, California, in which he is one of the principal owners. He reports that the mine is looking well and the work of adding to the efficiency of the mill is progressing favorably. The suit lately brought against Mr. Butterfield, one of the large owners, has been decided adversely to him, from which decision, however, Mr. Butterfield has appealed. The suit does not affect the interests of other owners.

Up or down, inside or outside, no matter where he is, JIM ANDERSON, of Louisiana Returning Board fame, is always squirming about and generally lets the people residing in his immediate vicinity know that he's still alive—to the interest of Jim, my Joe-Jim. Less than three years ago he arrived in Eureka, Nev., incog. C. A. Morden, an old Washington typo, then at work on the Sentinel, "gave Jim away," and Cassidy published the arrival of the "Champion Liar" in the moral city of Eureka. The people were horrified and Jim gave up trying to get away from "his name," and settled down to a meek and lowly life. The result is that to-day he owns a paper second to none in Nevada—the Eureka Evening Leader. It's a banger; chuck full of readable matter and has every appearance of being a paying institution.—[Wood River News.]

MR. J. B. WILFORD, of the firm of H. Bradford & Co., Philadelphia, proprietors of Bradford's Ore Concentrators, was at the Bangor House over Sunday, on his way to the Lake George Antimony Mines. Since Mr. Wilford left this State, a year ago, he has been busily engaged in erecting mills in Colorado and New Mexico. About three weeks ago, he was riding on horseback down the side of Mt. Suesfels, when his horse took fright at a huge bear which suddenly made his appearance. Mr. Wilford, losing control of his animal, and fearful of being thrown over the precipice, attempted to leap to the ground; but his foot becoming caught, he lost his balance and received a severe fall, breaking a leg and two ribs. He not only had to be carried many weary miles, over rough roads, on horseback, but rode 2200 miles by rail, to Philadelphia, before receiving surgical treatment. He is already on his feet again, however, and manages to get about tolerably well with the assistance of a cane.

Dips, Spurs and Angles.

—Leather—the sole support of man.

—A leaf from history—a description of Eve's toilet.

—Ingersoll has taken to speculating in stocks. If this fails to change his belief in a future state he is indeed irrefragable.

—The "White House" at Washington was so named after it was burned by the British in 1815, when the smoke so blackened the freestone walls that it was painted white.

—The average miner participates in a great many pick nicks.—[Toledo American.] True, yet while many find good pickings, there are a large number who pick nix.—[Yawcob Strauss.]

—Mr. Wm. E. W. Oyster, foreman of the Congression-

al Record force in the government printing office, has been summarily dismissed by Mr. Defrees, the public printer. Mr. Oyster has been considered to be a very shellficient man in his place.

—A girl slid from the arms of her partner in a waltz, at Davenport, Iowa, and died instantly. The cause was heart disease.—[Exchange.] A Bodie man slid from the arms of his landlady, owing her \$32. He now lives in Arizona.—[Bodie Free Press.]

—An Irishman who recently fell a distance of 200 feet in one of the Lake Superior mines, breaking one of his legs, refused to be taken to the surface until the captain assured him that he would not "dock" him for part of a shift lost through his unfortunate fall. So says the Northwestern Mining Journal.

—The coming season promises to be a very busy one among our miners. There will be more mining carried on here than ever before. We are thinking of selling our dog and press, and of giving our entire attention to developing our mine. If we strike pay ore we can make money fast, and if the mine proves worthless we can sell it to Eastern parties.—[Central City (Col.) Telegraph.]

—A delegation of housewives visited the News office during the week, requesting us to suggest to Eastern manufacturers the propriety of putting the spout (or snoot) of frying pans on the right side of that useful article about the cook stove. To get gravy out of such a dish now, the average right-handed woman has to grasp the holder with her left hand, unjoint the elbow, throw her jaw out of place and look cross-eyed to strike the soup dish with half the quantity of gravy prepared.—[Wood River News.]

—As instancing one of the effects the approach of winter seems to have upon the residents of the Wood River (Idaho) region, listen to what the editor of the Bellevue News has to say: "We didn't intend to "scour," to any great extent, if the needy should help themselves to our pile of chips the coming winter, but its putting it on rather thick to commence this early in the season to carry off a whole mule load at a jag. We shall start in using No. 8 shot and increase the dose towards spring—probably getting our work in (if we live till February) with buckshot."

—There is a good deal of difficulty found in familiarizing the Indian laborers employed on Mexican railways with the use of the wheelbarrow. The same trouble was experienced by the first railway contractors in Hindostan. The laborers there had been in the habit of carrying off the clay from the excavations in baskets on their heads. This method proved picturesque, but slow. Finally a large supply of wheelbarrows was obtained. The contractor's emotions may be imagined when, on the first morning of their use, he beheld his laborers filing off in a long line, each with his wheelbarrow poised upon his head.

—The Boston Sunday Courier tells of a Dominic Sampson *redivivus* in the person of a well-known geologist of Massachusetts, who was employed to make an examination of a certain mining property. He did his work and made his report in the most satisfactory manner, and received a large check for his services. About a month afterwards he made his appearance at the office of the mining company, check in hand, as he had received it, and asked the cashier if he would be kind enough to give him some money. "Why," was the answer, "did you not endorse the check and get the money at the bank?" "Because I thought it was merely a certificate that you owed me so much, and that I was to call upon you when I was short." The office boy, no doubt, believed this man was a fool, and yet he was only an illustration of the fact that knowledge often travels in one deep channel, instead of spreading out in many shallow streams.

—There is a great portion of this planet which is not yet

finished and fenced in. We have 710,688,000 acres of available land not yet surveyed, but open to settlement, and 734,951,000 acres surveyed, but not yet taken up. This is exclusive of Alaska, where we have a domain vast in extent, and possibly possessing great value. But England has still more virgin land than we. In the Australian colonies she has 2,000,000,000 acres of land never yet touched; in Cape Colony, 52,000,000 acres all ready for settlement, but with no settlers; in Natal, Ceylon and the West Indies, 14,500,000 acres, and in Canada probably something like 1,500,000,000 acres of unoccupied and very fertile lands. Here is a vast heritage belonging to the English-speaking people of the world—a heritage large enough to give a farm of 160 acres to 31,325,000 families of five persons each, or to 156,625,000 persons. The time may come when the world will be too crowded with people, but that time is evidently not very near at hand.

—The Phoenix (Arizona) Gazette says: "The remark so often made and heard in Arizona about dead bodies drying up and blowing away, received a pretty strong verification at the reinterment of Dan Dietrich. Although death had occurred nearly eight months ago, and the body had been buried only in blankets, every feature was distinct and perfect, and anyone who had known Dan during his lifetime would at once recognize them. The hair appeared to have grown since his death, and still retained its natural color. No unpleasant odor was perceptible, and one might easily have supposed he was examining a well-preserved mummy. Since the first interment the body only shrunk and dried up, and no sign of decay could be found save in the region of the stomach, and that was due more to the fact of that portion of the body having been opened during the post-mortem examination than to natural causes. The body had, however, in that time lost over two-thirds of its weight, dwindling from 140 pounds to less than 50 pounds. This remarkable state of preservation in our hot, dry climate and soil is by no means uncommon, as many present could cite similar instances of it."

Our Exchanges.

[San Francisco Exchange.]

It will be observed that our Comstock contemporaries—from whose columns all the press telegrams are taken—keep their readers remarkably well posted on some items of mining news. No tank pit can be dug or pump-bobs be finished from one end of the lode to the other, that they do not know it; and they are always careful to note that the machinery runs smoothly. The well-known way machinery has of bumping and clattering about, and the roughening effect of oil and sandpaper on steel shafting make this latter news always interesting. When the stockholder learns that the pump-bob at the 2,958 1-2 level is completed and that the donkey engine runs smoothly, he pays his assessment over the Secretary's counter with a happy smile and treats some other fellow's girl to a new dress.

[New York Stock Report.]

It is the duty of every man who buys a mining stock, and expects to get legitimate mining products from the same, to pay the same attention to it that he would to the duties of his own immediate business, or to an investment in a farm, horse, etc. Very few ever give any attention to actual details of a stock purchase, or look at what their prospective property has done, or is liable to do; how it is financially situated; length of time before returns may be expected; what the interests of projectors are; who they are, etc., etc. Sometimes these details are hard to get at, but until investors insist on knowing what they are buying they will probably get a good assortment of blanks out of the bag. Something is not to be had for nothing. Many people who invest a few dollars in mining stocks expect to get hundreds or thousands in return. There are many mining stocks which

have paid and will pay a splendid return on money invested in them, and are as sure as and more profitable than any other kind of stock; but it takes care and discernment to find these stocks.

[Rosita (Col.) Journal.]

One of the mistakes mining companies frequently make is that of tying the hands of their superintendent in such a manner that he is practically powerless to exercise the superior judgment that his position would indicate him to be possessed of, and then compel him to tread in a rut marked out for him by a board of mining directors who are possessed of no accurate or adequate knowledge of mining. A superintendent for a mining property should be selected because of two distinct and separate qualifications. First, he should be a miner of unquestioned skill and ability. Then he should be known to the company to be a thoroughly honest man. While there are other important qualifications that should be considered, yet these two are absolutely necessary to be found in one that a company entrusts the charge of its property to, and when such a man as this is in charge of a valuable property his usefulness may be practically lost to the company by a board of directors who conclude that they are very good miners because they own a mine, and then undertake to direct his operations themselves, instead of relying on the superior judgment of the superintendent.

[San Francisco Mining and Scientific Press.]

Happily we are not this week without a sensation in the mining share market. This grows out of a remark said to have been made by Col. Fair, to the effect that he entertains a hope, or at least a partial hope, that there exists and most likely always will exist a strong probability that ore, water, porphyry or something else, will yet be struck in the lower levels of the Comstock; and if not in the lower levels of the Comstock, then in some other locality equally deep, dark and hot, but not so damp as the great sub-aqueous Washoe ore channel, with the exact sight of which locality he, the Colonel, is not at this time so well posted as he hereafter expects to be. The announcement of such a positive and unqualified opinion by a man so cautious and guarded of speech as Col. Fair, produced not only a profound sensation among mining men in this city, but created such a cheerful feeling over on the Comstock, that many of the old residents were seen to smile, a few having gone so far in their glee as to get drunk outright. The ultimate effect of this new revelation remains to be seen. Meanwhile, stocks wobble after the fashion most in vogue since the Sierra Nevada squashout, a condition they are likely to maintain, at least for the present, and probably for a long time to come.

[Daily American Exchange.]

Mines have their ups and downs; miners their vicissitudes. The miner is always guided by the indications, but never knows peradventure what the next blast may uncover. In Grass Valley, years ago, a miner named Dalton sunk his shaft on the indications, and toiled day after day, hoping to strike a bonanza which his judgment indicated should exist. He worked until he could work no longer, and then blew out his brains in despair. Others came along and in sinking not five feet deeper struck a bonanza that has since yielded millions. Not many years ago, a French tailor and a Yankee schoolmaster—Bertrand and Geddes by name respectively—prospected in Eureka County, Nevada, not far from the great Richmond and Eureka bonanzas. Their district was called Secret Canon. They plodded along patiently, expending all their means, and borrowed all that their friends would venture. They believed that they had uncovered a big deposit, and proceeded to San Francisco to get money to pay off a large indebtedness incurred and procure means to further prosecute work. In the latter attempt they were successful, and under the auspices of a California company work was resumed. It was expected that all the debt would be wiped out and Geddes and Bertrand be adequately

rewarded for their labors. Mismanagement resulted in the failure of the California Company, and the original owners' interests were foreclosed under mortgages previously given. The mortgagees, having acquired title to the property, came to this city a year ago to invite the attention of New York capitalists to the investment. But the history of the mine was not such as to induce confidence, and the owners returned empty handed. Not having the means to prosecute further work, they sold out for a song, giving it up as a bad job. The new purchasers had some confidence and money, and the result is that to-day extensive leaching works are in process of erection, thousands of tons of pay ore are in sight, 240 men are employed in the mine, and it promises to rival the best of the Eureka County mines. The present owners profited by the experience of the past, wasting no money on extensive mill crushings, but erected works which could not fail in successfully treating their ores. Meanwhile the Yankee schoolmaster and the French tailor walk the streets of San Francisco, Micawber-like, waiting for something to turn up. Moral: Never be in too much of a hurry to give up a mine.

Low Grade Copper Ores.

By F. L. BARTLETT, STATE CHEMIST, PORTLAND, ME.
[From the N. Y. Mining Record.]

That the sulphuric acid manufacturers have at last awakened to the fact that good acid can be made from pyrites, and much cheaper than from raw sulphur, is now quite apparent, and we do not hesitate to predict that within three years two-thirds of the sulphuric acid manufactured in the United States will be produced from pyrites. There has been an extreme prejudice against making acid from pyrites existing amongst our acid manufacturers for a long time; what its origin is no one seems able to explain, and this too, right in the face of the fact that our English, German and French friends have been successfully making acid from pyrites for the past fifteen years.

In several interviews which we have had with acid men, when asked their objection to pyrites burning, they have invariably answered that "some one has tried it and failed," referring always to some ill-advised experiments, which men made a few years ago in New York, with impure iron pyrites. Meantime, the Maine people have contentedly paid from twenty-eight, to thirty-five dollars per ton for sulphur, and charged the extra cost to the consumer, while millions of tons of good pyrites have been allowed to rest undisturbed under our very feet. Without stopping now to recite the history of the causes which have at last led some of our acid men into this innovation in the business, suffice it to say, that certainly three and possibly four concerns, are now making acid from pyrites in this country.

Osgood & Company, of Bergen Point, New Jersey, were, we believe, the first to go into this business. They started to burn zinc blende for the zinc works, but are now burning pyrites from the Capelton mine in Canada. A short time ago W. H. Nichols & Co. commenced to build over their sulphur burners into pyrites kilns at their large works in Williamsburg; at about the same time, works were started for making pyrites acid by the Portland Smelting and Reduction Company, at Portland, Maine. All three of these works are now in successful operation and we already hear of several other concerns who are about to build over their works. The cost of changing the sulphur burners into pyrites burners is not great; no other changes need be made in the works, and the acid made from pyrites is found to be quite equal to that made from sulphur. The cost of making, of course, depends upon the price of the pyrites, and this brings us to the subject of pyrites deposits.

Hundreds of these deposits occur in the New England and Southern States as well as in Canada and New Brunswick, but to be valuable for acid manufacturers, they must be reasonably accessible, as the item of freight is generally the most serious consideration. The deposits at present worked, all contain copper, which adds largely to the value of the ore. Since the ore will not pay for long transportation, it follows that the Southern ore, as that from Virginia, N. Carolina and Tennessee, cannot be profitably brought North for working, but must be worked at home, where it is especially valuable to those engaged in the manufacture of the superphosphates. Fortunately, the New England and Middle States can be supplied with plenty of ore from Canada and New Hampshire at very low rates. Messrs. Osgood & Company are using ore from the Orford mine, in Capelton, Canada; Messrs. Nichols & Company are using ore from the Albert mine in the same district; the Portland works are using ore from the Grand Trunk mine in

Milan, New Hampshire. These ores are all exceptionally free burning, giving a strong gas and burning down to a very low per cent. of sulphur; just here, we should remark that there is a great difference in pyrites as regards their adaptability to the manufacture of sulphuric acid; some varieties will not burn at all, others will only half burn, while some cannot be burned without slagging together; it seems to be a rule that those which burn the best contain about three per cent. of copper.

These pyrites should be free from arsenic, lime and carbonaceous compounds, in order to produce pure acid. The composition of the ores used in the above mentioned works is about as follows:

	Albert ore.	Orford ore.	Grand Trunk ore.
Sulphur.....	39.00	41.50	48.50
Copper.....	5.50	3.10	3.00
Silica.....	17.50	12.25	2.20

The balance is made up of iron with traces of zinc, alumina, magnesia and lead; they also contain from one to three ounces of silver per ton, with a little gold. The residue, or "cinders" from the Albert ore, owing to its silicious character and large per cent. of copper, will be smelted in a blast furnace. The cinders from the Orford works, we believe, are to be worked by the wet process. The cinders from the Grand Trunk are worked at the Portland smelting works, by the wet process, with the best of results. This ore more closely resembles the Spanish ore than any other yet discovered in America, and it promises to be especially valuable to the acid people owing to its nearness and low cost of production. This deposit is in the town of Milan, State of New Hampshire; it crosses the Grand Trunk Railroad, and is only ninety miles from Portland. Ore can be shipped from this mine to New York for \$2.50 per ton. The quantity is simply unlimited, and the ore can be quarried from the surface with little expense; with proper appliances 5,000 tons per month can be mined from this deposit, which is equivalent to 2,400 tons of pure sulphur and would make at least 6,000 tons of sulphuric acid; unlike the Canadian ores, no duty has to be paid on this ore. Portland works are only able to use a small quantity for acid and are anxious to contract with acid men to burn this ore, returning the cinders to be treated subsequently for copper.

A short time since, the Record contained the following notice of the success of the Tharsis Sulphur and Copper Company, engaged upon precisely the same class of ores referred to in this article:

"A SUCCESSFUL METALLURGICAL ENTERPRISE.—For several years past we have had occasion to notice annually, the Successful operations of an English company known as the Tharsis Sulphur and Copper Company, the chief seat of whose industry is at or near Glasgow. We have once again to chronicle a dividend declared upon the operations of this company for the fiscal year ended March 1st, 1881, aggregating \$1,420,000, leaving a clear balance in the treasury of \$91,000. It is noteworthy, that this large dividend or net profit for the year of more than one million and a half dollars, has been mainly derived from treating pyrites, an ore that is thrown aside as waste in this country. We note that this company are successfully using the Claudet process for the extracting of silver and gold from pyrites, and are preparing also to test the Desiguiolle process for the same purpose upon a large scale."

"We invite the attention of American capitalists to the operations of this company, for there are deposits of pyritous ores in this country, that we are satisfied could be turned to profitable account by the intelligent application of capital."

In this Grand Trunk mine, we find an exact counterpart of the famous Tharsis deposit, both as to extent and quality, while the advantage in location is decidedly in favor of the American deposit; an average analysis of the working ore from each mine shows little or no difference, as follows:

Tharsis.		Grand Trunk.	
Sulphur	48.11	Sulphur.....	48.50
Iron	40.20	Iron	42.92
Copper	3.11	Copper.....	3.00
Silica.....	2.26	Silica.....	2.20
Zinc.....	.81	Zinc.....	2.87
Lead.....	2.20	Lead (traces).....	0.00
Arsenic.....	1.21	Arsenic (none).....	0.00
Water.....	1.00	Water.....	.40
	98.96		99.90

Actual work on a large scale proves that forty-six per cent. of the sulphur contained in the Grand Trunk ore can be utilized for acid; with sulphur at thirty-two dollars per ton, this gives the sulphur value of the ore at \$14.72 per ton. The ore can be sold for \$5.00 per ton giving the acid manufacturer an advantage over sulphur of \$9.72 per ton of ore or, in other words, his ton of sulphur derived from the ore at \$5.00 per ton only costs him \$10.87 1-2 against \$32 for raw sulphur.

The copper, gold and silver remaining in the cinders after burning, are sufficient to give the smelter a fair profit for the extraction, while the residue left is valuable for fettling purposes or for the making of fire proof paints.

Mica.

[From the Scientific American.]

As in times past, when the search after the "philosopher's stone" resulted in the discovery of many unsought, but nevertheless valuable substances, it frequently happens that the treasure seeker of to-day brings to light some unthought of ore or mineral—not as valuable as the substance sought, but certainly well worth finding—if the discoverer is wise enough to understand this.

The discovery of good merchantable mica in some of our Western gold mining regions is illustrative of this. We have recently received many samples of this peculiar mineral—chiefly from Dakota, Colorado and California—and some of these compare very favorably with the best products of the celebrated Carolina mines. We are glad to note this, for mica is peculiarly well suited for hundreds of useful applications in the arts for which it is not now available on account of its cost.

Mica is a very common mineral in some localities, but the merchantable article is by no means common, and a large body of "mica rock," capable of affording large, clear and colorless sheets of the mineral, free from flaws and of uniform structure, is worth developing almost anywhere.

Muscovite or oblique mica—the clear variety—is essentially a silicate of aluminum and potassium. When a crystallization is uniform it can easily be separated with a knife blade into very regular, flexible and elastic sheets of almost any required thickness. It is not affected by water or strong acids (with the exception of hydrofluoric acid), and may be heated quickly to redness without danger of melting or cracking it. In thin plates or sheets it resembles glass, but it is not brittle, and this, in connection with the other peculiar properties alluded to, make it available and serviceable as a substitute for glass under conditions which preclude the use of the latter. Mica is never quite colorless, although in good samples the color is barely perceptible in the thin sheets. That having a faint wine or brandy tint commands the best prices.

In the New York market the mineral is usually sold by the pound, in sheets cut to sizes varying from two inches to fifteen inches square, the price varying with the size and number of sheets to the pound, color and quality. When the sheets are properly split, trimmed and cut to size the prices for good clear mica vary from twenty cents to eight dollars per pound.

Of the numberless uses to which this mineral glass has been put it is chiefly in demand for the glazing of stone and furnace or heater doors, and as a substitute for glass in some kinds of lanterns, as it is much lighter and tougher than glass, and is not easily ruptured by jar or concussion. The latter consideration has caused its substitution for glass lights on gunboats and naval vessels.

Mica is peculiarly well suited to the construction of light roofs and walls for galleries, conservatories, greenhouses, or hotbeds, etc., as it can be easily shaped and bent, and secured with tacks after the manner of shingles; is not easily fractured, and requires very light supports. We have seen structures of this kind, and they would seem to leave little to desire in this line, except, perhaps, larger sheets of the mineral and a reduction in its cost. The sheets may be tinted or colored by dipping them momentarily in a very dilute alcoholic solution of pale shellac suitably colored with any of the soluble coal tar or aniline dyes, and exposing them for a few minutes to warm air to dry. Very pretty color effects can thus be produced. A simple way of producing a frosted or ground appearance on the sheets of mica is to coat them with a thin milky varnish prepared by mixing together solutions of one ounce of pale shellac in three pints of wine spirit and one ounce of pale resin in a pint of good benzine. A rather thin sirupy solution of water glass, with which has been mixed a trace of zinc sulphate dissolved in water, can be used in a similar manner to effect this object.

A colorless cement for joining sheets of mica is prepared as follows: Clear gelatine is softened by soaking it in a little cold water, and the excess of water is pressed out by gently squeezing it in a cloth. It is then heated over a water bath until it begins to melt, and just enough hot proof spirit (not an excess) stirred in to make it fluid. To each pint of this solution is gradually added, while stirring, one-quarter ounce of gum ammoniac and one and one-third ounces of gum mastic previously dissolved in four ounces of rectified spirit. It must be warmed to liquefy it for use and kept in stoppered bottles when not required. This cement, when properly prepared, resists cold water.

Flexible mirrors are made from sheet mica, the silver being deposited from a solution of the nitrate by one of the processes described in the Scientific American Supplement, No. 105. Small mirrors of this description are used in some kinds of inland work and for various decorative purposes. As their flexibility admits of their application to irregular surfaces they can be used where glass mirrors can not. With the aid of a

little gold leaf, bronze powders, size, and variously colored thin transparent varnishes or collodion, mica has been worked into hundreds of beautiful articles for decorative purposes, toys, etc.

When mica is heated to redness for some time in a muffle and then allowed to cool rather quickly the laminae become distorted and the sheets present a silvery-white appearance by reflected light, the mineral losing much of its flexibility. The dust of this whitened mica is used to some extent by the French as a silver bronze powder. Mixed with a weak solution of gum arabic it makes a good silver ink. The powder is sometimes variously tinted by washes of very dilute colored solutions of gums or varnishes. To prepare the glistening powder the sheets of whitened mica are simply crushed (not ground,) boiled in hydrochloric acid, rinsed, dried, and assorted to size of laminae. The finer filaments have a pearly lustre and are made to adhere to semi-softened gelatine and wax to imitate pearl. The silvery powder is used on metals, glass, wood, paper, plaster, tapestry and furniture. It has been used in calico printing in place of the heavy bronze and glass dust of Lyons fabrics, and for the decoration of china and glass ware.

Mica is used by electricians for certain insulating purposes and also to some extent by makers of philosophical and optical instruments. Good mica, because of its lightness, is often employed as a substitute for glass in spectacles designed to simply shade the eyes or to protect them from dust, cinders or flying particles of metal or stone, for travelers, millwrights, grinders, polishers, and others whose work necessitates such protection. Vessels of mica are often used in the chemical lecture room, and are particularly serviceable in the experimental illustration of the properties of certain gases—the burning of metals in oxygen, etc.

The powdered or crushed mineral has recently been used in connection with nitroglycerine, in the preparation of a kind of dynamite called mica blasting power. It has also been employed as a filling for fire-proof safes, as a non-conducting covering for boilers and steam pipes, and, in connection with water glass, as a fire-proof varnish or paint. The larger sheets, applied after the manner of shingles, make a very good fire-proofing material.

Formerly most of the merchantable mica used in this country was imported, but for the past few years—since 1867—our supply of the mineral has been derived chiefly from mines located in Mitchell, Heywood, Yancey, McDowell, and Macon counties, North Carolina. The product of these mines is at present hardly equal to the demand, which is increasing very rapidly.

The discovery—or rather rediscovery (for some of them show signs of having been worked centuries ago)—of these valuable beds of mica in the Carolina gold fields was, like the Western "finds" above referred to, one of the results of a search after the precious metals.

Gypsum Deposits of New Brunswick.

A SKETCH OF THE PLASTER WORKS AT HILLSBORO, ALBERT COUNTY—AN IMPORTANT INDUSTRY.

[Chignecto Post.]

One of the leading industries in New Brunswick is the Plaster Works at Hillsboro'. An extensive deposit of gypsum of a very superior quality exists on the surface three miles west of the Petitcodiac River. About twenty-five years ago, an American capitalist having become possessed of it, erected mills at a convenient shipping point at Hillsboro', for its grinding and calcining, and the article was exported to various cities on the Atlantic sea-board. Twelve years ago the mill was consumed by fire, and though the company that then owned the property had lost some \$100,000 by their venture, nothing daunted, they at once re-built.

The twenty per cent. duty placed on manufactured plaster by the American Government has killed it as a successful undertaking, but the company with indomitable pluck have steadily manufactured and shipped it in the face of duty. The loss incurred by such duty has in part been compensated by the establishment of a mill at Newark, New Jersey, where the rock plaster is shipped to the extent of from 8,000 to 10,000 tons yearly and ground for the New York market. The operations of this company are a notable instance of capitalists pursuing for years a losing venture in a forlorn hope that the tide will some day turn. Still there ought to be money to the people of the Maritime Provinces in the sale of this article, as Nova Scotia and New Brunswick are the only sources of supply open to the Atlantic cities. It can only be bad fiscal tariffs or unnecessary competition amongst the owners that makes the business a profitless one even at its best.

Gypsum is simply lime with the addition of sulphuric acid water. The proportions are as follows:

Lime.....	32.56
Sulphuric acid.....	46.51
Water.....	20.93

How plaster operates as a manure has never yet been definitely settled. Sir Humphrey Davy supposed it to act directly as a nutriment to the crops, whereas Leibig advanced the theory that it fixed the ammonia of the air and conveyed it to the roots. At any rate its value as a manure results from its solubility in water, although it possesses this power only to the extent of one part to 461. Experience proves it to be most valuable to clover crops.

The operations of grinding and calcining are very simple. The plaster after being blasted and quarried, is carried by rail to the mill. It is first placed in a drying shed; then it is placed in the rock crackers—a sort of coffee mill—from which it is carried to two runs of stones. It is then screened, or bolted. From the screens it goes to the kettles, where it is calcined. Calcining is merely driving off the water from it by heat. The kettles are iron, and each holds 55 barrels. There are four of them. The process occupies half a day, so that the capacity of the mill is over 400 barrels a day. The mill is at present running from 100 to 200 barrels a day. Elevators take the material from the crackers to the stones, from there to the screens, from there to the kettles and from there to the barrels, where it is packed.

There are three sidings to the several wharves of the company. The first one is exclusively for barrel plaster, the second one for lumber, wood, ship-timber, etc., and the third is the rock plaster wharf. Last year the Company erected a rotary saw mill driven by the mill engine. They saw this season a million feet, which they send off as deck loads. They have also a barrel factory, having stave saws, trimmers, headings, etc. Their engine is 80 horse power. It has four large boilers. The mill refuse furnishes the fuel. The mill and quarry employ from 60 to 100 men.

The Hillsboro' gypsum has a high reputation for purity. Much of it is pure alabaster, and presents a very handsome appearance. Its extreme brittleness prevents its use for works of art. It is used in the finest kinds of architecture and occasional carloads of it for this purpose are shipped as far west as Detroit, St. Louis and Chicago. It is probably the finest on the continent. It is used under the name of terra alba, in the manufacture of white paper and for various purposes of adulteration. Rock plaster is worth about \$1.00 per ton on the wharf and calcined \$1.00 per barrel. Six barrels constitute a ton.

LODES, LEADS AND VEINS.

DEER ISLE.—We understand that everything is running along smoothly and the work is progressing as usual without any material change. The bottom of the winze is looking finely, showing considerable gray copper. Workmen are busily engaged in cobbing and sorting the ore on the dumps, preparatory to shipment.

NORTH CASTINE.—The North Castine is still showing good ore and sinking is steadily progressing. It is probable that arrangements will at once be perfected for putting in steam machinery and driving the shaft down another hundred feet.

FRANKLIN EXTENSION.—The Directors of the Franklin Extension Silver Mining Company held a meeting in Secretary Coombs' office Saturday afternoon. There was a full attendance and the entire interests of this valuable property were considered. Superintendent Ricker presented his report. The drift is in 15 feet, and the indications that an ore body is near at hand, are abundant. The great bulk of the stock, amounting to nearly 80,000 shares, was pooled. A large block of the treasury stock was sold to an outside syndicate for cash, at a higher price than the closing market of last week. The treasury is now supplied with an abundance of funds for future operations. The company owe nothing and have a large amount of stock left in the treasury after the sale. Matters are in training for solid work and the company has a promising future before it.—[Argus.

COPPEROPOLIS.—Developments at this mine continue of a most promising character; Shafts No. 1 and 2 produce ore of the usual grade. Substantial buildings are being erected over the shafts, which will enable the company to prosecute explorations during the coming winter. The Copperopolis House, stables and all necessary buildings are now ready for occupancy and the house will be formally opened in about ten days.—[Bulletin, Oct. 22.

Sullivan.

MILTON.—The work of prospecting the ground opened up in the various cross-cuts, levels, drifts and winzes from shafts Nos. 1 and 2, is being prosecuted energetically, and the general outlook for important developments can hardly be better.—[Bulletin, Oct. 22.

PINE TREE.—Supt. Messer reports: "Have been very busy during the week in building the wharf, which will have 76 feet front on the river, with from 12 to 14 feet of water at low tide. Good progress has been made since commencing, and we are in hopes to have the wharf in a state of completeness to land the machinery when it arrives."—Bulletin, Oct. 22.

Blue Hill.

MAMMOTH.—Supt. Duff is pushing work on the incline, following down the foot-wall of the vein. No particular change is noticeable in the ore body, which continues of the same general character and high grade. The Company have received an advantageous offer for their ore, from the Portland Smelting and Reduction Works, and shipments will commence as soon as a vessel can be procured.

TWIN LEAD.—The Twin-Lead is looking well. The winze is down nearly thirty feet, at which depth the body of rich ore, to which we have heretofore referred, is fully three feet in width. Supt. Duff has been in Boston during the past few days, on business connected with the Company.

YOUNG HECLA.—Supt. Ludlow is pushing the new shaft down as rapidly as possible. The quartzite has been struck at a depth of thirty-one feet from the surface.

FAVORITE.—Stockholders in the Favorite Copper Mining Company are requested to send their stock, properly endorsed, to the Secretary of the Company, H. A. Tripp, Blue Hill, who will have the transfer made and will return the certificates for an equal number of shares of stock in the Favorite Mining Company.

British Provinces.

Moncton, N. B., is considering the propriety of establishing a Mining Exchange.

The total shipments from the port of Pictou for the week ending Oct. 17, were as follows: Halifax Co., 1022 tons; Acadia Co., 2246; Intercolonial Co., 1413; Vale Co., 372; total, 5053 tons.

An excellent lead of copper ore has been discovered at French Vale, near Sydney, Cape Breton. It is nearly eight feet in thickness and of a superior quality. It is said that American capital has been invested, and the work of development is progressing rapidly.

It is reported that the sale of the famous Dorchester (New Brunswick) copper bonanza has been closed, at \$270,000; a company of Boston capitalists are said to be the purchasers. One half the money has been paid and the balance is to be paid within six months.

Dr. Goodfellow and others, of Sussex, N. B., have obtained from the Intercolonial R. R. authorities at Moncton a through rate of freight for the ore from their mine in Alma, Albert County, and will in a few days begin shipping it in bulk, by the carload, to the Portland (Maine) Smelting Works. Every succeeding test of the quality of the ore is more and more promising, and the vein being 30 feet wide there is a little labor required in mining a carload.—[St. John Globe.

Dr. J. H. Rea, the well-known mining expert and prospector, is now in Boston, stopping at the Crawford House. He reports favorably upon the mining interests of Nova Scotia, insisting that Nova Scotia should be classified among the gold-producing countries of the world. The yield in gold up to the first of January, 1881, according to returns made and sworn to at the Crown mining office, was six million two hundred thousand dollars. Probably this amount does not cover more than one-half of the real production, as many have unquestionably avoided the two per cent. royalty that the government taxes upon the bullion product.—[Advertiser, Oct. 26.

A party of prospectors have reached Victoria (B. C.) from the Northwest Territory. They report as follows: The Deloire was reached on the 30th of July, and the descent immediately commenced. The boats were taken down about 250 miles from Dease Lake. The Deloire River is a tributary of the Mackenzie River. Numerous bars were tested where gold was found in the gravel to the depth of 5 or 6 feet. These bars are covered with sand, which is easily cleared away with water. The pay on them is estimated at from \$20 to \$25 per day to the hand, after everything is ready for washing the dirt. A party of 20 Chinamen started in last spring, and they acknowledge to making \$20 a day to the hand since commencing to wash. The Chinamen who are washing with rockers are not doing much, the gold being fine and hard. To work these diggings successfully, companies should be strong and with sufficient means to take in two years' supply of all that may be necessary for mining operations. A very great deal cannot be done the first season, particularly if locations have to be prospected before commencing.

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

The coal fields of Tennessee are among the most extensive in the Union. The coal is of a bituminous character, and the area is estimated at 5,100 square miles.

The Socorro (New Mexico) Miner, a most excellent newspaper and an undoubted authority upon all matters relating to its district, is now published semi-weekly.

The mica mines around Deadwood, in the Black Hills, are large sources of wealth to their fortunate owners. Hundreds of pounds are being shipped from there every week.

Although the Bassick mine is reported to be looking finely and putting out better ore than ever, it is stated that no dividends will be paid until there is a two years' reserve in sight.

The Longfellow Copper Mine, at Clifton, Arizona, since its discovery in 1872, has yielded over \$4,000,000 in copper. The product of the Copper Queen for the past six months is placed at nearly 900 tons of copper bullion.

The Denver Railway and Mining Gazette appears this week in a new form. It is much improved in appearance and the current number contains more than its usual amount of interesting news and valuable information.

Utah mine owners are advertising for 10,000 miners. The cause is the high price and unparalleled demand for lead. The large number of carbonate of lead mines of that territory pay large profits whenever lead is above three and one-fourth cents per pound.

The old Leeds mine at Silver Reef, Utah, is again coming to the front as a bullion producer, its mill having just been started up on its own ores after lying idle for fifteen months. The new management seems to be energetic, and good reserves of ore have been opened up in the mine.

The Horn Silver (Utah) bullion production for September, from two furnaces at Francklyn and two at Frisco, was 838 tons lead and 143,482 ounces silver; gross value (lead \$1.00 per ton and silver \$1.10 per ounce) \$241,630. The net earnings for the month are estimated at over \$150,000.

It is estimated that in Colorado every dollar of gold or silver taken out is extracted at a cost of fifty cents. This estimate is based upon the calculation that 17,000 men, working two hundred days during the year, at an average of \$3 per day each produce \$24,000,000. No other legitimate business can make so favorable a showing.

The Vizina Consolidated, of Tombstone, Arizona, which has just declared its first dividend, has been a successful bullion producer for some time past, but its policy has been to accumulate a good surplus before beginning to pay dividends. After paying the present dividend of \$20,000 the company reports cash on hand of over \$75,000.

A Denver exchange says: "Still the problem of concentration remains unsettled. Some time ago the Inter-Ocean offered a prize chromo for the best essay on the subject. Ten thousand essays have been written and published, yet the business is no nearer solution than before. Some of the existing methods are good. None are perfect. The only way to approximate perfection is by gradual improvement."

It is not to be wondered at that Eastern mining operations are considered "slow," when compared with the remarkable amount of development work accomplished by some of our Western mines. The Eureka Con. Mining Company, during the past year, have reduced at their furnaces 33,988 tons of ore, run 5677 feet of drifts and 1081 feet of raises and winzes, and sunk the Locan shaft 440 feet to a total depth of 908 feet.

An iron mine was discovered on Staten Island in May last, and in July operations were commenced. The entire soil shows thirty-five per cent. of iron, and by screening large pieces of ore are obtained, ranging from fifty to eighty per cent. of the finest iron. Large deposits of Fuller's clay have been found also. Smelting furnaces are to be erected on the shore of the island, and this new branch of industry will prove a bonanza to the many persons interested.

A Portland (Maine) company have, during the past season, been working a property on Engineer Mountain, Lake County, Colorado, known as the Mountain Monarch No. 2. According to the Lake City Silver World, the indications are that with development it will be one of the leading mines of the district. In places the croppings show 12 inches of ore, and there are four veins on the property, all showing good ore at the surface. A tunnel has been driven some distance into the mountain and 15 to 20 tons of ore have been taken out.

The Northern Belle, of Nevada, has just paid its fifty-fifth consecutive dividend, making a total to date of \$2,087,000, or \$41.75 per share; a most noted example of what good management is capable of doing with a very ordinary mining property. The ores are comparatively low grade, exceedingly base, and have to be carted a long distance over a rough road to the mill. Yet it has never levied an assessment, being a paying property from the start, and has returned to its stockholders five-fold the first cost of their original investment.

Auditor General Lemon, of Pennsylvania, has served notice on the officials of mining companies whose stock is listed in the Philadelphia market to register in his department in order to determine their liability to taxation. Many of the mining companies propose to resist taxation on the ground that the offices in that city are not where the business is transacted; that the headquarters are in Camden, N. J., where stock is disposed of, meetings held, and to which State the necessary tax is paid, and that the offices in Philadelphia are simply used for the purpose of registering stock.

Gold is obtained from three sources, auriferous alluvium, auriferous veins, and auriferous rocks. The auriferous alluvium is formed from the decomposition of different rock containing gold. It is a singular fact that the gold found in this alluvium is more pure than the gold in the vein from which it comes. Auriferous veins are those filled by hot springs or geysers. They are not unfrequently mixed with silver, such as the famous Comstock lode. Auriferous rocks are rich in magnesium with gold scattered through them. The amount of gold that has been obtained from alluvium beds is about eighty times as great as that obtained from the other two sources. The amount of gold obtained from placers has decreased greatly within the last few years, while a more important part has been taken by the bonanza veins.

The prospects for the future of Emerald Mining District are brightening every day. That we are to have at least one mill is a settled fact, and it is not at all improbable but that we may have half a dozen before another summer shall have passed. H. G. Blasdel is now in San Francisco looking after new machinery for the Humboldt mill, and it is expected he will have the stamps of the Humboldt rattling away before spring. Our mines are developing in the most satisfactory manner. The Cortez and Centennial show large bodies of rich ore, while the Humboldt West, Esmeralda, Prospectus and New Esmeralda have in sight hundreds of thousands of tons of good paying rock. The time is a little slow coming, but it will surely come, when this camp will once more be the liveliest on the Pacific slope.—[Aurora (Nev.) Herald.]

The Globe Chronicle of the 8th inst. has an article on the Mineral Creek Mining Company, according to which the M. C. M. Co. is a swindle of the first water. Our contemporary, among other charges, asserts that the biography of J. P. Minear, the promoter, is scarcely fit for publication, that a mill was built where a mine does not exist, and that the mine itself is of no apparent value, there being only a small surface deposit, and a small kidney deposit, which would not assay over \$6 a ton. Out of 180 tons of rock only 91 ounces of bullion was realized. This stock is handled by some men of standing in New York and has been somewhat extensively dealt in. The local press cannot be too active in exposing such frauds, each of which does more harm to a district than can be repaired by half a dozen dividend-paying mines.—[Pinal (Arizona) Drill.]

The Iron Silver, and Silver Cord Consolidated Mining Companies, of Leadville, have established a miners' hospital in that city. The institution is calculated to accommodate fifty patients and is furnished with all necessary requirements. The men at work in the mines of the two companies are taxed one dollar a month each, to be applied to keeping up the hospital, in consideration of which they get the best of care, and medical and surgical treatment when sick, without further charge. Those who board in the hospital during treatment are charged six dollars per week for board, while those who do not board at the hospital may come for treatment at a merely nominal cost. The surgeon in charge is Dr. A. M. Maclean, a graduate of the Royal College of Physicians and Surgeons, at Kingston, Canada. His assistant is Dr. Alexander O'Neil, a graduate of Michigan University, and for four years assistant surgeon at that institution. Mrs. O'Neil, wife of the assistant surgeon, is the matron of the hospital. The companies are deserving of the greatest praise for providing this humane institution for the benefit of the 700 men in their employ.

The methods in vogue among the ancients for the development of mines were, in many respects, far different from those in use at the present time. In the country to the south of us the descent and ascent of shafts were made by means of notched logs. These were from twenty to thirty feet long, ex-

tending from level to level. The logs or ladders were climbed by the sure footed miners, the Aztecs, and more recently by the Indians, who were engaged in the dislodgement of the precious mineral. The ore was placed in raw-hide bags containing about a half bushel, this same being rested upon the back whilst it was held in position by straps extending across the shoulders, uniting in front and fastened through its own weight upon the forehead. If a mine were overflowing with water, the troublesome fluid was removed in these bags in the same manner as the ore, by the miners who tediously climbed the notched poles, and whose notches answered the place of wider steps. The ore was removed in a manner almost as tedious. Fires were built against the walls of the mine, and as their surface became calcined the incinerated portions were dislodged with stone hammers. The melting was equally as cumbersome, being affected with charcoal and bellows. Yet mining was profitable under these crude methods.

There is reported quite a mining excitement on Clark's Fork, Yellowstone Valley. Big assays of both gold and silver ores attest that there is some foundation for the rumor, but as the find is on the Crow reservation, no active work can for the present be done; but as the mines are near the route of the Northern Pacific Railroad, an effort will at once be made to induce Congress to treat with the Indians for the title to this land. There is little doubt but this effort will prove successful, as it will receive the support of not only a numerous mining community, but also of the railroad company, who have a large interest in having the country opened up to the miners. The mineral resources of Montana are next in importance to the agricultural interests of Minnesota and Dakota, and the Northern Pacific will do all it can for their development. There will be but little trouble to secure the recession of these rich mineral lands from the Crows, unless officious intermeddlers shall make trouble by misrepresentation, for the mineral belt is absolutely of no value to the Indians for any purpose, as there is neither grazing nor hunting on their sterile sides and snow-capped peaks. The mineral is found from 7,000 to 10,000 feet above sea level, and is largely in tellurium formation.

Nuggets.

—The annual stockholders' meeting of the Ammonoosuc Mining Company will be held at Portland, week after next.

—We have received from Mr. John E. Booth, of this city, some handsome photographs of his newly invented rock drill.

—Mr. Wilkie Darling has been appointed Supt. for the Brooksville Mining Company, who are opening up a promising property in the vicinity of the Manhattan.

—The new Steamer "Penobscot" was launched in East Boston on Tuesday last. She will be put on the route between Boston and the Penobscot in January next.

—Mr. J. P. Weston, of this city, is busily engaged in perfecting a device for consuming the smoke and waste gases of coal, wood and other fuel. He expects to have it completed and in working order in about three weeks.

—The National Underground Electric Company are laying their pipes in Philadelphia with all possible speed and the system promises to be a grand success. Hon. Wm. M. Everts has recently been added to the Board of Directors in the Company.

—The Brownville Star Slate Company has been organized under the general laws of Maine and the proper papers have been filed at the office of the Secretary of State. The capital stock of the corporation is \$500,000. Charles H. Moses, of Boston, is President and Henry A. Hildreth, of Lowell, Treasurer.

—The Lewiston Journal says that A. R. Savage, Esq., of Auburn, started for New Mexico, Monday, as attorney of the Good Fortune and Grand Mogul Mining Companies of Lewiston and Auburn, to fix their titles. The stockholders of these mines are in exuberant spirits over the very flattering reports sent home by Mr. Phillips, their mining engineer, and believe they have a bonanza.

—A Portland exchange says that Mr. E. L. Dyer, of Pownal, 2 1-2 miles north of North Yarmouth station, or Duun's depot, bought a 65 acre farm last fall, for \$3,000. Recently he discovered an ochre bed, of great dimensions. The ochre will bring \$14 per ton, and as it costs nothing to mine it, except a shovel, Mr. Dyer has struck a bonanza. He also found a mineral spring, believed to be of great value, at the same point.

—The Sullivan Bulletin thus alludes to the prosperous condition of the Sullivan Mining district: "A larger number of new buildings are in process of erection than at any other time

since the revival of business at this place. Ranches, as some of the temporary buildings were called, are giving place to substantial cottages, and very soon from the "Falls Village," as Sullivan used to be called, right up to the Franklin town line, will be one continuous street, if building sites can be purchased."

—The Cobb Lime Company, of Rockland, are carrying on an extensive business. The Courier says they have loaded sixteen vessels for various ports during last week, with a total of 14,000 casks. During the present week they have sent away 9000 casks by vessel and 1500 by rail. The shipments by rail have largely increased, the total being 325 cars for last year, while up to the present time this year, 460 cars have been shipped. There is good demand, the New York market continuing steady at \$1.10 and \$1.25.

CORRESPONDENCE.

Mining Matters in Portland.

PORTLAND, ME., Oct. 26th, 1881.

Editors Maine Mining Journal:

Cold weather has at last fairly set in, and with it comes the annual season of activity in mining stocks. The general feeling here is, that the season will be unusual lively. Maine stocks are growing in the public favor. The recent boom in Deer Isle has been of decided advantage to all legitimate Maine mining stocks. It has to an unusual degree directed the attention of capitalists to our valuable mineral properties, and now that we can show such silver mines as the Deer Isle, Sullivan, Franklin Extension and others that might be mentioned, and such copper mines as the Blue Hill, Cape Rozier, Manhattan, etc., there is every reason to hope and to expect that capital in large amounts will flow in to us just when we most need it.

You are winning encomiums hereabouts by the vigor with which you support every legitimate mining enterprise, and by the fairness with which you criticise all bad management. I wish you would do something to stir up the management of the Golden Circle. It really seems criminal that such a valuable property should be so badly managed. It is understood here that the offer to purchase, for cash, the mill (which the directors frankly declare is useless to the company) has been made to the directors, and they have not taken the trouble even to call a meeting of stockholders to see if they would sell it. It is well known that all the gold bullion, amounting it is said to over \$1,000, is still unsold. In fact, "masterly inactivity" seems to be the policy of the present management. It is time the directors were brought to the bar of public opinion.

Quite a boom in Franklin Extension is in progress. Several thousand shares have changed hands the past ten days, at prices ranging from 12 cents to 18 cents cash, and from 15 cents to 25 cents, buyer 60. This stock has suddenly sprung up into public favor, as the mine bids fair to become one of the most valuable silver properties in the State. Assays as high as \$190 in brittle silver have been made. Edgemoggin is destined to go higher.

HARRY.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, OCT. 26, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Amoosuc	3 1/2	3 3/4	3 1/2	3 3/4	3	3 1/2	3 1/2	3 3/4	3 1/2	3 3/4	3	3 1/2
Atlantic L. S.	15	14	14 1/2	15	14	15	14 1/2	15	14	15	14	15
Atlas	...	...	...	...	...	...	...	...	...	...	...	...
Aztec	3 1/2	3 3/4	...	...	3 1/2	3 3/4	3 1/2	3 3/4	3 1/2	3 3/4	3 1/2	3 3/4
Blue Hill Copper	3	3 1/2	...	...	3	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2
Brunswick	6 1/2	7	...	...	7	8	6	7	...	...	6 1/2	7 1/2
Calumet & Hecla	2 1/8	2 1/4	2 1/8	2 1/4	2 1/8	2 1/4	2 1/8	2 1/4	2 1/8	2 1/4	2 1/8	2 1/4
Catalpa	3/4	1	3/4	1	3/4	1	3/4	1	3/4	1	3/4	1
Central	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls	4	4 1/2	4	5	...	4	4 1/2	...	...	4 1/2	...	4 1/2
Contentment	...	...	...	...	...	...	...	...	...	...	...	...
Douglass	1 1/2	1 1/4	1	1 1/4	1	1 1/4	1	1 1/4	1 1/2	1 1/4	1 1/2	1 1/4
Dana	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Empire	...	...	...	...	...	...	...	...	...	...	...	...
Franklin	12 1/2	12 1/2	12 1/2	12 1/2	12	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2
Harshaw	5	5 1/2	5	5 1/2	5	5 1/2	5	5 1/2	5	5 1/2	5	5 1/2
Huron	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2
Hanover	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt	...	...	...	...	...	...	...	...	...	...	...	...
International	...	...	...	...	...	...	...	...	...	...	...	...
National	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Osceola	25	25	25	25	25	25	25	25	25	25	25	25
Pewabic	13 1/2	14	13	14	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Phoenix	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac	...	...	...	...	...	...	...	...	...	...	...	...
Quincy	39	40	39 1/2	40	39 1/2	40	39 1/2	40	39 1/2	40	39 1/2	40
Ridge	...	...	...	...	...	...	...	...	...	...	...	...
Silver Islet	33	34	33	33	30	31	30	32	29 1/2	30	31	32
Star	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan	3 1/2	4	3	3 1/2	3 1/2	3 1/2	3	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Canadan; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George E. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Canadan.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluchill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$3 each; assessable.
President, A. E. Herrick, Bluchill, Vice-President, H. A. Tripp, Bluchill; Treasurer, H. B. Darling, Bluchill; Secretary, H. A. Tripp, Bluchill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANKLIN SILVER MINING COMPANY,
Franklin, Me. Incorporated, Feb., '880.
Capital, \$500,000; Shares \$5 each.
President, E. H. Greeley; Treasurer, Jeremiah Wooster; Secretary, E. E. Brady; Directors—E. H. Greeley, N. P. Doe, Edward Mullan, Richard Laffan, Jeremiah Wooster.

FRANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb. 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec. 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffin, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

GREGORY COPPER MINING COMPANY,
Gardner Mountain, N. H.
Capital, \$500,000, in 100,000 shares.
Directors—Hanson Gregory, Jr., Maynard Sumner, S. M. Bird, A. F. Ames, Geo. Gregory, J. Fred. Merrill, Henry Spaulding, Hanson Gregory, Jr., President, H. T. Beveridge, Treasurer.
Office—Rockland, Me.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Noyes, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Noyes, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Reddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

McFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

PEABODY SILVER MINING COMPANY,
Property situated on Columbian Mountain, Col. Stock unassessable.
President, J. W. Johnson, Boston; Vice President, E. C. Nichols, Bangor; Secretary, S. P. Johnson, Bangor; Treasurer, E. R. Walker, Boston; Directors, J. W. Johnson, S. C. Hurst, W. C. Bradley, N. W. Gannett, C. T. Plimpton, A. C. Goss, E. C. Nichols.
Treasurer's and Transfer Office, 385 Washington St., Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Stury, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

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	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	5.30	10.00		5.00
Arrive Bangor,	6.43	11.15		6.05
Leave Bangor,		7.35	2.00	8.10
Arrive Bucksport,		8.43	3.15	8.10

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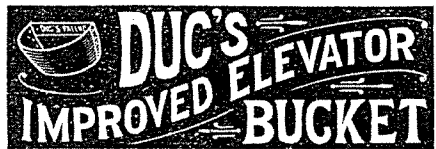
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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

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Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, NOVEMBER 4, 1881.

The auction sale, at Montreal, of Phosphate Lands belonging to the Laurentian Phosphate Mining Company (Limited) occurred as per announcement in our columns, and drew a good representation of those interested in phosphates. Mr. Arnton decided to offer the whole thirteen hundred acres in one lot. The competition reached some \$36,000, but the parcel was finally withdrawn at \$40,000.

Quite a lively scrimmage occurred on the floor of the American Mining Stock Exchange on Monday last. It seems that Mr. Hart, a well-known mining broker, actually had the audacity to speak disparagingly of the State Line properties. Upon refusing to retract he was set upon by Messrs. Lichtenstein and Selover who attacked him with an umbrella and evidently intended to give him a severe chastisement for his irreverence. Their plans seem to have miscarried, however, for Mr. Hart, although a little fellow, succeeded in "getting away" with Lichtenstein and brought hostilities to a close by throwing Major Selover over the stairway, dropping him into the arms of a friendly porter on the floor below.

A California exchange says: "The buildings erected in Nevada City district by the Fryer Reduction Company present a lonesome appearance. The machinery, smoke-stacks and apparatus have been taken away. The process was never carried into practical operation, although thousands and thousands of dollars were spent upon it." If the owners of the "Robertson" ever erected any "works" they must now present an equally lonesome appearance. Query: Where will the Hamilton works of New York be ten years hence? There are quite a number of New Yorkers who still have an abiding faith in the Fryer process, but their

faith isn't equal to putting any more money in the development of the "process." Processes are very onerous elements.—[Daily American Exchange.

The members of the Boston Mining and Stock Exchange have organized a Social Club, with Messrs. William Meehan, E. H. Hastings and Geo. D. Greeley as the Executive Committee. The Club's motto is "Dum vivimus vivamus"—in other words "Carpe diem." It strikes us that it might be well to add "Vive memor lethi." The first monthly banquet was held at Young's on Wednesday afternoon last. "L'eau en vient a la bouche." But stop—"Le cout en ote la gout." None but members of the Mining Board are eligible to membership, but members of any other stock board in the city may become honorary members by subscribing to its rules of government and paying the stated dues, and the Executive Committee are authorized to invite certain members of the press to participate as guests at each monthly dinner. Great care must be exercised, however, in admitting these fellows. "In vino veritas."

THE DOUGLASS.

The result of the Douglass meeting held in this city on Monday last must, in view of all the circumstances, be considered as highly satisfactory. The entire harmony which prevailed while undergoing so severe an operation as a reorganization and change of management is a matter for congratulation. It is gratifying in no small degree to witness a company of gentlemen who meet to adjust serious difficulties and assume grave responsibilities, setting entirely aside all personal interests and working harmoniously for the best good of the cause they represent. There are times when the surgeon's knife, painful though it be, must be used in order to save life. This was such an occasion, and under the care of skilful physicians and nurses, the recovery of the patient will be both rapid and permanent. That its attendants will now be found both skillful and watchful we most firmly believe.

About 90,000 shares were represented at the meeting of the company, and it was unanimously voted to sell out to the Douglass Copper Company, said company to assume all the assets and liabilities of the old corporation. The new company is organized under the laws of Maine, upon an assessable basis, with a capitalization of \$500,000 divided into 100,000 shares of \$5 each par value, and paid up to \$2 per share. The officers are as follows: President, Hon. Liverus Hull, of Boston; Treasurer and Secretary, Frank H. Williams, of Boston; Directors, Liverus Hull, Stephen Jennings, Wm. D. Swazey, Hanson Gregory, Jr., Gen. Charles Hamlin, I. S. Johnson and John C. Watson. The directors of the Douglass Copper Company hold a meeting in Boston next week, at which an assessment of \$1 per share will probably be levied upon the capital stock. This will, perhaps, seem to Maine people like heroic treatment, but it is just what is needed, and the amount will soon be returned to the stockholders threefold, in the enhanced market value of their shares. This, with the efficient and judicious management we feel assured it will receive, should be amply sufficient to wipe out the indebtedness and place the Douglass mine on a dividend-paying basis.

A NEW ROCK DRILL.

Once more we refer to the Rock Drill recently invented by Mr. John E. Booth, of this city, as it is a machine of great merit and is destined to come into very general use. It is so simple in its construction that by a few minutes' observation any person may fully understand how to operate it. It is easily adjusted to uneven surfaces and at any angle required, from a vertical to a horizontal, drilling any sized hole. It is both self-feeding and self-cleaning—that is to say, what the drill cuts from the rock at one blow is forced out of the hole in descending for the next blow, thereby cutting clean rock every time. It drills a 20-inch hole without changing drills, makes a perfectly round, smooth hole, is not liable to stick and will drill jointy or seamy rocks where an ordinary drill will not. It will drill six to seven feet per hour in rock of ordinary hardness. Thus two men with this machine are capable of doing the work of eight or nine men drilling by hand. The important feature about this machine is that it will actually do all that is claimed for it, and is, consequently, capable of paying for itself, by the saving in labor, in a very few weeks.

The drill is arranged in several different classes of stands or frames, to suit distinctive purposes. For mining work a frame is provided which is jacked across the shaft for sinking, or from top to bottom when drifting. When ready to blast it may be easily raised from the shaft or moved away on its balance wheels. For cutting marble, slate or granite, when it is not desirable to blast, holes two inches apart are drilled, a flat or chisel-shaped bar is inserted in place of the drill, the rotating ratchet is thrown off, and the spaces between the holes are broken out very rapidly by the machine. In short this is a most wonderful as well as valuable invention, and we hope soon to furnish our readers with some illustrations by which we may be able to give a more full and complete description of the machine and the varied uses for which it is adapted.

THE MINING SHARE MARKET.

The immense business (!) at the Mining Board in Boston still continues, the sales of Eastern mining stocks for the week ending Wednesday last, as "officially" reported, aggregating 210,750 shares, as follows: 2850 Copperopolis at \$2.11 to \$2.15; 41,000 Milton at \$1.02 regular to \$1.25 buyer 60 days; 41,800 Deer Isle at 89c to \$1; 74,200 Twin Lead at 49c to \$1.05 buyer 60 (This stock dropped suddenly on Monday from 91c to 50c and has not yet recovered, closing on Wednesday at 52c.); 4000 Mammoth at 65c to 35c, the last sale being made at the latter figure; 5500 Edgemoggin at 35c regular to 50c buyer 60; 2700 Grauger at 3 and 4c; 3300 Commonwealth Mica, starting at \$1.18 and advancing to \$1.40; 34,400 Hopewell Manganese at 57c regular to 75c buyer 60; 700 Douglass at \$1.25 to \$1.50; 100 Silver Lake at 30c; and 200 North Castine at 6c.

At the Old Board the sales of Maine shares for the week were as follows: 400 Douglass at 1 3-8 and 1 1-2; 1150 Blue Hill at 1 3-8 and 1 1-2; 300 Sullivan at 3 and 3 1-2; 100 Pine Tree at 1 1-4.

—The Kinco Slate Co. have commenced operations in Monson.

Personals.

MR. E. M. HERSEY has been in Boston during the past week.

JOHN W. MACKAY is on his way to New York from Liverpool.

SUPT. DUFF has returned to Blue Hill after an absence of a week in Boston.

MR. A. E. BARCLAY has recently visited the Montague Gold District in Nova Scotia.

MR. ISAAH S. EMERY returned to New York on Sunday evening after passing a few weeks in this city.

MR. EDWIN DOW, of Portland, has returned home from an extended tour through the mining districts of Colorado.

DR. A. C. HAMLIN, President of the Mount Mica Tin and Mica Company, left this city Wednesday on a brief trip to the mine in Paris.

HON. A. P. GOULD, President of the Katahdin Iron Works Company, has this week been visiting his son-in-law, O. W. Davis, Jr., of this city.

MR. FRANCIS WORCESTER and wife, of Ellsworth, passed through the city last Saturday on their return from Boston where they have been spending a few weeks.

MR. FRANCIS ELLERSHAUSEN recently sailed for Europe on business connected with the Newfoundland Copper Mines. It is expected that he will return in a month or six weeks.

HORACE W. TABOR, the mining millionaire and Ex-Lieutenant Governor of Colorado, in the year 1854 was a stonemason at Augusta, Maine. He is now reported to be worth \$5,000,000.

PROFESSOR FRANK STEWART arrived in Bangor on Saturday last on the steamer Cambridge, from Boston. He remained in Bangor over Sunday and left Monday evening for Blue Hill with a large party of mining men.

FRANK H. WILLIAMS, the well-known broker, has been in the city during the present week. The firm of which he is the senior member are already rushed with business in their new quarters, No. 64 Devonshire street, Boston.

MR. THOMAS CAHILL has resigned his position as Supt. of the Sullivan Mine. Mr. Cahill and wife intend to winter on the Pacific Coast. They arrived in this city night before last and will soon leave for San Francisco over the southern route through New Mexico and Arizona. He reports the Sullivan as looking finely.

MR. FRANK H. GETCHELL, editor of the Bangor Daily Commercial, has gone to New York to enjoy a well earned vacation. Under Mr. Getchell's management the editorial columns of that journal have been greatly improved, and his spicy and readable comments upon the political and other news of the day are attracting widespread attention.

EDWIN PARKS, of Keene, N. H., Superintendent of the War Eagle Mining Company, died suddenly on Sunday last, at Silver City, Idaho. His son, E. I. Parks, was with him at the time of his death, and came East with his father's remains. The death of Mr. Parks will be mourned by a large number of his friends in Boston and elsewhere.

THOMAS NAST, the caricaturist, invested \$40,000 in a

Colorado silver mine. Receiving unfavorable reports, he went out to see what he had paid for. Accompanied by an expert, he found that he had invested in an open quarry which wouldn't pay out five cents to an acre. The Buffalo Express thinks that a full-page engraving of Nast looking down the hole for his \$40,000 would make a striking picture. We commend the suggestion to the caricaturist.—[Syracuse Herald.]

Bangor was full of mining men on Monday last. Many were here to attend the Douglass meeting and the rest were upon other business. Among them were HENRY B. DARLING, HENRY L. GREGORY, CAPT. J. H. MOYLE, CAPT. DANIEL DUNN, CAPT. WILLIAM LUDLOW, COL. WM. H. DARLING, JOHN A. STEVENS, W. E. GRINDLE and C. A. BARRETT, of Blue Hill; W. D. SWAZEY, of Bucksport; J. A. DAVIS and A. W. CUSHMAN, of Ellsworth; F. A. McLAUGHLIN, of Hancock; W. A. PEARSON and FRANK W. LEAVITT, of Castine; HANSON GREGORY, JR., of Rockland; E. C. AREY, of WINTERPORT; WM. N. CLARK, of Peabody, Mass., and HON. STEPHEN JENNINGS and FRANK H. WILLIAMS, of Boston.

JAMES E. ANDERSON, editor of the Eureka (Nev.) Leader, was assaulted, and badly if not fatally beaten over the head with a revolver, by W. J. Penrose of Ruby Hill on the evening of Oct. 23d. His condition is very critical, and but slight hopes are entertained of his recovery. The trouble grew out of an article in the Leader denouncing Penrose. "Jim" Anderson was a member of the Louisiana Returning Board during the Hayes election contest, at which time he won the title of the "Great American Liar." Since his residence in Nevada he has been editor and publisher of the Ruby Hill Mining News, in which connection he has shown a great deal of enterprise in advancing the interests of Eureka district, and has gained the confidence and esteem of the people of that section. He had but recently purchased and assumed editorship of the Leader, which is one of the best known and most influential papers on the Coast.

Dips, Spurs and Angles.

When summer with her bloom has gone,
And autumn winds sound in the wood,
The sportsman winds his mellow horn—
Then takes a horn in solitude.

—A western editor being asked by a subscriber what was meant by the word hydrogen, replied; "Gin and water," and explained that hydro was the French for water.

—It is sweet for one's country to die, but most of those who attended the Yorktown centennial celebration say that starving in times of peace and prosperity deals a death blow to the most exalted patriotism.—[Boston Sunday Courier.]

—The Bonanza (Col.) Enterprise innocently asks: "What is a kiss?" To which Dave Day, of the Solid Muldoon, knowingly replies: "A kiss is a surface cropping; a species of float, that sometimes induces a country editor to put a \$250 assessment on a six-bit lead."

—To write for a paper is one thing, to edit it another. There are some excellent writers who would "make a fool of a paper" if they had the conducting of it for a few weeks. A good editor seldom writes much for his paper; he reads, judges, selects, dictates, alters, combines; and to do this well leaves little time to compose. Those people who have the most to say about the way a newspaper should be con-

ducted are those who know the least of what they are talking.

—A young man who signs himself Mons. Chape, who resides in Virginia City, and who has a weakness for beer and caviare at unseemly hours, sends the following atrocious report of a conversation that took place on C street between a brace of stock sharps: S. No. 1—"Hullo, Jim, what do you know this morniu'?" S. No. 2—"Nothing new. Think stocks will improve, though." No. 1—"What on?" No. 2—"Well, Sierra Nevada and Union have a good chance on the 2700." No. 1—"Don't believe it. Think that last deal was a dead swindle, and near as I can find out there ain't a pound of ore on the lode." No. 2 (caustically)—"Potosi you get so hot in the Chollar about the Comstock makes me smile. Experience should have taught Utah know better. Would Europa man in to believe stuff like that? You better not talk Savage Norcross about it or Someone may make it a point to Curry your Jacket. I think you are a dead, rank Succor, and probably Ophir your stock and have been Challenged to produce more Bullion. I advise you to Alta your opinion, admit that it's Alpha the Best and Belcher complaints to somebody else." No. 1 (reflectively)—"Darned if I ain't dead wrong, Andes right, by jove!"—[S. F. Exchange.]

"New Processes."

F. L. BARTLETT, PORTLAND, ME.

The Patent Office Reports teem with the inventions of sanguine individuals for the reduction of ores; for roasting, concentrating, crushing, amalgamating, and variously torturing ores of the precious and baser metals into yielding up their wealth. Of the thousands of patented "processes" hardly one ever comes into use. Probably there is no class of inventions patented which finds so little practical use as this, and why is it? One reason, and probably the chief one, is that the inventors are for the most part men who have little or no knowledge of chemistry. They may be good engineers, good draughtsmen, good mechanics, and practical men, yet if they do not thoroughly understand the chemistry of metals they cannot successfully cope with the great problem of metal extraction; for metal extraction is not in any sense a *mechanical* affair but is most decidedly a *chemical* process. It matters not whether amalgamation, chlorination, leaching or smelting be employed, it is a chemical process still and one, too, which involves the most intricate knowledge of chemical affinity on the part of the would-be successful operator. Any attempt to subvert chemical union will inevitably end in failure.

One does not need to be more than an amateur chemist, in reading the specifications of these numerous inventions, to detect, in the majority of them, fatal chemical errors. In many cases the inventors believe implicitly in their own process, but in others *fraud* is plainly written in their very faces and the gullible public is invited by tasty and highly probable reports, backed perhaps by some simple laboratory experiment which to the novice seems all right, to invest in the *new process*. This thing is constantly going on and at the present moment no less than six different companies of the "new process" stamp are advertising in the New York papers for customers. Some of them may have merit, but it would be an agreeable surprise to find one of that class. Millions of money have been put into these enterprises and "new process" mills by the hundreds can be found distributed about the mining districts slowly going to decay. It teaches us one thing most emphatically, and that is, that something is needed to reduce more cheaply our low grade ores. This is shown by the readiness with which the mining public invest in anything that promises the least show of success. All doubtless remember the "Robertson process" about which so much was said recently; this was eminently

successful—in filling the pockets of the originators—but not so in reducing ores.

Just now the "Hamilton process" is the one most talked about in New York and is attracting unusual attention. According to all accounts money is flowing like water into the treasury of this concern who promise to treat ores for "one dollar per ton." While this process may have merit, there are some things about it which look exceedingly suspicious, to say the least, and the first thing which demands attention on suspicion is that the company advertise that they can treat ores for *one dollar per ton*. Mr. Hamilton proposes, 1st—to crush his ores down to a fine state of division; 2nd—to roast them until the sulphur is driven off; 3d—to pass the roasted ore through a mass of melted lead; 4th—to recover the silver and gold from the lead. Any one with the slightest practical knowledge of handling ores knows that even with the most approved machinery and furnaces, ores cannot be finely crushed and roasted for \$1 per ton. If Mr. Hamilton can do this part he need not go any further, for there is not a smelting concern in the world who would not gladly give one dollar per ton and much more to have their ores crushed and roasted ready for after treatment. Yet we do not understand that Mr. Hamilton has any special process for the crushing and roasting, intending to do this much after the fashion of other smelters.

The novelty of Mr. Hamilton's process is in his method of extracting the silver and gold, which he proposes to do by forcing the roasted ore through a bath of molten lead. The "theory" as explained by Mr. Hamilton is that melted lead rapidly alloys with the metals gold and silver in the unmelted state, that is to say—if the metals gold and silver be added to melted lead they instantly disappear or alloy with it. This is true of these metals when in *metallic* condition, but is it true when these metals are in the form usually brought about by the roasting of ores containing them? It might be true to a certain extent as regards gold, but silver—never! With few exceptions silver occurs in its ores as a chloride or sulphide. Generally speaking, the ores which Mr. Hamilton will be called upon to treat will contain their silver as a sulphide. In roasting, unless salt be used, or the roasting carried to the highest point, the silver will remain as sulphide still; or, if pushed far enough, become a sulphate; at all events, the silver cannot be roasted into the metallic condition. Now Mr. Hamilton proposes to pass his roasted ores through the melted lead at a low temperature and expects the gold and silver to unite with the lead while the baser metals and rocky matter pass out untouched, thoroughly impoverished, ready to be thrown away; while the lead bath can be used over and over until sufficiently charged with the precious metals to pay for cupelling. We are only seeking for information and do not intend, or wish, to throw cold water on an enterprise which promises so much, yet we must confess our utter ignorance on this point, for we cannot see how sulphide, chloride, sulphate or even oxide of silver can unite with lead *unless* it be brought to a temperature sufficiently high to decompose the silver compounds, in which case a pasty mass of sulphide of lead, silicate, and litharge would ensue, soon destroying the efficiency of the bath; in fact, bringing us right back to the old fashioned "lead process" which has been in use hundreds of years. Lead is easily oxidized, any way; even the passage of oxygen from the air through the bath (which can not be excluded in passing the ore through) would give rise to large quantities of litharge, let alone the oxygen that would be in combination with the baser metals always found in ores.

Another incongruous statement made by the Hamilton people is that they will treat 100 tons per day in the mill now building in New York. Have they any adequate idea of what a *pile* one hundred tons of finely crushed and roasted ores will make or what powerful and capacious crushing and roasting machinery is required to handle one

hundred tons? Surely they cannot expect the plant now being erected to do anything of the kind, for the crushing and roasting facilities are largely inadequate to the performance of such duty unless some power more potent than steam be introduced.

In conclusion, we confess that we are meddling with something that is none of our business in asking these questions, and our only excuse is that we are seeking for knowledge on a subject that is of vast importance to the mining public. This is an age of progress; we don't want to "get left," and had rather "ride behind" than wait for the next train.

The Golden Circle Mining and Milling Company.

Several statements contained in a brief letter from a Portland correspondent which appeared in last week's issue of the *MINING JOURNAL*, and was afterward copied into the *Portland Argus*, served to call forth a sharp response from the Secretary of the Golden Circle Company, in a communication to the editor of that paper. If our correspondent has made any false statements no one has occasion to regret it more than ourselves, and we are only too glad to have them corrected. We gave his article a place in our columns for the reason that we could not help feeling that the Golden Circle management needed some "stirring up," and we are ourselves compelled to believe that the affairs of the company, in common with so many other of our Maine companies, have been badly managed. In view of the fact that the Golden Circle mine is, as far as human foresight can determine, a most valuable property, the causes for the company's present deplorable condition can scarcely be looked for in any other direction. The honesty of the management has not been called in question, and that they have faithfully done what they believed to be for the best interests of stockholders we sincerely believe; but all men are liable to errors of judgment, especially when engaged in a business of which they have no practical knowledge. Therefore, whenever we have occasion to criticise methods adopted or "stir up" a seemingly inactive management it is our intention to do so in the kindest spirit possible and in a manner which shall not be construed as an "attack" upon the individuals concerned. In this case, the strictures of our correspondent were not looked upon in that light by us, and we should regret to think that they were intended by him to be so regarded.

As we understand the situation it is something as follows: The Directors of the Golden Circle, acting upon the supposition that their ores were free-milling, purchased a 5-stamp mill, which they proceeded to erect in Portland, nearly 150 miles distant from the mine, and place in charge of a gentleman who, perhaps, had never seen a stamp-mill in operation, and certainly never had the slightest experience in operating one. Now we submit that for any man, no matter how much intelligence and ability he may possess, to run a quartz mill successfully without any previous knowledge of the art (for it is an art) is beyond the possibilities. But it was shortly discovered that a large proportion of the gold in the rock was alloyed with other metals and could not be saved by the ordinary process of amalgamation. About this time the company's working capital was found to be exhausted, and an effort was made to raise funds by the issuance of eight per cent. mortgage bonds. These have not met with a ready sale, as shown by the statements of Secretary King, and as a result matters are at a standstill. Now we have none but the best of feelings toward the Golden Circle management and, believing they are in possession of a most valuable mining property, we are extremely anxious to see it worked and made a success, and to this end we shall ever be found ready to render any assistance in our power. The only efficient and available method seems to us to be an immediate reorganization upon an assessable basis. When so established the expense of keeping the property out of the hands of the sheriff, or of operating the mine, will no longer devolve upon the faithful few. Furthermore, when this is ac-

complished the company's shares will be found, as shown by the experience of other Maine companies which have adopted this method, to have acquired a market value, which at present they do not possess. Then by engaging some competent person to make a thorough examination of the product of their mine and tell them what should be done with it, they may ascertain the proper course to pursue; and by pushing things energetically, yet economically, the success of their enterprise is assured. We append below Secretary King's communication to the Argus.

[To the Editor of the Argus.]

The letter of "a correspondent of the MAINE MINING JOURNAL," from which this morning's Argus publishes an extract is signed "Harry." If the writer had signed his real and full name to the letter it probably would have needed no reply. If I recognize him, and I think I do, he owns only one hundred shares of Golden Circle stock—bought "on the street,"—and has never paid a single dollar into the treasury to help the directors out of the "masterly inactivity" of which he complains. But as you have attached sufficient importance to the anonymous attack to induce you to publish it I wish to make this much of a reply to it:

First—As to the "sale of the mill:" The directors have never "declared it useless to the company," and have never decided it to be advisable to sell it. But when the "offer to purchase" was made, (and I think it was made by this same "Harry," but in behalf of another party not named by him) they at once obtained legal counsel to see if it could be lawfully sold under existing circumstances, if at any time it should become desirable to sell it.

Second—As to the "gold bullion" which he says is "still unsold," it is simply held back from sale for awhile for the sake of having it to show as a veritable, visible, tangible product of the rocks of Maine, which so many persons still so persistently refuse to believe really contain any appreciable quantity of that or any other of the precious metals; and in order to hold it for this purpose three of the directors weeks ago advanced money to the amount of its full value and devoted it to the very purpose to which the money realized from its actual sale would have been.

Third—As to the alleged "masterly inactivity," I have to say that whatever seeming lack of activity there may have been of late is due solely to the refusal of "Harry" and other stockholders to buy any of the 8 per cent. bonds which have been issued in accordance with a unanimous vote, passed at a stockholders' meeting duly called, largely advertised and well attended, or to furnish any money in any way to prosecute the company's work.

The directors, with a very little help from a very few other stockholders, at once bought enough of those bonds, at their face value, to keep the property from being sold for debts, and are now thus holding it, ready and anxious to resume active work, both at the mine and at the mill, just as soon as other stockholders (or any other persons) will enable us to do so by taking bonds as the directors have done. If they will do this in the same ratio to the stock held by them as the directors have, "Harry" will soon see activity enough, and this will enable the directors, as they firmly believe, to make his and all the stock of the company exceedingly valuable and valued. If they will not do it, then they will still *force* the directors to continue, most unwillingly, what he terms their "masterly inactivity" until the company's rich mining property passes into the hands of those who do buy the bonds, and this, of course, will make Harry's stock, in common with ours, absolutely worthless.

The truth is, the directors, from the organization of the company until now, have all, with one exception, and he is not now a director, been buyers and holders of the stock, while such men as "Harry" have been simply speculating, or trying to speculate, in "club shares" bought outside of the treasury, and every time money has been needed and could not be obtained by sale of treasury stock at proper prices the directors have furnished it with scarcely any help at all from others, and have thus pushed the development of the mine until its immense value has been demonstrated almost beyond a peradventure; and *their* money is now keeping it out of the sheriff's hands, until the other stockholders will help them bring their endeavors to triumphant success, or until it passes, to our great regret, into the hands of others who will take out the gold we have shown to be in it—to go, however, into their pockets and not, as we desire, into the pockets of the present stockholders. It strikes me, therefore, that the "masterly inactivity" complained of is chargeable, not upon the directors who have done and are doing all their limited means will allow them to do, but upon stockholders who have never put any money into the treasury, and are now doing nothing, except to complain because the directors are not doing what cannot be done with an empty treas-

ury; and this, I believe, will be the unanimous verdict whenever the directors, with a full and truthful statement of their management, are brought, as "Harry" desires, "before the bar of public opinion."

A. S. KING.

Secretary Golden Circle M. & M. Co.

The Dorchester Copper Mines.

A NEW BRUNSWICK BONANZA—PURCHASED BY BOSTON CAPITALISTS FOR \$270,000.

[St. John Daily Sun.]

About a year and a half ago Mr. Edward F. Couch, of Newburyport, Mass., purchased the right to explore for copper ore at Woodville, near Dorchester, and has since been unceasingly engaged in developing the surface indications in a manner, and with results that demonstrate what a practical miner can do, even in the face of adverse scientific opinions.

Some years ago, Mr. George King, of Woodville, noticed that a part of his pasture land grew no grass—the surface being dark, nearly black, and that when his cattle went to that particular part to rest during the heat of the day, flies and other insects did not bother them. Mr. King, who is an old Englishman, incited by curiosity at this phenomena, carefully examined the soil, and from the dark appearance that it presented concluded that it was a valuable loam and hauled quantities of it over his farm for top-dressing. Contrary to his expectations, wherever he placed this loam crops of all kinds refused to grow. The inquisitiveness of Mr. King was further aroused and he, at leisure hours, sunk a pit upon the bald spot and soon came upon gray sandstone, apparently impregnated with some foreign substance, and the stone, upon being exposed to the air, attained a greenish hue. He exhibited specimens to the savants of Dorchester who, after testing them with the best means at their command, assured him that he had a wonderfully rich copper ore. He afterwards dug several pits, and the news of a copper mine in Woodville was noised abroad.

Mr. Couch, who has been engaged in prospecting mines of all kinds during the past 16 years, hearing of the property visited it and, after a thorough inspection of the work done concluded as a practical miner, that the indications warranted further development.

Many in the Maritime Provinces know the situation of the Dorchester penitentiary, and by using that as a starting point one can convey a fair idea of the "lay of the land." Behind the penitentiary there is a hollow—scarcely large and deep enough to call a valley—and beyond rises a high ridge of land. This valley runs for some distance parallel to the railway, but about a mile north of the penitentiary it diverges off to the northeast and extends for several miles in that direction. The copper vein runs from near the penitentiary lines, at the bottom of this valley, along up the ridge beyond, out-cropping higher and higher all the time upon the hill for nearly two miles, the last indications prospected being about on the summit of the ridge.

The part of George King's farm where the vein crosses is pretty high up on the ridge. Here Mr. King's explorations had developed a reddish slate-marl, which immediately attracted Mr. Couch's attention when he first visited the premises. The marl encouraged him more than all the indications of ore opened out. He sank shafts showing its depth to be from 30 to 40 feet. Mr. Couch's first step was to follow along the face of the hill and demonstrate the continuance of this marl by sinking shafts at intervals. The marl continued satisfactory. He noted also a regular strata of conglomerate rock lying just above the marl.

All this was done without discovering a single trace of copper and on ground where eminent scientific men had given opinions adverse to the existence of copper. He then sank a few shafts higher up the hill than where the conglomerate crops out and in each one struck his vein of copper ore. Finding that the ore came nearer to the surface than he expected, he then drove in about forty slopes or drifts at intervals along the side hill for a distance of about 8,000 feet. These drifts run in from 15 to 30 feet, and in every instance the vein has been tapped, exposing a thickness of from 6 inches in some places to 5 feet in others. These drifts any one can walk into and satisfy himself of the existence of ore and the thickness of the vein as your reporter was enabled to do through the kindness of Mr. Couch. It is rather a curious fact that in one instance a slope, driven in close beside a shaft he first sank through the marl last fall, shows that the shaft was within a foot of the outcropping of the vein, and yet no direct indications of it were seen until the drift was made.

The ore has been analysed many times by experts and found to contain from 20 to 60 per cent. of copper. A considerable quantity selected at random from the different drifts was submitted to Prof. Richards, of the Boston Institute of Technol-

ogy, and he reported that it averaged 33 per cent. of pure copper. Another fact in its favor is that it is free from baser metals, rendering smelting operations very much less expensive, and more satisfactory, than is usual with copper ores. Indeed, the ore is so rich that an engineer from the Lake Superior mines, during the past summer, estimated the value of the ore exposed by the various drifts and shafts at not less than \$200,000 for a certainty, and assured the parties for whom he was reporting that if the vein continued in the same quantity to any great depth there was practically no limit to its value.

Of course it was no easy matter to develop the mines, and not an inexpensive operation either. Mr. Couch has had a number of men at work ever since he took the property in hand, and it has cost him over \$10,000 to make the exhibit he now does. He has prospected and sold valuable gold leads in Nova Scotia, and mines in New Hampshire and North Carolina, and he has felt all along that his reputation was at stake in venturing on these premises, and knowing that he was working on ground rejected by eminent scientific men, he has therefore felt constrained from the first to conduct his operations with all the secrecy possible. The shafts sunk were housed in and kept locked, and a watchman was kept walking back and forth over the property as a further precaution against trespassers endeavoring to obtain clandestine information. Mr. Couch naturally feels elated at his success in the face of so many difficulties. Indeed, some of the experts who have inspected the properties in the interest of capitalists during the past two months have pronounced his operations a wonderfully skillful engineering feat. It rather surprises a stranger to walk over the pasture field on the Chapman farm, the last place in the world, apparently, where one would expect to find any minerals, and suddenly come upon one of these drifts, disclosing a vein of ore of undoubted quality.

Mr. Couch sold his copper properties at Dorchester on Thursday last to Mr. Elmer P. Howe, of Boston, for a large sum of money, receiving \$85,000 in cash down. It is said that Mr. Couch paid away \$45,000 of this sum; \$20,000 went to the Boston broker who brought Mr. Couch and the Boston purchasers together, and \$25,000 went to original holders of the bond, the land owners, lawyers, mining expert, etc. Mr. Couch has \$40,000 left for his trouble, already, and has the purchasers bound to pay him \$185,000 more in six months, if they retain the property.

Mr. Joseph Revere, of Boston, who is a class mate of Prof. Richards and a son of Mr. Revere of the Revere Copper Works, of Boston, a gentleman having a thorough practical and scientific knowledge of the business, is to be the superintendent of the works and has already commenced operations on a large scale. If the vein proves as productive as present indications seem to warrant, there will probably be a force of 1,000 men at work by spring and the quiet Woodville valley will be transformed into a thriving colony.

The situation will enable the mine to be worked cheaply, and the shipping facilities are good. A tramway through a branch of the main valley, across Wm. Turner's farm, can be made to tap the railway at a distance of about a mile from the works, and less than two miles from the Dorchester Island wharf, to which there is already a branch track. The Dorchester harbor is the best port at the head of the bay, giving abundant water, safe anchorage, and being sufficiently land-locked to afford security from storms.

LODES, LEADS AND VEINS.

DEER ISLE.—Our readers have been informed of a recent rich strike in the Deer Isle mine, and that the bottom of the winze was in a rich body of ore; but just how rich it was had not been determined until a few days since, when a sample treated at the New England Smelting Works was found to contain gold, silver and copper in the proportion of \$557.44 per ton. The ore is *Tetrahedrite*, or argentiferous gray copper. Anyone who still doubts the existence of rich ores in Maine is requested to call at our office and examine a sample.

EDGEMOGGIN.—Supt. Sherman reports that he has finished timbering the shaft, and commenced taking out ore last week. The entire bottom of the shaft is in mineral and looking finely. Samples of the ore on exhibition at the store of Treasurer Libby, in Portland, have attracted great attention and been much admired. It is proposed to ship a quantity for treatment shortly. A full crew of men are employed and work is being pushed with vigor. We shall expect great things from the Edgemoggin before long as it has always been our belief that nothing but depth was required to show up rich bodies of ore. The shares have been recently quoted in Boston as selling at 42c cash, and 50c buyer 60 days.

FRANKLIN.—An adjourned meeting of the stockholders of the

Franklin Silver Mining Co. will be held at Ellsworth on Saturday, Nov. 12th, to perfect the reorganization of the company.

COPPEROPOLIS.—Everything about these works is moving along according to rule, and the steps taken to secure comfortable continuance of work during the coming cold weather have been perfected in the completion of both shaft houses. Work in both shafts is being carried along with the usual steady perseverance. Furniture is being got into the rooms of the Copperopolis House and on the first of November it will be occupied.—[Sullivan Bulletin, Oct. 29.]

Sullivan.

FANEUIL HALL AND SULLIVAN.—Supt. Hayward reports to us, under date of Nov. 2, as follows: "We are still driving the crosscut from the 160-foot level. It has now been driven 133 feet, and through hard rock the entire distance. The average work performed per week has for the past month been but 6 ft. and 4 in., with three shifts. The rock for the past few days has been improving. Everything at the mine is in first-class condition.

PINE TREE.—The weather during the week has somewhat retarded work on the wharf, but it has attained a state of forwardness so that the workmen can now work above high water on some portions of it and will soon be able to keep to work at all times of the tide.—[Bulletin.]

MILTON.—The Bulletin says the usual systematic, steady and persevering, [daily and nightly routine of duties has been carried forward at these works during the past week.

KERANA.—Messrs. J. W. Davis & Son, of Ellsworth, have purchased of A. A. Messer a large interest in his property situated between Sullivan and Gouldsboro, known as the "Kerana." It is reported that active developments may be looked for at an early day.

Blue Hill.

DOUGLASS.—The cupolas are running steadily and doing effective work. It is expected another lot of blister copper will shortly be refined and the company will then have a large quantity of refined ingots on hand.

ECLIPSE.—Prof. Stewart has been engaged during the present week, in making an examination of this property, preparatory to making a written report. There seems to be little doubt that the "Mammoth" vein has actually been found upon the Eclipse property, and there are also evidences of still another vein, further south.

YOUNG HECLA.—The new shaft of the Young Hecla is down something more than thirty-five feet, partly in the ledge, and is making good progress. It is already showing some mineral.

British Provinces.

Cape Breton's coal fields cover an area of some 200 square miles.

The Gloucester Silver Mining Company will proceed at once to a vigorous development of their promising property.

Mr. R. R. Call, of Newcastle, President of the Gloucester Silver Mining Company, has just returned from Prince Arthur's Landing and Winnipeg, where he has extensive mining interests.

The coal shipments from the port of Pictou for the week ending Oct. 24, were as follows: Halifax Company, 792 tons; Acadia Co., 618 tons; Intercolonial Co., 1076 tons; Vale Co., 1480 tons; total, 3966 tons.

Messrs. Adams & De Camp have sold the celebrated Hall-Anderson gold mining property, at Fifteen-Mile Stream, Nova Scotia, to New York parties. We shall give a more extended report of the property and sale next week.

Preparations are to be made for stripping the "lode" on the Goodfellow-Freeze mine at New Ireland. It is to be hoped that the pluck and energy with which this property has been developed will meet with ample remuneration at an early day.—[St. John Sun.]

A cable dispatch from St. John's, Newfoundland, states that the schooner Mello, which sailed from St. John, N. B., about three weeks ago with a locomotive and a number of cars for the Newfoundland Railway, has arrived there, but had lost the locomotive and one passenger car overboard on the passage.

The Renfrew Gold Mining Company has been organized, under the laws of Maine, with a capital stock of \$60,000, and \$1,000 paid in. The officers are as follows: President, Charles F. Hollis; Treasurer, Julius H. Rae; Directors, C. F. Hollis,

Henry Stumpue, Phillip Highley, William Mansfield and Dr. J. H. Rae.

Mr. McMullin, an assistant of Mr. Hugh Fletcher of the Geological Survey of Canada, is now completing the Geological survey commenced by the latter, of the Manganese district, controlled by Hon. Mr. Moseley at Glenmore, Lochlomond. It is expected that a careful survey of the manganiferous strata will greatly facilitate the development of the district.—[Cape Breton Advocate.

The Cape Breton Copper mine, at French Vale, owned by Mr. J. F. Burchell and others of Sydney, previously referred to in these columns, has, it is stated in the North Sydney Herald, been sold to an American Company. It is said the Sydney men receive \$25,000 cash with \$40,000 paid up stock, in addition to having refunded their previous outlay on this property. The capital of the new company will be \$300,000.

A Halifax dispatch dated Oct. 29 says that operations at the Montague gold mines are not so brisk as formerly. One shaft, however, is being sunk through the hard whin rock to a lower level than any hitherto reached. The prospect is very encouraging that a lead quite as rich as the former will be then found. Another has been sunk to a considerable depth. A considerable quantity of very rich quartz is being raised. Operations will be continued through the winter as formerly.

The sale of the mining licenses for Albert County took place at the Crown Land Office, Fredericton, on Wednesday at noon. For the first square mile there was some spirited bidding between Mr. Fred W. Stockton of St. John and Mr. A. E. McLeod, of Sussex. At length Mr. McLeod became the purchaser at \$370. For the second square mile the bids were lighter, and carried on only to \$50, Mr. McLeod being again the purchaser. For the third, there was scarcely any competition, and Mr. McLeod secured it at \$24; as also the fourth square mile at the upset price, \$20. No one present would take the fifth square mile at the upset price. The whole sum realized, therefore, from the sale was \$464. The licenses for King's Co. will be sold on the 16th of November.—[St. John Sun.

The Cape Breton Advocate, of Oct. 27, says that Isaac P. Gragg, Esq., of Boston, accompanied by a number of friends, arrived at Sydney on Tuesday and proceeded to examine the Copper mine near Coxheath, owned by themselves, Messrs. Burchell, McKenzie and others. The same mine was recently visited by Mr. Fletcher of the Geological Survey, and Mr. Gilpin, Inspector of Mines, both of whom were much pleased with the quality of the ore and the prospects of the mine. The ore is of two qualities—yellow, containing one third, and purple containing two thirds its weight of metallic copper. The fall rains are giving trouble to the pit, which is now forty feet deep. It is understood that the energetic gentlemen who control the property intend pushing forward the development of the metalliferous vein in which the copper occurs.

The Brunswick Antimony Mines.

[Portland (Me.) Cor. Poston Sunday Herald.]

The Lake George Antimony Mining and Smelting Company is defunct, the property being in the hands of the original owner, Mr. Bela Lawrence of St. John. No mining has been done since March, 1881, and the mine is now full of water. About 20 tons of A ore were shipped from this property in the summer of 1880. There are two well defined veins upon this property, but development has been confined to one. Upon this vein two shafts have been sunk, one to a depth of 174 feet, the other 92 feet, and connection between them has been made. About 60 fathoms of ground have been stoped out. There are no men employed on this property at present. There is no machinery upon the ground, and hoisting of water and rock is done by a horse-whim.

The Brunswick Antimony Company is the oldest company here. The first shaft was opened some time in 1862. There are two lodes upon the property, but almost all development work has been confined to the northernmost lode. This lode has a shaft 106 feet deep, with levels running upon the vein at a depth of 75 feet. No ore has been raised from this vein this year. From the other vein about 20 tons of low grade ore were shipped in the summer of 1880. No shipments have been made this year. The company now has a force of 10 miners at work, but no ore is being raised. There are no engines nor power here other than two whims driven by a horse. The superintendent, Mr. A. G. Adams, has been absent from the mine since Aug. 26, and three months' pay is due the men.

The Hibbard Antimony Company, formerly the Lake George Antimony Company, began operations in October, 1880, and has been increasing its operations every month. Upon this property there are three veins, only two of which have been

explored. The north vein or Hibbard vein, has been opened by five different shafts, every one showing good ore. The main shaft, or engine shaft, has a depth of 204 feet, is fitted with a large steam pump and steam hoisting gear, and carries a strong vein. Levels east and west have been driven at depths of 82 feet and 145 feet. The levels upon this vein aggregate 375 feet, and the shafts 436 feet. Over 2000 tons of crude ore are in sight in these developments. The south vein, or Prout vein, has been opened by a shaft 94 feet deep, and by levels run east and west at a depth of 87 feet. These openings disclose, at a depth of 87 feet, a vein of ore from three to four feet wide, and over 800 tons of good ore are in sight in this vein. On Wednesday, Oct. 5, 10 tons of good ore were raised in 10 hours from this shaft alone. This company has a complete outfit of concentrating machinery, to which it is adding a new ore-crusher, which will be completed in a few days, and will give the mill a capacity of 30 tons in 24 hours. This mill is running night and day, and will yield from three to five tons per day of pure A 1 ore. This output will allow the company to sell from 60 to 75 tons of ore per month, beside furnishing abundant ore for the roasting and smelting furnaces, which are now in successful operation. Both working shafts are fitted with steam pumps and hoisting engines, and all necessary appliances for rapid and systematic working. The company employs from 50 to 60 men.

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

The Walker Lake (Nev.) copper district will be developed vigorously the coming winter.

Chicago stove dealers are now being supplied with mica from the mines in the vicinity of Deadwood, Dakota.

The turquoise in the imperial crown of Russia came from the mines in New Mexico nearly two centuries ago. It is the largest and finest stone of the kind in the world.

A careful canvass of the mining interests of Chicago shows that the majority of the heavier business men of that city, which has become a great mining centre, are more or less owners of mines and mining stocks.

The upper Mississippi lead fields include 2,000,000 acres—200,000 in Iowa, 400,000 in northern Illinois, and 1,400,000 in Wisconsin. The value of the gross amount of lead produced in that field since 1826, is about \$70,000,000.

Mining shafts to the number of sixteen have been discovered in the Yellowstone Park, Wyoming. The deepest is 25 feet. They also are the work of the race of the stone age, for at the bottom of these shafts were found stone hammers and stone knives.

George D. Roberts, the noted New York mine operator, accompanied by Prof. Silliman and the Bob Ingersoll party, visited the Black Range in New Mexico last week. The Socorro Miner understands that Prof. Silliman has reported favorably on the Ivanhoe mine, and is enthusiastic over the formation of the Black Range district.

Grant County, New Mexico, is said to be experiencing a genuine boom. Several heavy sales of mines are on the tapis and the mining fever is at white heat. Nearly 100 patents to mines in that county have been applied for, and work with better results is going on constantly. Every day records new developments, new strikes and new discoveries.

A new body of ore has recently been encountered in the Richmond Consolidated mine, at Eureka, Nevada. It is thought to be extensive and very rich. The Eureka Sentinel says that previous to this find there was ore enough in sight to keep the furnaces running for a year. After 11 years extraction it would seem that the Ruby Hill ore body was inexhaustible.

Disturnell's Gazetteer of Arizona states that the Territory has 55 stamp-mills of from two to 80 stamps each, aggregating 585 stamps. Of the entire number only one mill is run by water power. Cochise county has nine mills, aggregating 145 stamps; Gila county, 12 mills, 79 stamps; Maricopa county, three mills, 95 stamps; Mohave county, seven mills, 60 stamps; Pima county, five mills, 52 stamps; Pinal county, four mills, 37 stamps; Yavapai county, 15 mills, 117 stamps. The Vulture mill, Maricopa county, heads the list with 80 stamps.

The Copper Mines of Grand Gulch and Copper Mountain, in Utah, promise a large bullion output in the near future. The two stacks now running are turning out about seven tons of base ingots per day—worth \$200 per ton at the works. The only disadvantage encountered thus far, is the scarcity of water, which, it is expected, will soon be overcome, as pipes

are being laid to bring water from a source about nine miles distant. Five more stacks will be erected within the next sixty days, which will give a proportionate bullion yield. At present, about forty men are employed at the works.

President Pollard of the empire Mining and Milling Company has received notice of an injunction, granted by a judge of the Connecticut Superior Court at Hartford, restraining the proposed sale of the property and the reorganization of the company. The injunction was obtained upon the application of a large number of Connecticut stockholders, who claim that the recent meeting at Hartford was illegally called; that they had no notice of it, and that the plan adopted will prove injurious to their rights as stockholders. The bill is returnable in January, and consequently, until that time, nothing can be done in the way of reorganization.

The Hailey Times, Wood River, Idaho, has the following concerning properties in which parties in this vicinity are interested. It will be remembered that Major Rooks displayed some of his fine samples at the Bangor House, in this city, last spring: "W. A. Rooks, of Ketchum, is about to ship 30 tons of ore from the Rooks group of mines, on Warm Spring Creek. Of this amount, 10 tons will be sent to Ketchum, 10 tons to this city and 10 tons to Salt Lake. The results obtained will determine to which place the ores of the mines superintended by Mr. Rooks will be shipped in future. Mr. Rooks is operating for a strong Boston company, who have paid in an ample working capital. They are in no hurry to get returns, and they propose to see where they can do the best. Four of the company's mines are now ready to ship an aggregate of 50 to 60 tons per day. These are the Ontario, Warm Spring, Sunday and Gopher. The Warm Spring mine has a six foot vein, half of which is galena. The Ontario, Sunday and Gopher are close together, and are developed by two tunnels 200 feet apart, but running in opposite directions, lengthwise of the vein. The tunnels being in about 100 feet, the headings are now about 400 feet apart. The vein shows three feet of solid ore which will average over 100 ounces silver to the ton. There is also a shaft on the Sunday-Gopher line, and stopes can be opened and ore extracted from several places. These mines will be worked all winter. Next spring they will yield large quantities of ore."

At the Atlanta Exposition there are ores of gold from many mines in Georgia, Virginia, North Carolina, etc. From the last-named State there are copper ores, masses of great size and richness; refined copper, in ingots and plates; lead and silver ores; iron ores from many mines; corundum, marbles, soapstones, mica in clear sheets a foot square; sandstones, flexible and otherwise; chrome iron; kaolin; jewels, amethyst, carraigom, green and rose beryls, true sapphires, zircons, etc., including fine specimens of the newly-found gem, Hiddenite, which rivals the diamond. Those enumerated are all from North Carolina, and contained in the exhibit of the Richmond & Danville R. R. Company, which, besides samples of the wealth of that State, embraces products, too many to enumerate, of other States traversed by its system of railways. In that company's exhibit may be seen some \$7,000 worth of gold nuggets, besides bars of retorted gold of weights from 38 to 58 ounces, and a single mass of gold of the value of \$3,300 in the quartz that forms its matrix. The display of woods in the rough and worked, in the same exhibit, is very large and fine. The exhibits of the various railway companies—apart from cotton, in staple and fabric, which was the sole subject in the original design of the Exhibition—added to those of individual, State and other corporate exhibitors—constitute a surprising revelation of the wealth and abundance of products of the South and of their value in commerce. The exhibits of the Louisville & Nashville and Western & Atlantic R. R. Companies are rich and extensive, containing, among other minerals, specimens of some of the best irons and coals in the world. The Richmond & Danville Company also exhibit rare and desirable qualities of iron.

A large collection of very rich ores from the famous Seventy-Six Mine, near Silver City, New Mexico, was recently exhibited at the Territorial Fair by Mr. M. W. Bremen. This mine produces gold, silver, copper, etc., in many different forms. It has seventeen shafts, and twelve thousand feet of drifts and shafts. A ten-stamp mill has been running on it for ten years. Best collection of specimen ores from any one mine in New Mexico: First premium awarded to M. W. Bremen; collection representing the Seventy-Six mine, owned by M. W. Bremen. Best exhibit of ores from any State or Territory in the United States or Mexico, premium of one hundred dollars awarded also to M. W. Bremen, Silver City, New Mexico. The exhibit of Mr. Bremen has proved the greatest attraction at the exposition, a crowd continually present eager to examine this magnificent display of the mineral wealth of New Mexico, as here represented. As other accounts have already been

published (in local papers) it will not be necessary to enter into a detailed description of the cabinet, but will simply mention the character of the ores and the counties and districts from whence they came. Silver sulphides, chlorides, bromides and native silver from the Seventy-Six mine, Chloride district, Grant county. Nuggets and placer gold from Hillsboro, Dona Ana county, and Pinos Altos, Grant county, New Mexico and Arizona. Copper, malachite, azurite, red and black oxide and native from the Santa Rita mines, Grant county; also specimens from Clifton and other copper districts in Arizona. The counties of the Territory of New Mexico here represented are Grant, Dona Ana, Santa Fe, Socorro, Bernallillo, Lincoln and Valencia. Counties in Arizona: Yavapai, Apache, Gila, Pinal, Graham, Cochise and Tombstone. The States of Colorado, Nevada and California, and Chihuahua and Sonora, Mexico. Mr. Bremen deserves great credit for his energy and judgment in his selection of specimens, a cabinet unexcelled in the United States, showing specimens of free gold, and silver in all its forms. Copper, cinnabar, lead, plumbago, asbestos, zinc, antimony, chromate—in fact, all ores known to the science of mineralogy. In fact, mining men visiting New Mexico, by a visit to this cabinet can see the mineral wealth of the world represented. Mr. Bremen's own property in Grant county has been a source of aid in making his cabinet, having specimens of silver in all its forms that assay from \$40 to \$29,000 per ton.—[Las Vegas Mining World.]

Nuggets.

—A new steamer is being built opposite Bangor for the Bangor and Bar Harbor Line.

—Trains have commenced to run on the Grand Southern Railway from St. John to St. George.

—Mr. C. C. Burrill has established a banking house in Ellsworth. Such an institution has long been needed in that city and Mr. Burrill's efforts will be highly appreciated in that vicinity.

—The Caligraph is on exhibition at the office of Wm. E. Brown, of Bangor. This machine is far superior to the old type writer and it appears to be destined to come into quite general use.

—On every hand new buildings are in course of erection; and the music made by the carpenter's hammer and saw, tell the story of prosperous times around the mining works at West Sullivan.—[Bulletin.]

—Work has been commenced upon the old "Androscoggin Acton" shaft, now the property of the National Mining and Investment Company. It is reported that work will be steadily continued during the coming winter.

—A vigorous movement is being made by the citizens of Bangor to secure the permanent location of the State Fair in this city. Bangor from its central location offers exceptional advantages as a site for the annual agricultural festival.

—The Cobb Lime Company, of Rockland, have shipped 13,000 barrels of lime by water during the past week. They also shipped 1200 barrels by rail, and have orders for 1100 more which had to remain over on account of the scarcity of cars.

—The MINING JOURNAL recently announced that Mr. J. P. Weston, of this city, is engaged in perfecting a device for consuming the smoke and waste gases of coal, wood and other fuel. The item should have read E. R. Weston instead of J. P. Weston.

—Mr. N. P. Doe, of this city, has lately given his attention to engraving on wood and with marked success. He has just finished a wood engraving of the Royal Rock Drill and is now working on one for the Champion Rock Drill invented by Mr. Booth.

—The Bulletin says that something of "a big blast" was made in the Waukeag shaft of the Sullivan works, on Thursday last, by Messrs. Harvey and McLain; they hoisted ninety-three carloads as the result. Old miners say it was "more than considerable" of a blast.

—The American House in Ellsworth has been purchased by Mr. Arthur Saunders, the genial landlord who for some years has had charge of this popular hostelry. We learn that Mr. Saunders proposes to build a large addition to the present house and contemplates other numerous improvements.

—We are indebted to Mr. W. A. Rice for some magnificent specimens of cut mica from the Hartford Mica Mines at Groton, New Hampshire. Mr. Rice, who has been visiting in this city, is an old prospector, and the original discoverer of the famous mines now worked by the Hartford Company.

—Capt. Otis Smith, of Brooksville, brought to our office a few days since some surface specimens from a ledge recently discovered by him, on the Otis Farnham place, in that town. As this property is within the limits of a rich mineral belt, the showing is sufficiently encouraging to warrant further explorations.

—The Avery Lactate Acid Company have sold their patent for England, in London, for \$625,000, through T. S. Nowell, of Boston, who goes abroad in December to establish the works for the English company. Prof. Avery is to be congratulated upon the success of his process, which is the outcome of long and patient research and experimenting.

—Mr. F. C. Philbrick, the well known mining stationer, can now be found at 169 Devonshire St., with Samuel Hobbs & Co., one of the largest stationery firms in Boston. Mr. Philbrick will continue to give his attention to mining and railroad work, and will now, with increased facilities, add to the large trade which he has built up in this line, especially in the State of Maine.

—Mr. H. A. Merrill, of this city, informs us that a marked improvement is noticeable in the slate market. During the present season, Mr. Merrill has shipped from twelve to fifteen thousand squares of slate from Bangor and a large number of vessels are weekly leaving our port with cargoes of slate. At the Merrill quarries in Williamsburg about 125 workmen are employed. At the old quarry about twelve hundred squares are being turned out monthly and at the new quarry slate will shortly be produced at the rate of one thousand squares per month.

—The Jewell Granite Company has been organized in this city, with the following officers: President, Charles L. Marston; Secretary and Treasurer, Dr. H. L. Jewell; Directors, Charles L. Marston, Dr. H. L. Jewell and J. P. Bass, all of this city. The company have secured a valuable granite quarry near the line of the E. & N. A. R. in the town of Lincoln. The granite is of very superior quality and is susceptible of very beautiful polish. A magnificent specimen of polished granite from this quarry is now on exhibition at the office of Dr. H. L. Jewell in this city.

—The Belfast Age says: "We have been shown samples of ore taken from the mine of L. & J. E. Staples, McGregor City, New Mexico. This mine has been mentioned in our columns as a find of Josiah E. Staples of this city, and others. Mr. Lafayette Staples of this city has lately gone on and associated himself with his nephew in the mining business. The samples shown us are said to be an average lot, and they appear to be very rich. J. E. Staples writes home that ore from their mine, lately assayed, run 87 per cent., or \$20,000 of silver to the ton. They are now working ore that runs \$500 to the ton."

—We have received from the publisher, a copy of the "Gazetteer of the State of Maine," by George J. Varney, of Brunswick, author of the "Young People's History of Maine." This valuable work is one of great interest and importance to every son and daughter of the "Pine Tree State." Such a work, owing to the immense labor and expense, has never been attempted before by itself, except some forty years ago in Hayward's little work of about fifty pages. This Gazetteer first gives a descriptive, historical, and statistical account of the State, in some forty pages. Then follows, in alphabetical order, each town, giving to each the space required to show its position, its ponds, streams, hills, rocks, soil, productions, its business, interesting history, statistics, etc., etc. Each post office will be represented in order with the towns. As a book of reference it will be invaluable, in fact, a necessity to every household, store, and office. Consider the labor necessary to gather all the facts concerning one town—from its first settler to its latest improvement; from its hill-tops to the bed of its streams; from the way-side shop to its vast factories,—its population, its old people, soldiers, its schools, banks, newspapers, valuation, rate of taxation, and many other points,—and then remember that there are over five hundred towns and plantations in the State, and some idea may be given of the cost, both in time and money, of producing such a book. Mr. Varney was born and educated in Brunswick, heretofore the educational centre of the State; and having visited almost every part of it for the purpose of historical investigation or of lectures, has the rare but requisite familiarity with its towns to prepare pleasing descriptions. All atlases, maps, towns, county, and State histories, geological, mineralogical, and hydrographic surveys, tourist's guide-books, and State reports in great numbers, have been made use of in the preparation of the articles; and communication has been held with every city, town, and plantation clerk, and numerous others, to obtain the necessary facts. The publisher, as well as the author, is a native of Maine, having been born and brought up in Franklin county; and it is therefore natural for their home pride to show itself

in efforts to produce a book superior to any previous work of this kind. The work contains nearly 500 pages, octavo, is illustrated by about sixty engravings of buildings and localities of public interest, and is sold by subscription. A Boston lady is at present canvassing for the work in this city and vicinity, and, we are glad to learn, is meeting with good success, as the work is one which should be in every household.

A Merited Compliment.

A recent issue of the New York Scientific Times and Mercantile Register contains the following complimentary notice of the well-known brokerage firm of F. H. Williams & Co., Boston: "The wonderful development of mining interests in different sections of the country has greatly multiplied that necessary adjunct to the interest—brokers. As a class, it is composed of shrewd, experienced men of energy and capacity, who must necessarily be possessed of financial skill and a high character for integrity. As intending investors in mining stocks must take for granted many of the representations of their brokers, the necessity of good standing is at once apparent. We speak more particularly of mining stocks, for, though only in its infancy, this interest is destined to be as important a feature of our national wealth as any of the great staples, and, also, because like other industries, it is saddled with many schemes that will not bear investigation. And as brokers bear an important part in the manipulation of the shares, these brokers should above all be noted for integrity. These remarks were suggested by the removal lately of an energetic and growing young firm, that of Messrs. F. H. Williams & Co., from 22 Water street to No. 64 Devonshire street. We have had occasion to mention this firm already, as Financial Agents of the celebrated "Masco Mine," one of undoubted capacity and richness. Messrs. Williams & Co., are also agents for the Young Hecla Mining and Smelting Co., which has recently resumed work with rich prospects. The firm are also thoroughly posted on the value and prospects of all the companies owning mining properties in Maine and will furnish intelligent and disinterested advice and information regarding them. The firm have an office at No. 12 West Market Square, Bangor, which is under the charge of Mr. Williams, of the firm, and being so near to the Maine mining districts, facilitates the acquisition of truthful and early information. We should say that Mr. Williams is also a member of the Boston Stock Exchange, and therefore prepared to buy and sell all other stocks, bonds, etc., as well as mining stocks. Mr. Greeley is a member of the Boston Mining Exchange. The firm have every claim to the confidence of the investing public, and in their new location with ample facilities are fairly entitled to a generous share of the patronage."

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital
O. K. Gold Mining Co.,	Kittery,	Oct. 23,	\$500,000.
Kelley Gold Mining Co.,	Portland,	Oct. 22,	125,000.
Coxheath Mining Co.,	Portland,	Oct. 24,	500,000.
Contra Costa Silver Mining Co.,	Portland,	Oct. 24,	50,000.
Shoo Fly Mining and Smelting Co.,	Kittery,	Oct. 23,	100,000.
Eclipse Copper Mining Co.,	Blue Hill,	Oct. 28,	500,000.
Empire Mining and Milling Co.,	Portland,	Oct. 29,	500,000.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, NOV. 2, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Allouez	3	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2	3	3 1/2
Atlantic L. S.	14	15	...	...	...	...	...	...	...	...	...	...
Atlas	...	...	...	...	...	...	...	...	...	...	...	...
Aztec	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper.	1 1/2	2	1 1/2	2	1 1/2	1 3/4	3 1/4	3 1/2	1 1/2	1 1/2	1 1/2	...
Brunswick	8	...	7	9	7	8	...	...	6	8	6 1/2	7
Calumet & Hecla.	218	219	218	220	220	222	225	226	224	225	224	225
Catalpa	...	...	1	1 1/2	...	...	1	1 1/2	1	1 1/2	1	1 1/2
Central	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls	...	...	4 1/2	4	4 1/2	...	...	...	4 1/2	...	4 1/2	...
Contentment	...	...	...	...	...	...	...	...	...	...	...	...
Douglass	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	...	...
Dana	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver	...	...	...	...	...	...	...	...	...	...	...	...
Empire	...	...	...	...	...	...	...	...	...	...	...	...
Franklin	12 1/2	13	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	...	12 1/2	12 1/2	12 1/2	12 1/2
Harshaw	5 1/2	5 1/2	6 1/2	6 1/2	6 1/2	6	5	5 1/2	5 1/2	5 1/2	5 1/2	6
Huron	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	4	3 1/2	4 1/2	3 1/2	4 1/2
Hanover	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt	...	...	...	...	...	...	...	...	...	...	...	...
International	...	...	...	...	...	...	...	...	...	...	...	...
National	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	...	...	2 1/2	2 1/2	2 1/2	2 1/2
Osceola	28	27	29	29 1/2	29	30	...	...	30	30	27	29
Pewabic	13	13 1/2	12 1/2	13 1/2	...	13	13 1/2	13	14	13	14	13 1/2
Phoenix	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac	...	...	...	...	...	...	...	...	...	...	...	...
Quincy	39	39 1/2	39 1/2	39 1/2	39 1/2	40	39 1/2	...	40	39 1/2	40	41
Ridge	4	...	...	...	...	4	4 1/2	...	...	...	...	...
Silver Islet	40	41	39 1/2	40 1/2	39	40	33 1/2	30	35	35 1/2	35 1/2	36
Star
Sullivan	3 1/2	3 1/2	3 1/2	3 1/2	...	3	3 1/2	3	...	2 1/2	3 1/2	2 1/2

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Leave Bucksport,	5.30	10.00		5.00
Arrive Bangor,	6.42	11.15		6.05
Leave Bangor,	7.35		2.00	5.10
Arrive Bucksport,	8.45		3.15	5.10

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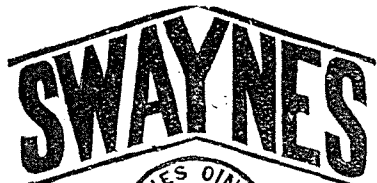
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OFFICE, 4 SEARS' BUILDING, BOSTON, MASS.

Capital, \$500,000. Par Value of Shares, \$2.50.

Unassessable.

GEO. E. HARRINGTON, President. S. L. SYMONDS, Treasurer.

W. OSCAR ARNOLD, Secretary.

Directors—GEO. E. HARRINGTON, GEO. WEST, FRANCIS TUCKERMAN of Salem, Mass.; P. MULLAN, L. W. HODGKINS of Ellsworth, Me. JOHN SHOENBAR, Superintendent.

Deer Isle Silver Mining Co.,

OFFICE, PORTLAND, ME. MINES, DEER ISLE, ME.

Capital, \$500,000. 100,000 Shares. Treasury Fund, 52,000 Shares.

A. H. HARRIS, President. GEO. F. GOULD, Treasurer.

GEORGE F. GOULD, Secretary.

Directors—A. H. Harris, of New York; Nathan Cleaves and Frank C Crocker, of Portland; C. W. Bryant, of Deer Isle and George D. Greeley, of Boston.

S. Z. DICKSON, Superintendent.

Gouldsboro Silver Mining Co.

OFFICE, ELLSWORTH, ME. MINES, GOULDSBORO, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

Judge A. P. WISWELL, President. C. C. BURRILL, Treasurer.

J. B. REDMAN, Sec'y. FRANCIS WORCESTER, Manager.

Directors—A. P. Wiswell, C. C. Burrill and Eugene Hale, all of Ellsworth.

W. I. VALENTINE, Superintendent.

Milton Mining and Mining Co.

OFFICE, 4 SEARS BUILDING, BOSTON, MASS.

MINES, SULLIVAN, ME.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50

CHAS. H. LEWIS, Pres't. GEO. E. HARRINGTON, Treas.

W. O. ARNOLD, Secretary.

Directors—Chas. H. Lewis, Geo. E. Harrington, Geo. West, J. D. Prescott, O. Arnold.

JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE

Capital, \$500,000. Par Value of Shares \$5.00.

Unassessable.

GEN. JOHN M. CORSE, President. ROBERT L. CUTTING, JR., Treasurer.

W. OSCAR ARNOLD, Secretary.

Directors—Col. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, JR., of New York.

Revere Silver Mining Company.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

F. O. BEAL, President. WM. E. BROWN, Treasurer.

WM. E. BROWN, Secretary.

Directors—F. O. Beal, W. J. Webb, George W. Knight, Ezra L. Storms, A. H. Thaxter, Bangor.

JAMES MITCHELL, Superintendent.

Stewart Copper Mining Com'y.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

HON. FREDERICK M. LAUGHTON, President. C. F. BRAGG, Treasurer.

C. F. BRAGG, Secretary.

Directors—Frederick M. Laughton, F. W. Hill, C. F. Bragg and Thomas White, of Bangor; S. N. Stockwell and G. B. Putnam, of Boston.

DANIEL DUNN, Superintendent.

Sullivan Mining Company.OFFICE, 17 Tremont Bank Building, BOSTON, MASS.,
MINES, SULLIVAN, ME.

Capital, \$500,000. 100,000 Shares. Par value, \$5.00.

GEORGE B. BROWN, President. F. R. NOURSE, Treasurer.

CHARLES L. PERRIN, Secretary.

Directors—Geo. B. Brown, B. S. Grant, C. F. Farrington, J. G. Russell, Dudley R. Child, E. A. Birchard and Frederic R. Nourse.

THOMAS CAHILL, Superintendent.

Shelburne Silver Mining Co.

OFFICE, PORTLAND, ME. MINES, SHELBURNE, N. H.

Capital \$500,000. 100,000 Shares. Par value, \$5.00.

L. D. M. SWEAT, President. WM. E. GOULD, Treasurer.

C. W. HOBBS, Secretary. STEPHEN JENNINGS, Managing Director.

Directors—L. D. M. Sweat, Charles A. Dyer, C. D. B. Fisk, C. H. Chase, C. S. Morrill, Geo. L. Warren, John E. Buruham, Wm. E. Gould, Stephen Jennings.

GEORGE D. HOLT, Superintendent.

Twin-Lead Mining and Smelting Co.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 125,000 Shares. Par Value, \$4.00.

EUGENE M. HERSEY, President. SAMUEL STERNS, Vice President.

JOHN R. MASON, Secretary and Treasurer.

Directors—E. M. Hersey, Samuel Sterns, John S. Jenness, Jacob Stern, F. H. Williams and Thomas N. Egery, of Bangor; Charles Duff, of Blue Hill.
CHARLES DUFF, Superintendent.

THE Mascot Mining Co

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Office, Portland, Maine.

Capital \$500,000. Shares 100,000.

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- C. W. HOBBS, Secretary and Treasurer, Portland, Maine.
- C. C. LANE, 7 Exchange Place, Boston.
- CHAS. H. LEWIS, 4 Sears' Building, Boston.
- FRANK H. WILLIAMS, 22 Water St., Boston.

CONSULTING GEOLOGIST:

PROF. J. H. HUNTINGTON, 35 Congress St., Boston.

ENGINEERS AND METALLURGISTS
BINNS, KIDNEY & HOLLIDAY, 33 Hawkins Street.

SUPERINTENDENT:

J. M. JOHNSON, Gorham, N. H.

FINANCIAL AGENTS:

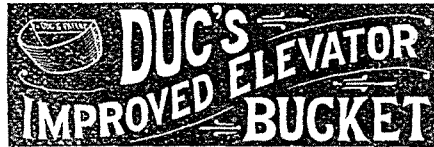
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ASSESSMENT NOTICE.

OFFICE OF THE

Sullivan Mining Company,

OF MAINE.

3 CONGRESS STREET, ROOM 17,
BOSTON, Nov. 4, 1881.

Notice is hereby given that at a meeting of the Board of Directors, held on the 17th day of October, 1881, an assessment of twenty-five cents per share was levied upon the capital stock of this corporation, payable to the Treasurer, November 21st, 1881, by stockholders of record at the close of business November 10, 1881, after which date no stock will be transferred until the assessment thereon shall have been paid.

Any stock upon which the assessment shall remain unpaid on the 21st day of December, 1881, will be delinquent and will be advertised for sale at public auction, and unless payment be previously made, a number of shares of said stock sufficient to pay the delinquent assessment, together with costs of advertising and expenses of sale, will be sold on Saturday, January 14th, 1882.

Stockholders will please present their certificates, that payment may be endorsed thereon.

By order of the Board of Directors,
FREDERIC R. NOURSE, Treasurer.

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Mining Engineers & Assayers

U. S. Deputy Mineral Surveyor for the territory of New Mexico.

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F. H. WILLIAMS & CO., Financial Agents.

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Mining and Smelting COMPANY.

Office at Bangor, Me. Mines at Blue Hill, Me.

Capital, \$500,000.

100,000 Shares. Par Value, \$5.00 each.
Treasury Fund, 20,000 Shares.

President, John S. Jenness, Bangor, Me; Vice President, Charles Hamlin, Bangor; Treasurer, C. P. Wiggin, Bangor; Secretary, W. F. Seavey, Bangor.
Directors—John S. Jenness, Charles Hamlin, Wm. D. Swazey, F. M. Laughton, Hanson Gregory, Jr., Horace P. Tobey and Frank H. Williams.
F. H. WILLIAMS & CO., Financial Agents.

BLUE HILL CENTRAL

Mining and Smelting COMPANY.

OFFICE.....BANGOR, ME.
MINES AT.....BLUE HILL, ME.

CAPITAL, \$500,000.

100,000 Shares: Par Value, \$5.00.
Treasury Fund, 30,000 Shares.

Hon. Wm. C. Marshall, of Belfast, President; H. J. Preble, Esq., Vice-President; S. P. Johnson, Secretary and Treasurer; Directors—Hon. Wm. C. Marshall, H. J. Preble, Esq., Samuel R. Prentiss, J. S. Jenness and M. Preble.

Silver Hill Mining Company.

Office, 11 CENTRAL STREET,

Room 4, Boston.

Mines at Garland, Me.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50.
25,000 Shares in Treasury.

President, John F. Hudson, Boston; Treasurer Chas. E. Parent, Boston; Clerk, Geo. A. Mudge, Portsmouth, N. H.

Directors—John F. Hudson, Geo. A. Goodyear and Chas. E. Parent, of Boston; Geo. E. Hodgdon, of Portsmouth, N. H.

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[ESTABLISHED 1848.]

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33 HAWKINS ST., BOSTON, MASS.

Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

28 West Market Square, Bangor, Maine

E. M. BLANDING, } EDITORS.
W. F. BLANDING, }

E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

Subscription price, postage paid, \$2.00 per year, strictly in advance.

Advertising rates made known upon application.

All letters should be addressed to

THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, NOVEMBER 11, 1881.

The first lot of ore shipped from the Deer Isle mine has led a somewhat checkered career and has finally brought up in a strange locality. The ore was shipped to St. John, N. B., and there transferred as ballast to the ship "James-town," which sailed for Swansea, England, with a cargo of lumber. When nearly across, heavy gales were encountered which caused considerable leakage and drove her back for many days, until it was decided to return to St. John, repair damages and take a fresh start. On her second attempt to cross she became water-logged and was abandoned at sea. Since then numerous steamers and sailing vessels have encountered the craft, but she was finally supposed to have gone to the bottom. It seems, however, that after drifting about in mid-ocean for an indefinite length of time, the vessel stranded on the coast of Iceland, where she still remains.

The Goldring Phosphate Mine, recently advertised in our columns to be sold at public auction by Messrs. Benning & Barsalou, Montreal, was put up at the upset price of \$45,000, and withdrawn, no one offering more. The next day, however, the whole was taken at that price by Mr. Hubert, prothonotary, one of the syndicate by whom it was held. The Laurentian Co.'s lands, previously mentioned as having been withdrawn at \$40,000, are still unsold, but will probably be purchased by one of the French companies. These phosphate lands are really very valuable properties, and the mining and sale of phosphate constitutes one of the most profitable industries of the Dominion. It is believed that if the holders of these extensive tracts had consented to have them split up into smaller parcels, some of the lots would have brought high prices and, in the aggregate, probably have realized considerably more than the upset prices at which they were withdrawn.

MR. JAMES M. SMITH, a gentleman engaged in mining operations in the Black Range, New Mexico, called at our office on the 29th of August last, and, after a pleasant chat upon mining matters, left the amount of a year's subscription to the MINING JOURNAL upon our table, with orders for the paper to be sent to Chloride, N. M. Mr. Smith is a native of Orland, in this State, and was then on his way to visit friends in that place whom he had not seen for twenty years. He intended to make but a brief stay in the East, and promised to furnish us with some items of interest concerning the mines of the Black Range immediately upon his return. Since then we have heard nothing of him. A Socorro dispatch to the Santa Fe New Mexican, dated Oct. 31, is as follows: "Every effort to ascertain the whereabouts of J. M. Smith, a Black Range miner, who has valuable property there and who went East in August last and was at Portland, Maine, on Sept. 2nd, and who left for New York City, to stop at the Columbia House, on or about the 10th of September, has failed. No tidings of him can be obtained and it is feared that he has been foully dealt with. Information of his whereabouts or his demise will be gladly received by the postmaster at Grafton, Socorro County, New Mexico. He was about thirty-seven years of age; wore a dark brown moustache; is about five feet four inches high and heavy set. He had about \$8000 with him."

There has been no change in the mining share market, during the week, worthy of note. At the Boston Mining and Stock Exchange the usual amount of heavy business has been transacted. Copperopolis remains at \$2.15; Milton has advanced to \$1.20 regular and \$1.33 buyer 60 days; Deer Isle 85c; Twin Lead remains at 48c to 50c; Mammoth 52c; Edgemoggin sold on Wednesday at 40c and 41c regular to 50c buyer 60; Hopewell Manganese advanced during the week to 71c regular and 79c buyer 60; Commonwealth Mica advanced to \$1.45, on small sales. The reported sales of Eastern mining stocks for the week ending on Wednesday last aggregate 143,400 shares, as follows: 3,200 Copperopolis, 57,500 Milton, 7,400 Deer Isle, 53,400 Twin Lead, 2,000 Mammoth, 6,000 Edgemoggin, 11,500 Hopewell and 600 Commonwealth; 400 Douglass at prices ranging from \$1 to \$1.12 1-2; 100 Sullivan at \$2.50; 600 Granger at 4c; 500 Gouldsboro at 25c; 200 Portland Sullivan at 54c. At the Boston Stock Exchange, sales of Douglass were made as follows: on Monday 200 at \$1 and 100 at 75c; on Wednesday 1000 at \$1 3-16. Sullivan, 100 on Monday at \$3; on Wednesday 120 at \$3, 150 at \$3 1-8 and 16 at \$2 3-4, the closing sale being made at the latter figure. Tuesday being a legal holiday, no session of either board was held.

In Professor Bartlett's article on "New Processes," published in our issue of last week, the author states that he "cannot see how sulphide, chloride, sulphate or even oxide of silver can unite with lead *unless* it be brought to a temperature sufficiently high to decompose the silver compounds, in which case a pasty mass of sulphide of lead, silicate, and litharge would ensue, soon destroying the efficiency of the bath, etc., etc." In this connection, our friend Mr. Thomas Cahill relates an incident worthy of note. Some years since he

was engaged to make an examination for English parties of a then recent discovery on Schell Creek, in Eastern Nevada. The ore at the surface was a very rich sulphide of silver, a 120-lb. lump sent to London running \$22,500 per ton. While there he attempted to chlorodize and amalgamate a small quantity of the ore, for a working test. Having reduced the mass to a powder, he expelled the sulphur by melting in a frying pan over a muffle furnace. Before adding salt to chlorodize he was called away, and returned to find the fire out and the mixture cold. Upon examining the contents of the pan they were found to be thoroughly impregnated with wire silver in the most beautiful forms. This, then, is most positive proof that with certain classes of ores, to say the least, there is a point during the process of desulphurization by heat at which, if the temperature be gradually lowered, the silver contained in them resolves itself into a state of native purity, and is, of course, in a proper condition for amalgamation. That this point is not at a very high temperature is evidenced by the fact that in the instance mentioned the transformation took place in an open pan placed on top of an ordinary assaying furnace. Mr. Cahill states that while it is probable other persons may have witnessed the same phenomenon, he has never seen or heard a similar instance mentioned. He looks upon his experiment, which he has repeated many times since with precisely the same result, as a practical illustration of the manner in which the native silver occurring in silver veins is formed. Prof. Clayton, who is familiar with the incident mentioned above, being in the vicinity at the time and having specimens submitted to him for examination, also expressed himself as being of Mr. Cahill's opinion.

A REFORM NECESSARY.

The number of wash sales made every day in the mining boards of New York is not creditable to the reputation and standing of these institutions, or the individual brokers who lend themselves to the business. It doesn't require much talent to perpetrate such petty frauds, and does much more harm than good. It is about time that brokers who have some sense of the responsibility of their position left should move in the matter. As it is, confidence is rapidly being destroyed, and the time may come when the exchanges will be left severely alone with their laundry business.—(Daily American Exchange.)

The above is equally applicable to other mining boards than those of New York. It is this method of falsifying transactions which, more than all else, tends to create suspicion and distrust in the minds of would-be investors, and fully accounts for the lethargic condition of the mining share business at the present time. The mining industry has made a sufficiently creditable showing during the past twelve months to entitle it to far more respectful consideration than it has received from the investing public. That it does not receive the attention its merits deserve is due largely to the fact that this same public have learned a thing or two of late. Outsiders have learned how to ascertain what is going on within the walls of an exchange and can no longer be misled by a long string of false quotations, and the only effect such mistaken methods can have is to drive away and keep out the very class of customers it is most desirable to secure. The mining boards only half perform their duty in refusing to list the stocks of mines which are known to be wildcats. They should also afford the stocks in which they deal some measure of protection, and see to it that really meritorious investments on their lists be not made use of to

further swindling schemes and operations. There is no use in mining matters. These mining boards must come down to actual business, be that business ever so small or infinitesimal. In no other possible way can the confidence of the public be secured and held, and without such confidence they cannot long survive. If the exchanges cannot or will not do this, they must go to the wall; they have outlived their usefulness. As the New York Stock Report well says, "when brokers are driven to the cannibalistic practice of living off each other, the rations will soon give out and there will be nothing left to devour."

MINING MANAGEMENT.

[Leadville Circular.]

It cannot too soon be understood at the East that mining is like every other business, and depends for its success on the skill and capacity of those who have it in charge. No one would expect a cotton factory to succeed if it were in charge of a sailor, or a railroad to pay dividends if it were managed by a haberdasher, or a steamship to earn money if it were run by a tailor, or a bank to do well if it were administered by a doctor. Each business requires specific, trained capacity. Yet capitalists in the East buy mines here and place them in charge of men who never saw a mine before, who don't know the difference between an adit and a winze, who don't know a sulphide from a carbonate and yet are expected to pay dividends from ores which require the nicest handling and the closest calculations to turn the scale between profit and loss. A vague idea seems to prevail outside of mining camps that mines are like the caves which Aladdin visited, where you took your bushel basket and filled it with gold or silver or diamonds or rubies, as your fancy tempted you. Miners know that in the richest mines, it needs calculation and economy to get one dollar's worth of bullion by an expenditure of seventy-five cents worth of labor. There are mines in this camp, whose output we report weekly, and whose stock is sold on the exchanges, which are losing money every day they are worked, simply because they are managed by men who are incompetent, and who go on day after day spending \$1.10 to get a dollar, without knowing why or how. This may last some time where the company's credit is good at the bank, and snug book-keepers contrive a pleasant balance sheet for stockholders. But the day of reckoning comes at last. A well known mine here lately suspended operations. It had changed hands a few weeks previously. A reporter of ours called on the superintendent and inquired for the output. It chanced that the superintendent was a man of business, who could not under any circumstances, be induced to believe that two and two make any more than four. "My predecessor," said he, "ran this mine for some time and sold a good deal of ore. He was a grocer by trade. I have gone through his books with care, and as nearly as I can figure, he lost just about \$10,000 a month. Now this is not a very large sum of money, but still it is more than I care to sink for my friends. So I have stopped the expense account until the owners place a man in charge who knows more about mining than I do."

—Hon. W. A. Simmons has brought suit against the publishers of a scurrilous sheet published at 3 School street, Boston, known as the Sunday Mail, for criminal libel. Sundry articles appearing in the Mail during the past few weeks have charged Mr. Simmons with complicity in the Mrs. Howe Women's Bank swindle. These have been reprinted in the form of a circular entitled "The Sim-moon," and distributed among the brokers and bankers to a considerable extent by the "mining reporter" of the Daily Advertiser, who takes this method of refuting the charges made against him through Mr. Simmons' paper, the Star.

Personals.

JOHN W. MACKAY tarries in New York City.

MR. HENRY B. DARLING, of Blue Hill, visited Bangor on Tuesday.

COL. BROWNELL GRANGER is superintending operations at the Silver Lake Mine, New Hampshire.

SUPT. WILKIE DARLING, of the Manhattan, has been in Boston during a portion of the past week.

MR. W. H. SANBORN, of Portland, favored us with a call a few days since. Mr. Sanborn has made a number of fortunate investments in Maine mines and owns large interests in valuable properties in the Brooksville district.

PROF. STEWART last week visited the mining districts of Blue Hill and the Bagaduce, and returned to this city Saturday evening, passing Sunday at the Bangor House. The Professor expresses satisfaction at the present encouraging outlook for Maine mining. He is now at the Tremont House, Boston.

SECRETARY BLAINE recently went with a party of twenty to examine some coal fields in West Virginia, with a view of investing surplus money. Among those comprising the party were Senators Davis, Bayard, McPherson, Secretary Windom, U. S. Grant, Jr., Augustus Schell, W. H. Barnum, Gen. Sickles and Gov. Hamilton.

HON. MAURICE C. C. BLAKE, mayor-elect of San Francisco, has recently been visiting his nephew, Joseph G. Blake, Esq., in this city. Mr. Blake is a native of Otisfield, and an oldtime resident of Camden, which place he left for California twenty-eight years ago. He was a school teacher, a prominent lawyer, and Customs Collector during the Taylor administration from '49 to '53.

DR. S. LAUGHTON has entirely recovered from his illness of many months and has now resumed the practice of his profession in this city. The Doctor is a veteran practitioner, having commenced to attend to the wants of patients in Bangor in 1834. During the past few months he has taken a prolonged vacation and visited Castine, Katahdin Iron Works, the White Mountains and Canada.

JOHN H. BURKE, a California celebrity, is at present visiting the capital of Maine. Mr. Burke is the gentleman who conducted the famous Bonanza suits against Flood and O'Brien, compelling those worthies to return several million dollars to the stockholders of Consolidated Virginia and California mining companies. It is rumored that Mr. Burke is here in the interest of California parties, who are interested in Augusta property.

MISS HELEN M. McDONALD, the Aroostook girl who invented and obtained a patent for a skirt-supporter, from which she has become very wealthy, last week caused to be arrested one Abram Schwab of New York, on a civil writ, the ad damnum of which is \$50,000. The writ was issued at the instance of Miss McDonald, who alleges in her brief that Schwab, who is one of the firm known as the New York Novelty Company, has been guilty of infringing on her patents to the extent mentioned above.

MR. THOMAS CAHILL and wife, who have been stopping at the Penobscot Exchange in this city during the past

week, take their departure for the Pacific coast this evening. They go over the southern route, by way of New Mexico and Arizona, where Mr. Cahill thinks of tarrying for a short time to take a look at some of the principal mining camps of the Southwest. We much regret to lose him and his estimable wife from our midst. During their stay of a year and a half in Maine they have made a host of firm friends, whose best wishes for their future welfare and happiness follow them in returning to their old home.

N. N. ATKINSON, a former principal of the Rockland (Me.) High School, has recently struck it rich, says the Courier. About a year ago he, in company with a man named Cheney, of Lewiston, went to Colorado and prospected around for a claim. They finally struck what they considered to be a good thing and Atkinson came home to Lewiston and tried to sell stock in it. But the wary Lewiston people knew better than that, and not a dollar could Atkinson raise, so he went back to the illimitable West, and he and his partner have just sold out their claim for \$100,000 spot cash. This has a tendency to make the Lewiston sharps feel lonesome, but the poor school teacher slaps the \$50,000 in his trousers' pockets and protests that his heart beats warm for his native land.

Dips, Spurs and Angles.

"Hello, thar!
Going far?"
"No; not far."
"How far?"
"Only to the bar."
"Well, I'm thar."

—A-loan in the world—U. S. Bonds.—[Keokuk Gate City.

—The crow is a sagacious bird. In chronology excels all the other feathered species.

—Beer and banking have largely contributed to make Newark known outside of New Jersey.

—"However great my fall my spirit is unbroken," remarked the overturned bicyclist, feeling in his coat-tail pocket.

—The first instance of aestheticism on record was when Balaam beat the ass and made him to utter.—[Boston Traveller.

—Vennor accidentally made one prognostication which seems likely to be fulfilled. He prophesies fowl weather for the 24th—Thanksgiving Day.

—Fresh.—"May I have the pleasure?" Miss Society—"Oui." Fresh.—"What does 'we' mean?" Miss S.—"O, U and I."—[Bowdoin Orient.

—Col. D. B. Powers, a San Juan mining superintendent, proposes to work the Indian Girl and Virginia Belle all winter. And he ain't a Mormon, either.—[Colorado Miner.

—The man who has been speculating in Confederate bonds explains that he did so because he wanted to tackle something that was a little safer than the average mining stock.—[Boston Post.

—There is a woman in New York known as "Yellow Wheeled Fanny."—[Chicago News Letter.] She must be related to Yella Wheeler, who writes the alleged poetry for the Chicago Tribune.

—The Philadelphia News says the 150 carat diamond brought from South Africa was found about three feet from

the surface, among some crumbling bones, supposed to be the last remains of an ancient hotel clerk.

—A miner is naturally a lucky man, because he can always take his pick.—[Toledo American.] And says the owner, "I can have mine."—[Steubenville Herald.] But when a miner draws to a "bob-tail" and is allowed his pick, he would sometimes prefer a spade.—[Richmond Baton.]

—The Journal speaks of Prof. Gunning as a successful teacher of science in popular lectures. The learned professor was unsuccessful in attempting to teach Californians that there could be no petroleum in their State, as there were several flowing oil wells within a few miles of where he stood when he delivered the lecture.—[Boston Globe.]

—A prospector who struck a lead in the Gunnison country not long ago posted the following notice: "The undersigned claims this lode with all its drifts, spurs, angles, sinosities, etc., etc., from this stake a 100 fete in each direction, the same being a silver bearing lode, and warning is hereby given to all persons to keep away at their peril. Any persons found trespassing on this Claim will be persecuted to the full extent of the law. This is no monkey talk but I will assert my rights at the point of the sickle shaver if legally necessary so talk head and good warning. According to law I post This Notice. JOHN SEARLE."

—Spokane Falls, Washington Territory, claims to have a medicinal lake a half mile long that would have satisfied even Ponce de Leon's search for the fountain of youth. The water is clear and of a dark color, and, besides curing all skin diseases of men and beasts, lays out nervous troubles, rheumatism, paralysis and similar ailments. The water has not been analyzed, but tastes of salt and borax, is as buoyant as the Dead Sea, and the only animal life it sustains is a species of jelly fish. The lake has no visible outlet, and, although fed by several small streams, never increases or decreases in size. In the slightest breeze the water lashes into a foam which makes a superior soap, and almost anything can be cleansed in the lake much better than by the most powerful chemicals.

—The theory that everybody can make a newspaper a success is often disastrous. Three or four fortunes are often swallowed up before people are convinced that brains are required to conduct a journal. Although there are 7000 dailies only 36 are half a century old. The average of newspaper life is five years. Most of them die of cholera infantum. An editor must be an encyclopedia. More qualities are needed as an editor than in any other business. I say this to save men from bankruptcy. Men who think that, without experience, they can run a newspaper, have softening of the brain. Such a man had better throw his pocket-book into his wife's lap and rush up to the Bloomingdale Insane Asylum. The newspaper is the tunnel to bring the waters of knowledge to the people. The Bible, Webster's Dictionary and a good newspaper; these fit men for this life and the next.—[Talmage.]

—The San Francisco Daily report gives an account of proceedings at the annual stockholders' meeting of the Forty-Five Calibre Consolidated Mining Company, held recently at Reno, Nevada. Mr. Coffin was in the chair, Mr. Shroud being Secretary. A quorum being present and everybody well heeled, the reports of the Superintendent and Secretary were read and almost unanimously adopted, the only dissenting vote being that of Theophilus G. Jones, whose funeral was appointed to take place from the Twenty-first Presbyterian church at 2 p. m. the following day. Mr. Geo. W. Robinson wanted to know what the item "Contingent expenses \$26,375.47" meant, and was invited outside by Vice-President Hair-Trigger McProx. Neither of the gentlemen had returned when the reporter left. Mr. James Abraham Cahoots moved a vote of confidence in the directors and was at once shot in the abdomen by the largest

holder of five shares present. A somewhat desultory debate followed, and had not terminated at the hour of going to press.

Among Our Exchanges.

[Chicago Mining Review.]

It is to be hoped that the question of establishing a Mining Bureau will not be neglected at the present session of Congress. It is a matter that should be urgently pressed by the members representing mining States and Territories, and not lost sight of in the multitude of other business. The magnitude of the mining interest is sufficient to demand this, and there are many questions of law which require the attention of a regular and well qualified department. Full statistics of output and a number of other important matters connected with mining will prove not only interesting but valuable to the miners, financiers, and capitalists of the country.

[New Mexican Mining News.]

Some mining journals are strongly advocating the handling of ore by the owner of the mine, whenever the owner can command the necessary means to erect reduction works. This idea we believe to be a fallacy. Leave the reduction of ores to men who have the necessary experience to manage the works and who can obtain the best possible results from the least possible cost. It is useless to attempt to join mining and milling, and no good can result from such a union. Let mine managers pay all their attention to the development of their property and leave milling to those who from years of experience are capable of making a success of it. The experience of the past teaches that in such a union there is no strength.

[Black Hills Times.]

We have been requested frequently to suppress important mining news for the alleged reasons "that important transactions then on the eve of completion might be injured," or "parties interested in mining enterprises desired the same to remain a secret." The province of a newspaper is to give the news, and the duty of a reporter is to discover and publish the same. We therefore, as a rule, have paid but little regard to these requests, as the interests of the country are of more importance than the claims of a few private individuals. On one or two occasions we have consented to suppress important mining information for a few days, only to find within twenty-four hours the same news a common topic of conversation on the streets. One or two such examples have taught us better. Although it may be of great interest to a single individual to have the prosperity of his camp or district remain unknown that he may benefit by the general ignorance concerning it, the public interest is of more importance to this people than private claims. Men naturally endeavor to accumulate all they can, and strive to keep a good thing to themselves. There is nothing absolutely wrong in this, even though it is somewhat selfish, but they must not expect to make the newspapers the instruments of advancing their individual interests at the expense of the community. We know of men who came here without a dollar who have developed mines and erected improvements, who have persistently decried the districts in which they were located. Of course their object has been to depress property and secure valuable claims at nominal prices. If they can do so individually, of course we do not complain, but they must not expect the press to give a black eye to any portion of the country merely to advance their ends.

[St. John (N. B.) Daily Sun.]

The mining fever is raging in our Province—or, rather the fever for forming mining companies, for although there are many companies there is not much mining. There can be little doubt that our Province is rich in mineral wealth, but it is unfortunate that up to the present time the persistent expenditure of capital in development, which has made Col-

orado and other notable mining countries conspicuous among the mineral regions of the world, has been unknown amongst us. The recent "find" of copper at Dorchester will, we hope, prove an exception to the rule. It is alleged that the Boston parties who have purchased the property from Mr. Couch at a very high figure, intend to work their copper mine. Most purchasers of mines express a similar intention. If the Dorchester mine is all that it is represented, it is (to use the language of Mr. Wilder, the mining expert who has been helping the sale) "the greatest copper mine in the world;" and if it be properly worked and turn out satisfactorily, it may lead to an extraordinary development of our mineral resources. If, on the other hand, the affair should prove only a speculation for the Mining Exchange of Boston, a shuttlecock for the amusement and profit of Boston stock brokers; if it should fall far short of the representations made in connection with the sale, the transaction will prove a great blow to the mining interests of the Province. Meantime, of course, a great deal of cash has been distributed in Westmoreland County—probably \$30,000—and Mr. Couch has made a large amount of money. We trust the most sanguine hopes of all concerned may be realized. Then we hear of the silver mines of Bathurst. Of the richness of the ore found on the Nigadoo there can be no doubt. As regards the quantity, nothing definite is yet known. Albert, too, is turning out silver; and the end is not yet. Doubtless, a thorough search for mineral deposits would produce satisfactory results. It is well, however, for people not to lose their heads in their efforts to find a short cut to wealth. Mining fevers have raged before, and we shall have them again. Every aid should be extended to those who seek the legitimate development of our mining industries, and it is desirable that movements connected with our mining enterprises should be of such a character that all who have the interests of the Province at heart may render active assistance in carrying them forward to a satisfactory consummation.

Newfoundland Mineral Lands.

A PROMISING FIELD FOR THE INVESTMENT OF CAPITAL.—AN IMPORTANT ENTERPRISE.

A few weeks since, brief mention was made in these columns of the fact that Mr. Isaiah S. Emery, of this city, and Judge D. William Douthitt, now of New York but formerly of Nevada, had secured control of prospecting licenses to a large tract of land covering many square miles in what are believed to be among the richest mineral districts of Newfoundland. These licenses were held by Messrs. James Browning and John Steer, residents of Newfoundland, and comprise forty in their own right together with a large interest in thirty-three others; and as each of these licenses gives the right to search for minerals over an area of three square miles, it will be seen that they are entitled to the sole right of prospecting seventy-three areas or nearly 220 square miles of mineral land.

These areas are mostly located on the Western or French Shore of the Island, between Cape John and Cape Ray, and all are situated on the seacoast with, in nearly every case, commodious harbors near at hand. The French Shore is known to be specially rich in minerals and all the above areas have been selected on account of indications more or less encouraging; but hitherto the Government could not grant mining licenses, but only such grants as held them in reserve for applicants, pending the settlement of the vexed French Shore question which has so long deprived the Islanders of their rights. Now, however, the matter has been settled most satisfactorily, and as our readers have been informed, Sir Wm. Whiteway, the Island Premier, has recently returned from England with full authority from the Imperial Government to promote the settlement of the Western shore, to sell land, grant mining licenses, etc., etc. as in any other portion of the Island. Accordingly, these

grants (provisional) may now at any time be exchanged for regular mining licenses.

Under the laws of Newfoundland, any British subject can claim, on lands not already granted, a right of search for minerals over an area of three square miles, on payment of £5. Within two years from the time of obtaining it he must select from this area one square mile in any rectangular form, provided it be not less than half a mile wide, which on payment of £10 and government expenses is given as a grant. The other two square miles lapse to the government, who, at one time or another, will sell them by auction to the highest bidder. If on a grant the grantee should expend a sum of not less than £4000 within eleven years, it becomes his absolute property in perpetuity, in fee simple. Aliens, as individuals, cannot hold property in Newfoundland, but only as a body incorporated, with the one condition that two directors or trustees of said body must be subjects of the Crown. It will be seen at once that these laws are very liberal, and, in view of the undisputed mineral wealth of the explored parts of the Island, offer superior inducements to foreign capitalists.

It is the intention of the holders of these licenses to form a company, with a paid in capital of \$25,000, for the purpose of sending prospecting parties to explore the lands in question. Wherever a valuable mine is discovered the license to search will be exchanged for a mining grant, and a company organized to develop it. The project is a meritorious one, as it seems likely to be instrumental in placing many valuable mining properties in the hands of American capitalists, and we can scarcely see how the enterprise can fail to be highly successful and vastly remunerative.

CORRESPONDENCE.

Inclined to Kick.

BOSTON, Nov. 8th, 1881.

To the Editors of the Maine Mining Journal:

The management of the Gouldsboro Company have had the sublime assurance to issue a circular to the stockholders of said company in which they make the modest request for one-quarter of all the shares bought, in order that the deceiving and self-aggrandizing policy of the management may be further carried out. The circular concludes with the words, "*something must be done, and that speedily.*" Believe us as voicing the views of very many stockholders, when we say that we heartily agree with this assertion; but that the thing to be done is to oust the present incompetent (to use no stronger language) management, and give them no more opportunities of gulling trusting

STOCKHOLDERS.

LODES, LEADS AND VEINS.

ATRATO.—The Atrato Mining Company have received papers from the State of Cauca, United States of Columbia, conferring upon the company mining rights on the Atrato river for a term of years.

ACTON CONSOLIDATED.—The Portland Daily Argus says: Under the new light of experience and patient, substantial development, the leading mines of Maine are steadily and surely coming to a self-sustaining basis. It is understood upon very good authority that the stock of the Acton Consolidated Silver Mining Company will soon be issued to the stockholders and that nearly all have consented to exchange their old shares for assessable stock. The assessments proposed will be light, not over one cent per share at a time, which will secure some \$1,500 on each assessment, and the aggregate for the year would not amount to over five cents on each share, and there being a large number of shareholders, the assessments will be considerably distributed and thus be made easy. An experienced and able mining superintendent has been secured to take charge of the mine. A special meeting of the company will be called soon to ratify the movement and put the matter into practical execution.

MOUNT MICA.—Exceedingly interesting developments have recently been made at the Mount Mica mine. No less than three chambers or pockets have been opened, each of which has furnished a number of the most beautiful red, green, blue and white tourmalines imaginable. The developments have far exceeded the most sanguine expectations, and we are in-

formed that the proceeds from the sale of cabinet specimens alone of the rare minerals encountered, are more than sufficient to pay the running expenses of the mine during the coming winter. The commercial value of the mica and the gems already found is also no inconsiderable item. We understand that the Company have contracted with Messrs. Tiffany & Co., of New York, for all the tourmalines of value which may be found.

NORTH CASTINE.—The lumber for the new shaft-house and hoisting works has been purchased and awaits shipment as soon as a vessel can be procured. The hoisting engine is also in readiness to be shipped whenever the building may be in readiness to receive it. The company intend to sink the shaft 100 feet further as rapidly as possible. All the indications in the bottom of the shaft point to the existence of an extensive ore-body at no great distance from the present workings.

SULLIVAN.—As per announcement in another column, Sullivan levies an assessment of twenty-five cents per share, payable November 21st.

FANEUIL HALL AND SULLIVAN.—Supt. Hayward reports, under date of Nov. 9, as follows: "The crosscut from the 160-level has been driven during the week seven feet; rock improving very fast. Are now at work on foundation for the compressor, which will be ready for shipment December 1st. Everything at the mine is in a first-class condition and giving entire satisfaction."

Blue Hill.

DOUGLASS.—Work continues as usual in the mine and there is nothing special to chronicle this week. The underground developments are very satisfactory and the ore bodies exposed are both massive and high grade.

STEWART.—The work of development at the Stewart progresses to the entire satisfaction of the management. Shaft No. 2 has been substantially timbered and shafts 2 and 3 are both gaining rapidly in depth. The former shaft continues to make an excellent showing of copper and No. 3 shows very decided improvement. The bottom of the latter shows handsome quartz the entire width and carries some very handsome copper ore.

BLUE HILL.—The Blue Hill mine continues to make a fine showing of copper ore. The underground developments are already quite extensive. On the 110-level the easterly drift has been extended a long distance and the winze from this drift has reached a considerable depth, on the vein. Supt. Moyle is now engaged in opening up a second level on the vein, from the main shaft or incline. Twenty-eight miners are employed in the mine.

British Provinces.

Discoveries of gold and coal have been made between Musquash and Depreux, N. B.

The Salmon River Gold Mine is keeping 15 stamps running, the last clean-up giving 300 ounces from a month's work.

A 50-ton lot of silver-lead ore from Salmon River has been sent to New York for mill test, assay values being from \$40 to \$50 per ton.

The St. Martin's Manganese Mining Company are pushing work vigorously at their mines, near Quaco Head. The weekly shipments are about 200 tons.

The coal shipments from the port of Pictou for the week ending Nov. 1st were 2454 tons, as follows: Halifax Company, 778 tons; Acadia Co., 771 tons; Intercolonial Co., 667 tons; Vale Co., 238 tons.

It is rumored in Yarmouth, N. S., that a rich find of gold has been made on the shore of Lake George, near that place. The property has been secured by Messrs. R. B. Brown, of Yarmouth, and Charles Annand and Mr. Higgins, of the Halifax Chronicle.

It is reported that Abram Toney, a young Indian, who lives at Kempville, Yarmouth Co., N. B., has discovered a rich gold bearing quartz in that vicinity. He is anxious to dispose of his discovery to some good men who would treat him fairly. He has several specimens of his find.

A Bathurst correspondent of the St. John Sun says that R. R. Call, of Newcastle, President of the Gloucester Silver Mining Company, accompanied by Edward Jack, of Fredericton, is on a visit to the mines. Robert Ellis, of Bathurst, Crown Land Surveyor, went with them. They intend spending two or three days on the Nigadoo, and Mr. Jack, who has a good knowledge of geology and mining, will make an examination of the lode and character of the ore deposits, etc.

The Renfrew Gold Mining Company, whose list of officers was given last week in these columns, is organized under the laws of Maine with a capital of \$60,000 in 30,000 shares of the par value of \$2. The property of the company is situated in Renfrew district, Nova Scotia, 35 miles from Halifax, and consists of 34 areas of land, about 28 acres, through which are said to run ten good veins of free gold quartz. The property is equipped with an 8-stamp mill, and possesses water power sufficient for hoisting and milling purposes. The additional equipments consist of houses, shops, tools, etc., and 100 acres of timber land is included in the franchise. Mill and everything in good running order, and the mine on a paying basis. Dr. Julio H. Rae, the well-known mining expert and mineralogist, is the general manager, and Phillip Highley, 66 Devonshire street, the financial agent.

Concerning the Dorchester Copper Bonanza, the Chignecto Post remarks as follows: "The effect of this discovery on the industrial development and wealth of Dorchester and the county generally can as yet only be surmised, but if the expectations of the owners are half realized, no such good fortune has befallen this county since July 1st, 1867, the birth of the Confederation. It would be premature for months yet to say what the character of the works will be, or the number of men employed, but if the deposit is as extensive and valuable as the prospecting and analyses show, no mining concern in the Maritime Provinces will equal in character the extent of the operations. The employment of a thousand or even five hundred men will create a small city on the outskirts of Dorchester and have a reflex influence on the surrounding country, of a very beneficial kind, giving a market at our doors for every article that our farmers and manufacturers can produce. The consequent increase of business, wealth and prosperity, would be magical."

GLOUCESTER COUNTY, N. B.—Attention has been drawn to this county recently by the discovery of a deposit of silver. Of the quality of the Nigadoo ore there can be no doubt; its richness has been attested by assays worked out both in England and the States. Some of the specimens which were tested, picked up at a venture and without the intention at the time of submitting them to chemical experts, revealed an extraordinary yield of the precious metals. On that point there is no room for controversy. The only matter in doubt is the extent of the deposit. That it is very large is the opinion of many familiar with the details, but this is a point which only a liberal development of the property can settle. The Nigadoo vein is owned by two companies—the "Nigadoo" company proper, and the "Gloucester" company. Some work has been done by both companies, and thus far everything is encouraging. The "Gloucester" company are so hopeful that they have refused to sell their stock, having adopted a resolution to lock it up for the present. The finding of valuable mineral in Gloucester, however, is not a thing of yesterday. The existence of large deposits of copper has long been known.—[St. John Sun.

THE NEWFOUNDLAND RAILWAY.—The St. John Telegraph of Nov. 9th says that Mr. Evans, a representative of the Newfoundland Railway Company, was in the city on Monday on his way to Newfoundland, with another locomotive purchased from the New Brunswick Railway. This is the second engine the corporation has bought from the same company, but unfortunately the first one was lost overboard the schooner while on the passage over. This caused a serious drawback to the work, for without the assistance of a locomotive the grading could not be done with any expedition. Without delay another engine was contracted for by Mr. Evans, and he secured the services of Mr. George W. Gerow, who had the locomotive safely brought down from Gibson in the schooner Templar, which landed it at the Railway wharf, yesterday, after which it was placed on a platform car and shipped by special train to Halifax during the afternoon. At Halifax the engine will be placed on board the steamer Merlin and then shipped direct to its final destination. Mr. Evans will accompany it. The work on the railroad is being vigorously pushed, but the approach of winter will necessitate the suspension of the labor until spring, when it will be renewed with redoubled energy. The erection of a station in the city (St. John's) has been commenced, and during the winter will, no doubt be completed. The entire length of the road proposed to be built is about 380.

ALBERT COUNTY, N. B.—There seems to be considerable interest taken, at the present time, in finding out what this county contains in the shape of minerals, and it is to be hoped that more will be found and not only found but worked. Nearly everybody has now in his possession a specimen of coal, plaster, pottery, clay, lead, tin, copper, silver, iron or gold, taken from a supposed mine to be found on his own land or on property that has been leased. It is far easier to find rich specimens than a lead that will pay to work, we are told; but if the specimens are forthcoming we can more reasonably

look for paying mines than if none could be found. There is a great deal of uncertainty about mining, and, although the prospects may be good, we find that a great many mines that promise well at the start turn out to be no good and not worth working. And every time a mine proves a losing speculation for its owners makes it harder to get stock taken in a new one. More especially is this true where the mine is an out and out fraud as many have been. It is by all means best not to overstate the facts. If you have an idea that you have found a good lead, get a practical man to examine it and test the ore and pay him for his information. If he reports favorably then try to get men of means to take hold of it and work it. Albert County gives promise of containing rich deposits and if so they will not long remain where they are. Mining experts are going over the ground nearly every day and capitalists are corresponding with the owners of properties and negotiating for its purchase or lease. Don't be in a hurry to make a sale until you understand the value of the property you would dispose of, and when you find out its value don't hold it for a price above its value. By trying to get too much you may miss the sale of something that will be useless because you will not be able to work it.—[Maple Leaf, Nov. 3.

MONTAGUE GOLD MINES.—A correspondent furnishes us with the following information concerning the leading mines of this district:

The prospects at the Rose Mine, Montague, have not been so promising for the past six months as they are to-day. The contractors, Messrs. Kenty and Hawes, in the Western deep shaft, have encountered a rich strike, the first crushing of which yielded nearly three ounces to the ton. Another crushing, now ready to put through the mill, is estimated to run over four ounces, and the lead is gradually increasing in size and richness. The main pump shaft, in the last ten feet sinking, has encountered four or five heavy leads, yielding double the quantity of quartz mined in the previous fifteen feet and showing strong indications of another rich strike in that section. The property situated about three hundred yards southeast of the Rose, recently purchased from Geo. W. Stuart by H. A. Foster and partner of New York City, and known as "The Friendship Gold Mine," at the depth of thirty-five feet, having made such good showings of gold, both in shafts Nos. one and two, and in seventy-five feet of stoping, giving such promising assurances, that the owners have been induced to let a heavy contract for sinking and stoping; the last crushing gave three ounces per ton. Messrs. Kenty and Hawes are the contractors. The operations of the Dominion Concentrating Company commenced on Saturday. The works of this company are for the purpose of concentrating the tailings from the mills, which have previously all gone to waste. The sulphurets in this process are all collected and shipped to the United States, where it is treated for gold and other valuable metals. The erection of the machinery involved the expenditure of \$7,000. They have bought all the tailings, the result of mining operations in Nova Scotia for years. The figure is said to have been very low. The truth of the matter is that our gold men are just now waking up to the fact that in many cases they have thrown away about as much gold as they have extracted. But a new era is about being inaugurated which will, it is believed, bring hundreds of thousands of dollars into the Province. The Symonds-Kaye Mining Company are about getting new machinery in their mill. The quartz they are taking out is very rich, averaging about four to five ounces to the ton.

HALL-ANDERSON GOLD MINES.—Since the purchase and vigorous operation of some important Nova Scotia gold mines by Messrs. Clark & Bothwell, much attention has been drawn from this city to that region, which has resulted in investments and developments that appear highly satisfactory. The Nova Scotia mines have long been regular producers in a small way, but not until lately have they been even prospected in anything like a thorough manner. We may now, however, expect better work, as another important sale and organization appears perfected. We understand that Messrs. Adams & DeCamp, of this city, have just sold the celebrated gold mining property so well known as the Hall & Anderson Mines of Fifteen Mile Stream, Nova Scotia, to New York parties. All the reports regarding this property, which have come to us from widely different sources, unite in describing it as one of the most brilliant showing properties in the Province. Its history may be briefly told. Some ten years ago the find of numerous rich boulders brought attention of some casual prospectors to the property. Only recently, however, have the lodes been discovered. Up to last advices, twenty-one separate auriferous veins have been opened, varying in width from four inches to four feet. Of these seven have been thoroughly tested, and on three of them very profitable mining has been done, as follows: Serpent lode, down three shafts, respectively 95, 65 and 50 feet, drifted on about 200 feet, vein 12 to 18 inches, milling on average \$60 to ton. In

the working of this lode, which is really merely surface work after all, over \$15,000 have been taken out. Next, as regards development, but of far greater promise, is the Orient lode, giving four feet of crushing matter. Recently a shaft was sunk on this lode to a depth of 15 feet, and 20 tons raised, which milled \$10 per ton, and on sinking 10 feet more, 10 tons gave \$17 per ton. This appears undoubtedly to be the lode of the district. Next is the Island lode, which consists of two veins, one on the hanging, and one on the foot-wall, giving two feet of crushing matter, worked on with three shafts about 50 feet each, and stoping done for 100 feet on the lead. This ore has milled on an average \$22 to the ton, and looking better every foot down. Then there are four (4) other leads that have been sunk on and from which thorough mill tests have been made; they vary from five inches to two feet in width, yielding from \$15 to \$20 per ton. A report has just been received of the discovery of a new and important lead, called the Pole Cribbin lead, about two feet wide, and, judging from specimens accompanying report, must prove very valuable. Most of the other leads show free gold in sight, but no mill tests have yet been made. The property sold to the company, above referred to, consists of 91 No. 1 mining claims or areas, each 150x250 feet, also 620 acres of land, 300 of which is heavily timbered, which is of great value to the mining camp. There is here a never-failing supply of water power. A 10-stamp mill, large dwelling, blacksmith shop, shaft houses, magazine and store house are on the property. The mine is now working and producing, and will hereafter be known as the Hall-Anderson Gold Mine.—[N. Y. Bullion.

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

Colorado election returns indicate that Denver is to be the permanent capital.

Trouble is brewing at Altar, Sonora, between some of the American mining companies and the Sonora Merchants.

An iron ore bed at Winsted, Conn., which is owned by Hartford and New Haven parties, has been tested and is said to yield fine ore for the manufacture of crucible steel.

New and Old Mexico are now over-run by mining experts and Apache Indians. It might be difficult to estimate which class miners and mining investors fear the most in the long run.

The new hoisting works at the Eureka Con. will be second to none on the Pacific Coast in point of size or capacity. The building will be one of the finest in the State and is a trifle larger than that of the Union Con. on the Comstock.

Wisconsin is looming up as a mineral State. A contemporary thinks that ten years will not elapse before Northern Wisconsin will attract the explorer, capitalist and miner to an extent almost as great as have the Black Hills during the last decade.

The coal fields of Alabama are coming to the front. an abundance of coal of a superior quality having recently been found. G. H. Otis, of New York, superintendent and manager of the Belmont Mines, has let contracts for building forty dwelling houses for the accommodation of miners, and also two school houses and one storehouse.

The Leadville Mining Index is a recent and valuable acquisition to the limited circle of reliable journals devoted to the mining industries of the country. It is a sixteen-page paper, full of bright sayings and readable matter, contains none but trustworthy information, and is edited by Mr. A. F. Wuensch, for the past year and a half mining editor of the Leadville Democrat.

The San Francisco Daily Report says: The local copper market is active. The San Francisco Copper Company turns out 35 tons per month of precipitate of copper, which finds ready sale at 15 1-4 cents per pound. We learn that acid works are being constructed by two of our prominent powder companies for the purpose of making sulphuric acid, thus utilizing the productions of the various sulphur mines on this coast.

The railroad to Candelaria and the enterprise for supplying that town with water will make Columbus District one of the liveliest in Nevada. There are thousands of tons of ore exposed in the mines of the district which can be worked with a handsome profit as soon as the water necessary for milling purposes is brought into the town of Candelaria. The mines that have been idle are already preparing to start up to anticipation, of the beam.

The Kokomo Times and Professor Gowenlock together insist that Silver Cliff has gone up. The ore only runs five ounces, and disappears as soon as bed rock is reached. Only two

mines are being worked, the Bassick and Silver Cliff. The great Plata Verde mine and its \$250,000 mill are useless, because there's no ore. Thomas Nast, artist for Harper's Weekly, lost \$40,000 in Plata Verde. However, he gets \$500 a week salary, and is going to try it again somewhere.

The Nevada Concentrated Company has incorporated, with a capital stock of \$5,000,000. The object is to conduct mining, milling and working all kinds of ores and metals in the State. The Directors are L. T. Lazure, Morris Hoeflich, Gustave Frank and John Landers of San Francisco, and Millard B. Farnell, Stephen G. Clarke and John A. Bogely, of New York. Lazure, Hoeflich, Frank, Farnell and Landers have each subscribed to the nominal stock to the amount of \$1,000,000.

Gold mining is still looking up in Georgia, and the air is full of new projects. That which now seems to be fullest of promise and of greatest value to the mines is the canal enterprise of J. P. Imboden, D. C. Stewart, E. H. Beck and others to get the Chastatee river, in Lumpkin county, in order to supply with water the whole mineral belt in that section. It is thought it will do more to get the rich ores from the earth and develop Georgia's great mineral resources than any other one thing.

Various reasons are given for the recent sudden decline in Robinson Con. stock, but none which are satisfactory, and it still remains a mystery. It is generally believed, however, that a large block—at least 20,000 shares—have been thrown on the market by someone, which would, of course, account for the break. Every confidence is felt in the representations of Mr. Ewing, the manager. The mine has always been open to public inspection, and not an adverse report has ever been published.

At the annual meeting of the Chrysolite Silver Mining Company, held on the 22nd of last month, the old management was reelected. The report of the President, Dr. R. W. Raymond, says: "According to present appearances, the sum of \$200,000 will constitute a sufficient reserve. With the mine still producing and good prospects ahead, and an estimated cash surplus of \$426,000 on Oct. 31st, dividends may be kept up for several months, and in the meantime it is not improbable that new and important discoveries may be made that will enable the management to declare dividends which its conservatism will not permit it to predict."

A table of "Population of Towns and Camps in Arizona," stated to emanate from the Census office at Washington, is going the round of the press, from Yuma to Maine. It must be a very antiquated compilation, and is calculated to mislead. Pinal is down for 166 inhabitants! In reality we have about 1000. Florence is credited with 973, which may perhaps be correct, if the Indians on the reservation are included. Seymour, where the Vulture mill formerly stood, is stated to have 258 inhabitants, or 50 per cent. more than Pinal. It actually has about 7 at present, not counting dogs and burros. That Eastern journals should print such errors is excusable, but our Territorial contemporaries should know better than to pass them without remark.—[Pinal Drill.

General P. E. Connor, says the Eureka Sentinel, is a man of iron nerve. He showed this quality in an eminent degree while in the army in dealing with the Mormons and hostile Indians of the plains. He is not less brave in great enterprises involving the investment of heavy sums of money. About four years ago he organized and incorporated the Eureka Tunnel Company of this district. Much of the stock was either given to friends or sold at nominal figures. No assessment was ever levied. The General went on investing his own private funds until he had expended over \$30,000 in the driving of the great tunnel. He put it in 2,000 feet almost wholly at his own expense. His energy and enterprise have at last been rewarded by the discovery of one of the largest ore bodies ever uncovered in this State. If there is any man on earth deserving of this lucky turn of Fortune's wheel, that man is General Connor. We sincerely congratulate him on his good fortune.

The Burlington (Vt.) Free Press and Times says: The town of Plymouth, Windsor county, is greatly excited over late discoveries of silver and gold there. A company has been developing the mines heretofore partially worked, and the latest reports are to the effect that very rich deposits of the precious metals have been discovered. It is said that a vein of gold and silver-bearing quartz has been struck, good for from one to five hundred dollars a ton. This vein is said to be from one to eight feet in width and extending to unknown depths. A crusher will be built as soon as may be, and meantime, the work of developing the leads already commenced and taking out the rock is to be rigorously prosecuted; the work being at present pushed night and day. The Plymouth Gold Mining Co. are quite encouraged by this neighboring strike on the same mineral belt two miles distant, and will take measures to

sink on its vein which shows better on the surface than the vein referred to did.

There is a wealth of hidden and visible treasure all along the line of the Alabama and Great Southern railroad from Chattanooga to Birmingham, a distance of 142 miles. On the Lookout Mountain side of the narrow valley through which the road runs, is coal, and on the right, or Sand Hill side, is iron. Rich indications of this wealth may often be seen from the car windows. The coal is in seams, or strata, from one to twelve feet in thickness, and extends back into and apparently through the mountain. On the other side, the range seems to be composed of iron ore alone, the hill being as bare as though there was not even soil enough to support shrubbery sufficient to hide its bleak and naked sides. All along the very road bed, ore rich enough to yield seventy-five pounds of pig metal to the hundred pounds of ore is so plentiful as to be gathered up by the wagon load, the ton, the car load, or even the ship load, from the very surface, almost without the use of the pick. Large amounts are so gathered and stacked along the track, according to the convenience of farmers, miners, and others living along the line. In places many car loads thus collected are gathered by trains sent from Chattanooga for the purpose. Between the schedule time of other trains these cars are filled, hauled and delivered at the blast furnaces, thus making a profitable pursuit for hundreds of people, and leaving ample room for the employment of thousands more.

A remarkable "pocket" or a deposit of emeralds, quartz crystals, etc., has recently been found in the Hiddenite Mine, Alexander county, North Carolina. The Statesville Landmark of Oct. 28th says: "On Monday last an open cavity, having the extraordinary dimensions of sixteen feet in depth, three feet in width and seven feet in horizontal length was discovered. The surface walls of this cavity were thickly studded with beautiful crystals of quartz, varying in size from those weighing twenty-five pounds down to minute crystals. Fully four hundred pounds were obtained in all. In this pocket were discovered nine of the finest emeralds ever found at the mine, or in the whole United States. We had the pleasure of viewing the 'find' yesterday. In color they were fine grass-green and were for the most part transparent. They were all twelve-sided and had a smooth flat termination. Placed end to end their combined length was over thirty inches. The largest emerald was eight and one-half inches long and an average diameter of one inch. The others varied in length from two to six inches. Mr. Hidden states that the finding of emeralds of the above size is without a parallel in the mineral history of the United States, and he doubts if the famous mines of Siberia have yet produced emeralds of these lengths and color. He says further, that while these North Carolina emeralds are not quite equal in color to those from Bogota, in South America, yet they are fully equal to anything from other known localities, and as the work progresses in Alexander county and the mine gets deeper, the color and transparency of the emeralds improve."

Nuggets.

- Plymouth, Vermont, is getting excited over her gold mines.
- All departments of the Pembroke Iron Works are now running, for the first time in several years.
- Mr. John F. Rea, of Castine, has contracted to build a new shaft house at the Manhattan mine in Brooksville.
- There passed through the E. & N. A. R. drawbridge into Kenduskeag Stream during the month of October 115 vessels.
- The large saw mills on the Penobscot will soon close their operations for the season. It has generally been a profitable year to mill owners.
- An Ellsworth American correspondent states that work has commenced on a mine located on the land of Wm. Farrar, at Gouldsboro. The showing is said to be good.
- The Kineo Slate Company of Mouson are putting in heavy machinery and preparing for extensive operations. The company is composed entirely of citizens of Lowell, Mass.
- J. M. Patten, of Bowdoinham, gives employment to a number of men getting out and shipping quartz from his ledge. He has shipped since he began to get out quartz over 1,700 tons.
- A. H. Merrill has orders ahead for 4000 squares of slate. Work is being rushed at the quarries in Williamsburg, 1175 squares were taken out during the twenty days ending Saturday, Oct. 29th.
- We are indebted to Mr. Jno. Landregan, of Milford, for a copy of the Aspen, Colorado, Times, containing an interesting

and valuable description of the mines and prospects of that portion of Pittkin County.

—There has been found on the land of Loring S. Webber, at Small Point, Phippsburg, large deposits of mica. We understand that he has been offered \$5000 for the deposit and refuses to accept it.—[Bath Times.

—During the month of October the Bangor carriers collected 34,413 letters, 13,628 postal cards and 2,948 newspapers. They delivered during the same time 27,290 letters, 7,717 postal cards and 15,253 newspapers.

—A young lady in Leadville recently sent to Bangor for two silk dress patterns. It is said that parties in Leadville can obtain these goods in our city, in this manner much cheaper than they can be purchased there.

—A new mine has been opened on Surry Mountain, New Hampshire, half a mile north of the Granite State shaft, and on the same vein, which is being worked by the private enterprise of a wealthy Boston gentleman.

—The Ellsworth American says that notwithstanding the fact that this is usually a slack time of the year for the stage lines, Beal's coaches continue to be well patronized and the line is doing a successful business.

—The shipments made by the Cobb Lime Co., during the past week have been very light on account of bad weather, aggregating only 7200 barrels. The total would have run up to 20,000 barrels had the weather been fair.

—Work has stopped for the season in the lead mines at Lubec. It is reported that twenty-five men have been at work during a part of the past season. The ore produced is thought to be of a superior quality.—[Machias Union.

—The James A. Garfield Post, No. 46, G. A. R., was recently organized at Blue Hill. This is the only Post in the county. The soldiers of Cherryfield, in Washington county, have made application for the establishment of a Post in that place.

—A communication from "Harry," relative to the Golden Circle business, we do not publish in this issue for the reason that, having already given expression to our views upon the subject, we do not care to reopen or prolong a discussion that would be likely to prove profitless.

—A correspondent of the Dexter Gazette reports that the Corinna Silver Mining Company will resume work on their mine, located on the Adams' farm, in a few days. A new company has obtained control of the "Silver Queen" mine, and operations will be commenced immediately.

—We are indebted to Prof. C. H. Hitchcock for a copy of his work on the Geology of the Ammonoosuc (N. H.) Gold Field. The work, to which we shall have occasion to refer in these columns hereafter, is one of great interest and value, and may be procured of the author, at Hanover, New Hampshire.

—Col. W. H. Darling is engaged in placing the old Douglass farm, embracing what was formerly known as the "City of Boston" property, upon the market. This property is one of the most desirable and promising locations in the Blue Hill district, as it lies in the very heart of the great mineral belt.

—Attention is called to the advertisement of the Royal Rock Drill, in another column. This drill, to which previous reference has been made, is the invention of Mr. I. W. Royal, of this city. J. S. Ricker, Esq., is agent for their sale, to whom application should be made for circulars or other information.

—The bones of a walrus, recently dug out of the banks of Pleasant River, in the town of Addison, and presented to the Portland Natural History Society by Major C. H. Boyd, was the subject for a post mortem examination and discussion by the members of that body, at their meeting on Monday evening last.

—Henry P. White has written for the Rockland Courier a brief but extremely interesting historical sketch of the town of Blue Hill, from the date of its first settlement, in 1762, to the present time. Mr. White also gives an account of his visit to the mines of that district, and speaks enthusiastically of their future prospects.

—At the Mount Waldo Granite Works, in Frankfort, granite is now being taken out for the Utica Custom House. During the present season about two hundred workmen have been employed and a larger business has been carried on at these Works than for many years past. The number is now being reduced and during the winter months about seventy-five men will be employed.

—Brick making in the town of Penobscot has been lively the past season. The following number have been manufactured

since May 1st: Bowdoin & Grindel, 954,000; Wardwell, Leach & Sellers, 576,000; M. T. Leach, 396,000; D. Grindle & Sons, 378,000; W. S. Hutchins & Son, 360,000; total, 2,664,000. To burn these, 1000 cords of wood have been used and 40 men have been employed.

—On one of the cold days of last week an old man nearly eighty-four years of age was observed on the bank below the Sanford wharf at Belfast, with a hammer and spike prospecting for silver. He was from the Blue Hill region, and said he knew people who had expended heaps of money and gone nearly crazy on prospects less encouraging than he found in Belfast.—[Belfast Age.

—As will be seen by advertisement in another column, Mr. C. B. Wyman, well known in the business of building and repairing vessels for the past fifteen years, has opened a hardware store at the old Schwartz stand, 141 Exchange street. The store has been remodelled and refitted throughout, and is furnished with a very complete line of hardware goods, all new and fresh from market.

—It is stated that the Boston Evening Star is to be enlarged to twice its present size. The Star is to be congratulated upon its success, which is well deserved. It furnishes its readers with all the news of the day, is under able editorial management and has already performed meritorious service, for which it deserves the thanks of the community, in exposing the rottenness of the alleged "mining department" of the Daily Advertiser.

—Work upon the new Woolen Mill at Ellsworth is progressing rapidly, and the buildings of the Foundry and Machine Company are approaching completion. The American says everything points to an industrial boom in that city. With the increase of business prosperity the Ellsworth people more than ever feel the necessity of having railroad facilities, and a National Bank. Both these subjects are under active consideration and it is believed that something definite will result.

—The Sea Serpent has been seen again, this time in inland waters. It was in the Machias Chain Lakes and Mr. Eb. Hall, of Calais, was the individual who met with the encounter. In relating his story he waxeth earnest, is impatient at any expression of doubt, and his excitement, evidently unfeigned, convinceth his listeners. It was broad daylight, 11 o'clock a. m., the hour, when he beheld the spectacle, and of course he cannot be mistaken. He and another logger were on the shore of the lake when a serpent came round a point at great speed, and, with his head six feet in air, bore down upon them. When very close to Mr. Hall and his horror stricken companion the monster, on account of shallow water or from some other cause, suddenly turned and went down the lake and through the thoroughfare "like a steamboat," leaving a great wake behind. The serpent, according to Mr. Hall and his fellow witness, was as "big round as a pork barrel," not less than fifty feet long, and measured at least two feet across the head. Immense scales cover his back, which at one time appeared above the water. Mr. Hall never wants "to see such a sight again," and will scorn hereafter all men who in his presence express the opinion that the sea serpent is a myth.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, NOV. 9, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.*		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Alouez.....	8	8 3/4	8	8 3/4	8	8 3/4	8	8 3/4	8	8 3/4	8	8 3/4
Atlantic L. S.....	14	15 1/4	15	14	15	14 1/2	15	15	14	15	14	15
Atlas.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	1 1/2	2	1 1/2	2	...	...	2 1/2	2 1/2	...	...	1 1/2	1 1/2
Blue Hill Copper.....	6	8	6	7	6	7	5	7 1/2	...	...	5 1/2	7
Brunswick.....	224	221	222	223	224	225	225	...	...	...	224	225
Calumet & Hecla.....	7/8	1	3/4	1	7/8	1	7/8	1	...	...	7/8	1
Catalpa.....	...	...	...	...	...	...	...	...	...	...	...	...
Central.....	3 1/2	4 1/2	...	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2	...	...	3 1/2	4 1/2
Copper Falls.....	1 1/2	1 1/2	1	1 1/2	1 1/2	1 1/2	1	1 1/2	...	...	1 1/2	1 1/2
Contentment.....	...	...	...	...	...	...	...	...	...	...	...	...
Douglass.....	...	...	...	...	...	...	...	...	...	...	...	...
Danb.....	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver.....	...	...	...	...	...	...	...	...	...	...	...	40c
Empire.....	12 1/2	12 1/2	12	12 1/2	12	12 1/2	...	...	...	...	12	12 1/2
Franklin.....	5	6	5 1/2	6	5 1/2	6	5	6	...	...	5	5 1/2
Harshaw.....	3 1/2	4 1/2	3 1/2	4	3 1/2	4	3 1/2	4	...	...	3 1/2	4
Huron.....	...	...	...	...	...	...	...	...	...	...	...	...
Hanover.....	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt.....	...	...	...	...	...	...	...	...	...	...	...	...
International.....	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	...	...	2 1/2	2 1/2
National.....	...	...	...	...	...	...	...	...	...	...	...	...
Osceola.....	...	...	...	...	...	...	...	...	...	...	...	...
Pewabic.....	13	13 1/2	13	13 1/2	12 1/2	13 1/2	12 1/2	13	...	...	12 1/2	13 1/2
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	41	42	41	41 1/2	41 1/2	42	31 1/2	31 1/2	...	...	41	41 1/2
Ridge.....	3 1/2	4	3	3 1/2	3 1/2	4	4	4 1/2	...	...	4	4 1/2
Silver Islet.....	35	...	31	34 1/2	34	35	34	35 1/2	...	...	33	34
Star.....	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan.....	2 1/2	3	2 1/2	3	2 1/2	3	2 1/2	3	...	...	2 1/2	3 1/2

*No Board.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb. 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 60,000 Shares.
President, Wm. T. Pearson, Bangor. Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Rediff, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

PEABODY SILVER MINING COMPANY,
Property situated on Columbian Mountain, Col. Stock unassessable.
President, J. W. Johnson, Boston; Vice President, E. C. Nichols, Bangor; Secretary, S. P. Johnson, Bangor; Treasurer, E. R. Walker, Boston; Directors, J. W. Johnson, S. C. Hursh, W. C. Bradley, N. W. Gannett, C. T. Phimpton, A. C. Goss, E. C. Nichols. Treasurer's and Transfer Office, 356 Washington St., Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett.
P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

WEST BAY SILVER MINING CO.
Gouldsboro, Me.
Capital, \$500,000; Shares, \$5 each; Treasury Stock, 20,000 Shares.
President, G. R. Campbell; Treasurer and Secretary, William Freeman. Directors—G. R. Campbell, John W. Coffin, William Freeman, all of Cherryfield. General Manager, Francis Worcester, Ellsworth.
W. I. VALENTINE, Supt.

WINTHROP W. FISK, B. S.

State Assayer,

Graduate of the Worcester Institute of Technology, Massachusetts. Five years practical experience with minerals.

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P. O. Box 192. Ellsworth, Maine.

Subscriptions and advertisements received for the leading Eastern and Western mining journals.

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Main Offices: 75 Kilby Street, Boston, and 65 Exchange Street, Portland.

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Bucksport and Bangor R. R.

CHANGE OF TIME, Oct. 8, 1881.

	A. M.	A. M.	P. M.	P. M.
Leave Bucksport,	5.30	10.00		5.00
Arrive Bangor,	6.42	11.15		6.05
Leave Bangor,	7.35		2.00	8.10
Arrive Bucksport,	8.45		3.15	8.10

The 5.30 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.

STAGE CONNECTIONS.—At Bucksport, daily, for Castine, Penobscot, Blue Hill, Ellsworth.

L. L. LINCOLN, Supt.

Portland & Boston Steamers.

One of the first-class side-wheel steamers of this line will leave Franklin Wharf, Portland, at 7 P. M., and India Wharf, Boston, at 5 P. M., daily. (Sundays excepted.)

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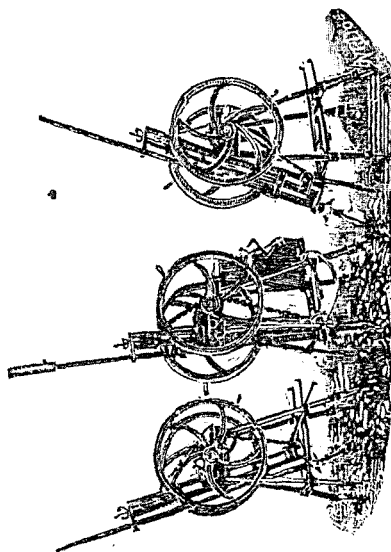
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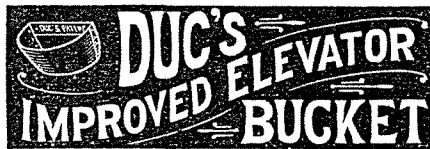
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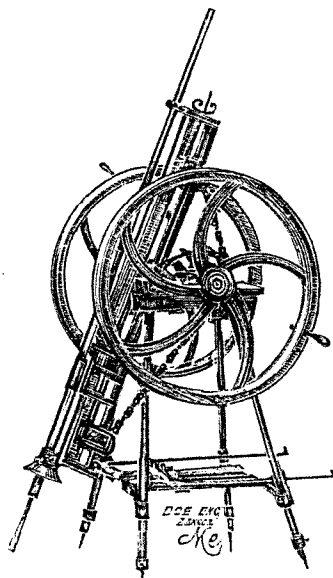
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ASSESSMENT NOTICE.

OFFICE OF THE

Sullivan Mining Company,

OF MAINE.

5 CONGRESS STREET, ROOM 17, }
BOSTON, Nov. 4. 1881. }

Notice is hereby given that at a meeting of the Board of Directors, held on the 17th day of October, 1881, an assessment of twenty-five cents per share was levied upon the capital stock of this corporation, payable to the Treasurer, November 21st, 1881, by stockholders of record at the close of business November 10, 1881, after which date no stock will be transferred until the assessment thereon shall have been paid.

Any stock upon which the assessment shall remain unpaid on the 21st day of December, 1881, will be delinquent and will be advertised for sale at public auction, and unless payment be previously made, a number of shares of said stock sufficient to pay the delinquent assessment, together with costs of advertising and expenses of sale, will be sold on Saturday, January 14th, 1882.

Stockholders will please present their certificates, that payment may be endorsed thereon.

By order of the Board of Directors,

FREDERIC R. NOURSE, Treasurer.

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ATLAS POWDER.

NEW ENGLAND AGENCY,

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Metallurgists, Assayers and Analytical Chemists.

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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

28 West Market Square, Bangor, Maine

E. M. BLANDING, } EDITORS.
W. F. BLANDING, }

E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

Subscription price, postage paid, \$2.00 per year, strictly in advance.

Advertising rates made known upon application.

All letters should be addressed to

THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, NOVEMBER 18, 1881.

An important meeting of the directors of the Douglass Copper Company was held in Boston on Friday of last week. It was voted to levy an assessment of \$1 per share, the same to be paid between Nov. 30 and Dec. 30. The transfer books will close Nov. 25.

Messrs. W. A. Pearson and J. W. Milliken, of this city, have secured a property immediately adjoining the famous Dorchester (New Brunswick) Copper Mine, recently sold for \$270,000. The property comprises upwards of 3000 feet length of vein, and has been prospected by a shaft which has penetrated the ore-body. The ore presents the same general appearance as that of the Dorchester, and proves to be equally as rich.

The Portland Argus has unearthed another "new process" for the reduction of ores, in a discovery claimed to have been made by M. Sebillot, of Paris. By this method not only are all the valuable metals saved but the ore itself is made to furnish its own reducing agent (sulphuric acid). The process is surely a valuable invention and one full of promise to the mining industries of this and every other section; but it is not quite as new as the Argus may have been led to believe. It has for some time been in use at Swansea, and was fully described in the MAINE MINING JOURNAL (issue of Aug. 26th) by Mr. C. W. Bryant.

Unlike those in the West, the people connected with the mining interests of Lake Superior keep silent—indulge in no braggadocioisms, but our copper and iron ore developments and monthly output keep talking all the time and speak in trumpet tongue.—[Portage Lake Mining Gazette.]

Of all the unblushing impudence it has ever been our misfortune to tumble against, this certainly is entitled to the premium. If the Lake Superior newspapers can be said to

excel in anything it is in their eternal brag and bluster, and the brazen effrontery with which they continually assert that region to be the only copper-producing district on the globe worthy of a moment's consideration. The weekly output of brass from that benighted country far exceeds the product of their copper and iron industries, and this it is which speaks in "trumpet tongue."

The reported sales of Eastern mining stocks at the Boston Mining Board for the week ending on Wednesday last aggregate 148,900 shares, as follows: 4400 Copperopolis, 23,100 Milton, 26,700 Deer Isle, 9000 Twin Lead, 59,200 Edgemoggin, 15,700 Hopewell, 8900 Granger, 900 Portland Sullivan, 400 Mammoth, 200 Sullivan, and 200 Blue Hill; also 200 Plymouth Gold at 31c. The closing prices were as follows: Copperopolis, \$2.15; Milton, \$1.22; Deer Isle has declined to 63c; Edgemoggin has advanced to 46c regular and 52 buyer 60; Granger advanced to 6c; Hopewell Manganese, 75c; Twin Lead, 47c; Portland Sullivan, 50c; Mammoth, 50c; Blue Hill, \$1.37 1-2. 100 Sullivan sold on Monday at \$4.25. On the Old Board the sales for the week have been 300 Douglass at 1 1-4 to 1 3-8, 150 Blue Hill at 1 1-8 to 1 1-4, 1030 Sullivan at 3 5-8 to 3 7-8 and a single sale of 1000 shares Sullivan, on Monday, at \$4.

The directors of the Gouldsboro Silver Mining Company have not seen fit to reply to the sentiments expressed in our last issue in a communication from "Boston stockholders." It is not surprising that stockholders should have some hesitancy in complying with a request to part with one-quarter of their stock, simply on the statement that the company is in debt, without further explanation. Convinced, however, of the honest intentions of the management, we have enquired into the matter and find the proposed plan susceptible of a very satisfactory explanation. The Gouldsboro has arrived at the point already reached by so many other Maine mining companies; the funds are exhausted, work has been discontinued at the mine and the company are in debt. The property is most assuredly a valuable one, and it is necessary to provide some means by which it can be made profitable to stockholders. In view of the fact that prominent and well-known gentlemen with an abundance of capital stand ready to purchase treasury stock at a fair price and thus supply the company with funds for a working capital, it was decided that a voluntary assessment upon the plan proposed would be the best and most available way to secure relief from their present embarrassments. It was believed that stockholders generally would be willing to sacrifice a portion of their stock in order to enhance the value of the remainder. Viewed in this light, the plan is at least entitled to consideration.

The Hamilton Process.

The time set for a practical trial of the Hamilton Reduction Process upon a large scale, is now long since past, and our New York contemporaries which but a short time since were wildly enthusiastic over the wonderful results about to be accomplished are ominously and, under the circumstances, painfully silent upon the subject. It is evident that, while it is perhaps yet too early to pronounce the process an entire failure, there is positively a hitch somewhere; and the fact that no attempt at explanation has been made raises the suspicion

that it is something more serious than a mere unavoidable delay in putting the machinery and works in readiness. All of which goes to prove that the position taken by the MINING JOURNAL is the correct one—viz.: That all "new processes" which may be brought forward in a legitimate manner are entitled to respectful consideration; but that investments in their stock are unsafe, and the adoption of their methods by mining companies the height of folly, until their merits shall have been successfully demonstrated.

The New York Mining Record, which in September last expressed itself as "perfectly satisfied of the perfect working of the Hamilton process," and stated that "Mr. Hamilton's assertion that he could work ore for \$1.00 per ton appears to be an *over-estimate* of the cost," has at last, much to its credit, employed a competent metallurgist to examine the works of the Company, and publishes the results of his examination, as follows:

The metallurgical principle on which this company are to base their operations, is a sound one, and the method of action only varies in its mechanical parts from old and well established practise. The method consists in bringing ore containing native gold or native silver or minerals of silver into contact with molten lead and to leave them in such contact during sufficient time for effecting an absorption by the lead of the gold and silver contained in the ore and minerals.

The older practise consists in spreading the ores over the surface of a lead bath. At Freiberg, the boxes containing high grade silver ores, are pushed into the bath bodily. Then the blast is put on to the fire and the flame is first a roasting and subsequently a smelting one. The result is absorption of silver and gold by the lead bath, and the drawing off of the gangue matter as slag from the surface. Similar practise is kept up at Andreasberg, Lautenthal and Joulouen.

At different times attempts have been made to shorten the time required by the old method, and also to lessen the expense of labor connected therewith, by introducing machinery, mainly for handling the ores. Fuller attempted this in 1868, by pressing the ores through the molten lead. Mr. Boyt, of Chicago, erected an establishment for the same purpose at the mouth of Boulder Canon in Colorado in 1874. High grade concentrates from Frue tables produced by the Silver Islet Company are treated by hand successfully in vessels containing molten lead.

At present Mr. Hamilton is renewing the attempt in an establishment here in New York. His arrangement is as follows: Mr. Hamilton brings molten lead and roasted ore in the state of powder into contact where both fall down in a tube. It is intended that in this tube they shall mix thoroughly in a constant stream downward, and that all lead scoria and ore shall pass out and around a lower edge, and ascend again on a circuitous road, and that during this ascent, scoria and exhausted ore shall be pressed to the surface by the molten lead and pass out in continuous discharge. Reasonable doubts do exist as to the possibility of success of this method.

The molten lead having higher density than the roasted ore will fall with greater velocity inside the tube than the ore, and thorough mixture there is not very probable.

Will not the high density of the molten lead prevent the ore from at all passing below and around the lower edge as intended? Will not the scoria (silicate of oxide of lead) having a density just midway between the density of molten lead and ore, take a place between the two and prevent a thorough contact between the metals, and will it not accumulate on top of the lead, where no means of discharge is provided for it? Aside of these mechanical doubts there are economical ones.

Roasted silver minerals certainly emanate when being reduced to metal oxygen and other elements which will combine with the lead. The oxide of lead will enter combination with silica, form scoria and be lost.

When Mr. Hamilton estimated on the cost of treatment per ton as being one dollar, he has not taken a considerable loss of lead into consideration. It is my opinion that the Hamilton Company with their present attempt will fail to do any better economically or technically than old methods have done, and will possibly fail to do anything.

Notwithstanding all this, the Hamilton works must be considered as a rational attempt for progress, and nothing is more probable than that a mechanical arrangement may be introduced for economical and continuous treatment of fine metal ores with molten lead, combined with rational provision for the other products of reduction, besides the base bullion, and utilizing such other assistance as other metallurgical methods may render in the premises.

As the present Hamilton arrangement is constructed, it will

require great modification before it will treat ores with practical and economical success. But many of the existing difficulties would be reduced and in part be avoided, if the attempt to treat crude ores with small percentage in metal be reduced to treating concentrates only, producing a smaller quantity of scoria and refuse.

F. M. F. C.

Splendid Discovery at Mount Mica.

Our readers will remember a brief notice, in last week's issue of the MINING JOURNAL, of recent important and valuable discoveries at Mount Mica, where explorations are now being conducted by the Mount Mica Tin and Mica Company. Dr. A. C. Hamlin, President of the Company, has recently returned from a visit to the mine, and we have had the privilege of examining the rare and beautiful gems which he brought with him.

It seems that in the month of October last three cavities were exposed by the crew now engaged in preparing the ledge for extensive explorations next summer. The largest of these cavities held about two bushels of loose material, among which occurred crystals of transparent smoky quartz, masses of deep red lepidolite, white amblygonite and other rare minerals, besides the tourmalines. The tourmalines occurred in these cavities either embedded in the disintegrated cookeite or attached to masses of quartz, lepidolite or feldspar. A large number of crystals and fragments of crystals of tourmalines of red, white and green colors were obtained, some of which we will describe.

One crystal is 3-10 inches long by 9-10 of an inch wide. Its summit is of a beautiful grass green of the purest water. About midway its shaft the color changes into white and then into pink and red, passing into blue near the base. When the crystal is viewed horizontally the blue of the base appears to be enclosed with a coating of pink which is in turn covered with a coating of green.

Another crystal was found in the same cavity, of the same length and of the same arrangement of beautiful colors, but not quite so wide in diameter, being about 7-10 of an inch.

Two other crystals of the same hues were also found, one of which was 2-4-10 of an inch long, by 4-10 of an inch wide; another was 1-7-10 of an inch long but flat, being but 2-10 of an inch wide in its narrow diameter.

Some magnificent sections of white and green tourmalines were also brought to view. The upper sections of these crystals were perfect in form and substance, but the lower parts were disintegrated, and crumbled in taking them out. These sections were from one and a half inches to half an inch in length and from 4-10 to 6-10 wide, of clear transparent white, tipped with the purest green.

Several crystals entirely green were discovered, but crumbled in extraction, leaving in some instances nodules of transparent green stones which will afford beautiful gems.

Quite a number of red and white crystals tinged here and there with faint green were also found, but most of them were injured in their transparency by fibres. These specimens were not crystallized in regular form.

From the trivial explorations thus far made, rich and unexpected results have been obtained, and the management hope to bring to light in early spring some of the most beautiful and extraordinary specimens of tourmalines known to the world, besides a great number of the rare minerals for which Mount Mica is famous.

—The prospect is good for new railroads through Northern Maine. A surveying party is making a thorough examination of the proposed route from Dexter to Aroostook and the Maine Central management assert very positively that the road will be built in the near future. The International Railway Co. have had two surveying parties in the field during the entire season and a route has been decided upon running from Lake Megantic in Canada to Mattawamkeag on the E. & N. A. Railway. The proposed line will run through the enterprising town of Greenville, at the foot of Moosehead Lake, and within a few miles of that hive of industry, the Katahdin Iron Works. Supt. McFee informs us in emphatic terms that the work of construction and equipment of this through railway line will be commenced vigorously in the early spring.

Personals.

SUPT. DUNTON, of the North Castine, was in Bangor early in the week.

SUPT. SHOENBAR, of the Milton, has been in Boston during the present week.

MR. E. M. HERSEY and JOHN R. MASON, Esq., went to Boston Monday night.

CAPT. J. H. MOYLE, Supt. of the Blue Hill, made a brief trip to Bangor on Monday.

PRESIDENT ARTHUR is said to be the first man to occupy the presidential chair who knows how to play the banjo.

DR. WILLIAM FLETCHER, of the Dominion Geological Survey, was drowned in Margo River, Cape Breton, on the 12th inst.

MR. FRED W. HILL has returned to Bangor from an extended trip to Michigan where he has large interests in timber lands.

MR. THOMAS CAHILL and wife have made a stop of several days in Boston prior to their final departure for the Pacific Coast.

JUDGE C. C. GOODWIN, editor of the Salt Lake Tribune, has recently become wealthy by reason of a lucky mining investment. So says the Carson Appeal.

MR. F. H. WILLIAMS, since his return to Boston, a fortnight since, has been confined to his room by illness. We are glad to learn that he is rapidly improving.

MR. E. J. SWAN, of Franklin, was in the city on Monday and favored the MINING JOURNAL with a call. Mr. Swan, accompanied by his wife, was en route to Boston and New York.

PROF. O. S. FOWLER, the phrenologist, is on a lecture tour among the mountains of Colorado, and, according to the Lake City Silver World, examined the head of Pike's Peak recently.

OLIVER W. EASTON, a resident of California since '49, and prominently identified with mining developments on the Pacific Coast, died recently in San Francisco. Mr. Easton was a native of Nantucket, Mass., and was aged 68 years.

MR. WILKIE DARLING, the mining superintendent and hotel proprietor, was in the city yesterday and made us a call. He is in high spirits over the bright prospects of the mines of the Bagaduce and is very enthusiastic in regard to the future of Castine as a resort for summer tourists.

JAMES M. SMITH, the New Mexico miner reported in our last issue as missing, claims that he is still living and that he has neither strayed nor been stolen. He arrived in Santa Fe from the East on Tuesday of last week. Having been delayed en route, his friends became alarmed at his non-appearance and feared that some accident had befallen him.

CHARLES JONES, one of the two miners who discovered the famous group of Robinson mines in Colorado, died while drunk in a Leadville saloon. He then owned a quarter interest in seven mines out of the twelve constituting the Robinson consolidation, from which the late Lieut.-Gov. Robinson made his fortune of over a million. The heirs of Jones live in Vermont, and, being uninformed of the great value of his estate, were induced to accept twelve hundred

dollars for an estate really worth a quarter of a million. A legal contest is to follow.

MRS. NELLIE A. BOWKER, of Tucson, Arizona, is visiting a sister at Fairfield, and will spend the winter there, says the Journal. Her husband, Mr. S. U. Bowker, was a native of Brunswick and was formerly manager of the Atlantic and Pacific telegraph office, at Buffalo, N. Y., and later of the office at Tucson, Arizona. He is now superintendent of a Telephone Co. which he has organized and is now building a line from Tucson to the different mines. The future prospects of the enterprise are good. Since Mrs. Bowker's arrival here, she has received word that her husband is sick with malarial fever.

MR. THOMAS CAHILL, after occupying the position of Superintendent of the Sullivan Mining Company's property in this place for about a year, has resigned and departed from here, with the intention of sojourning the coming winter among his friends in the far West. During his residence in this section of Maine, Mr. Cahill has made many warm and intimate friends, and particularly among those with whom he had business relations. As a millman, metallurgist and practical assayer he has an excellent record, and has given sufficient evidence of his abilities not only during the time of his connection with the Sullivan Company, but during a period extending over a quarter of a century of practical experience had by him in various important mining localities in the far West and Mexico; he stands to-day at the head of his profession. "Tom," as he is familiarly called by his numerous friends on the Pacific Coast, is a capital fellow, and is bound to make friends and succeed in whatever position he may be placed. We wish him and his good wife who accompanies him success and good health, in whatever place or clime they may choose as their future place of abode.—[Sullivan Bulletin.]

Dips, Spurs and Angles.

—A Boston artist has started West to paint the Rocky Mountains. It's a big job and will take a heap of paint.

—It is said that a gold mine has been discovered in Indiana. This is very well, says the Inter-Ocean, but a quinine mine is what they want.

—When a Yaukee in Rome was shown the petrified form of one of the early Christian martyrs he remarked that it was evidently a saint Gothard.—[Boston Globe.]

—The only thing lacking to make Chicago a success is a bronze statue of Mrs. O'Leary's cow.—[Commercial Bulletin.] Why not have the statue of cast iron, oxidized?—[Yawcob Strauss.] A bully idea.

—A yarn factory is to be started at Baton Rouge, Louisiana. Eli Perkins is not a stockholder.—[Philadelphia News.] This is the most crewel thrust that has zephyr been given to Eli.—[Yawcob Strauss.] We are quite woollen to see Eli worsted for once.

—The Salt Lake Tribune says there is a man in that city named Payton, who is manufacturing confederate bonds with plates captured with some rebel stores after Lee's surrender, and is unloading on the European market. As the original bonds are not recognized, there can be no harm in counterfeiting them, and there is no good reason why Payton should not enlarge his factory.

—Russia has just been celebrating the three hundredth anniversary of the conquest of the great territory of Siberia,

begun by the Cossacks under Jermak Timofejew in 1580, and completed by Peter the Great before 1710. It is an immense country, with extensive agricultural and mineral resources, and valuable fisheries. Gold, silver, copper and lead have been found in large quantities.

—There's stork about a reunion of the Crane family.—[Commercial Bulletin.] Comments on family reunions of this kind, we fear, will stir up some bitterness among the participants.—[Yawcob Strauss.] If these fellows continue to "poke" fun at this estimable family, there'll be trouble. Herodias won't stand much nonsense, and it will be Ar-dea joke for them should they succeed in getting her-on their track.

—An Eastern church is credited with taking its building fund into Wall street recently and increasing it from \$40,000 to \$125,000. The new church will have all the latest improvements and a big steeple, and will be known as the church of "St. Paul Preferred." But another Eastern church tried the same plan and got caught on a bear market. They have concluded not to build just now, but to get along with the old church for the present.

—A remarkable stampede is in progress toward the Beni River, in Bolivia, unexplored until last winter, when Dr. E. R. Heath ascended it, and discovered a vast forest of cinchona and caoutchouc. Fully 10,000 men have since gone there, and the export of rubber alone has risen from 15,000 pounds to 75,000, with promises of 6,000,000 next year. Dr. Heath is sanguine of finding rich deposits of precious metals and medicinal plants along the Madre de Dios.

—When we ascend the golden clothes-pole and our place is filled by another virtuous, sad-eyed philosopher who wears second-hand clothing and manifests other signs of greatness, let no bronze statue or Corinthian urn be reared above our narrow roost. A simple soap-stone slab with a neatly carved side-saddle and two doves will suffice to tell a weeping constituency the sad, sad story of him who loved not wisely—but too promiscuously.—[Dave Day, in the Solid Muldoon.

—A hundred miles south of Las Vegas, New Mexico, is Gran Quivera. It is in the midst of a country as barren as the desert. No streams of water flow near it and the whole country is deserted. There stand the ruins of an ancient and large city. For centuries the winds have brought showers of sand until the streets are filled and are level with the roofs. There is one building that towers above the rest and can be seen for fifty miles. Its walls are four feet thick and eighty feet high. The building was one hundred and sixty feet long and eighty feet wide.—[Virginia (Nev.) Enterprise.

—In the New York Mining Exchange there is much excitement over the State Lines, and the situation daily grows in interest. The bulls have discovered that the Green Mountain crowd has been straining every effort to depress Nos. 2 and 3, so they retaliate by a vigorous attack on that stock. The Green Mountaineers have circulated the report that Colonel Geo. D. Roberts, Lord Elkins and Senator Chaffee were caught by the Sioux Indians in Southern Colorado and instantly scalped. The State Line people admit that there was an attempt to scalp Roberts, but state that the tomahawks of the Indians were so dull they could not make any impression. While they were busy trying to scalp him, Roberts explained to the chief of the tribe, Stick-in-the-Mud, that he was about capitalizing another mine at \$20,000,000, and that if the tribe would take half the stock they could make up their loss in the State Lines. After a conference, the chief and tribe concluded to accept the proposition, and Elkins, with his childlike and bland smile, treated the crowd to a barrel of old rye, so-called, but which was really pure alcohol. The Indians found Colonel Roberts' head much sharper than their tomahawks.—[N. Y. Sunday Mercury.

Our Mineral Interests.

[N. Y. Mining Record.]

The mines of lead (galena) of Wisconsin, Missouri and southeastern Kansas, are more than equal to those of Spain and England, while the base silver ores of Utah, Colorado and Nevada furnish a supplement to our other lead product wholly unequalled by all other countries.

The zinc mines of the State of Wisconsin, Missouri and Kansas are far more extensive and richer than those of Belgium, Silesia and Sardinia.

The copper mines of Lake Superior—exclusive of the extraordinary copper ores of Arizona—rival those of Chili.

As for quicksilver, even exclusive of the product of the now famous New Almaden mine of California—which exceeds the world-famous Almaden mine of Spain and the equally renowned Austrian Idria—the production of this invaluable metal may be raised to almost an unlimited extent upon the Pacific slope.

Only Australia has ever produced as much placer gold as California has done—about \$1,000,000,000; while the mining of that metal in that State as a regular, methodized industry, by means of hydraulic processes or the exploiting of deep quartz mines, is becoming more and more productive every year. On the other hand, in Australia and New Zealand, quartz and hydraulic mining for gold are diminishing industries. To-day, the United States are the largest producers of gold on the earth.

All the mines of South America and Mexico in the palmy days of Potosi, Cerro de Pasco, Cartorce, El Doctor and Pachuca, never furnished as much silver annually as was produced last year by the mines within our borders.

No other anthracite coal is comparable to that found in so vast a quantity in Pennsylvania. A single field of bituminous coal east of the Alleghenies, extends from Northern Pennsylvania to the centre of Alabama, a distance of 800 miles, and embraces 60,000 square miles; while a single field in Arizona is estimated to cover 30,000 square miles.

Everywhere in the Union iron ore is found of all descriptions in exhaustless quantities, producing iron equal to that of the best of Sweden, Scotland, Spain, Algeria and the island of Elbe, while this country is already second only to Great Britain in the amount of pig iron which it produces.

In mineral oil—petroleum—which has become indispensable to humanity, liquid coal as it may be called, the United States have a vast, apparently exhaustless reservoir of it, not only in Pennsylvania and Western Virginia, but on the Pacific Coast, affording the country an export trade for the fiscal year ending June 30th, 1880, of \$36,218,625.

The Earth's Great Age.

In a lecture at San Francisco, Prof. Wm. Denton gave several striking illustrations of the earth's age. First, he said, we had evidence of the earth's great age in the tiny particles of soil beneath our feet. The great trees of California with from 1,350 to 2,350 annual rings of vegetable growth, revealed the fact that these monarchs of the vegetable world were saplings when Nebuchadnezzar was born. The great fallen monarch of the forest has been estimated to have been 4,000 years old and grew from seed propagated by older parent trees, and these in turn from grandparents, whose crumbled dust forms a rich vegetable mould to nourish their younger progeny. How many such generations occurred no one can tell.

But older than these are the glacial beds. When these ploughed their way over the surface of North America and Scandinavia they planed out mighty beds and ground and polished down the uneven surface of a former age. In this remote age, the coast of New England was like that of Greenland at the present day. Few geologists will place the glacial period at less than 100,000 years ago. But we could go back still further. In the tertiary strata of California have been found what are called the earliest human remains ever discovered. These existed many thousand years ago, when one-half of New Jersey, one-third of Virginia, all of Florida, part of Texas and Great Britain were under water. The Mediterranean sea was then double its present size, and the Gulf of Mexico extended to Ohio. A large part of California was under the bed of the Pacific Ocean, and waters then extended back to the foot-hills of the Sierra Nevada Mountains.

But older than this period and formation was the underlying stratification of chalk; still older was the Triassic, and older yet, the new red sand-stone. Older yet was the carboniferous formation. Then further back was the old red sand-stone, such as comes to the surface in parts of Scotland. Again, still lower Laurentian, seen at the surface in western Canada, and older yet than all these the granite or great underlying rock, the parent that thrusts itself up as the backbone of continents, cutting through all others to show us on the surface

what is below. What an infinity of time must have passed away in the successive formation of these rocky layers!

LODES, LEADS AND VEINS.

Blue Hill.

DOUGLASS.—The Douglass continues to make the same brilliant showing of ore. The new roasting kilns and ore dressing sheds are about completed.

BLUE HILL.—Developments are being energetically prosecuted under the charge of Supt. Moyle. The future prospects of the mine were never brighter than now.

MAMMOTH.—Supt. Duff is pushing work on the Mammoth property with energy. A large number of teams are being employed hauling Mammoth ore to the new Blue Hill steamboat wharf where it will soon be shipped to the Smelting and Reduction Works at Portland.

ECLIPSE.—A crew of miners, under Col. W. H. Darling, are doing prospect work on the Eclipse.

REVERE.—As will be seen by reference to advertisement in another column, the entire property of the Revere Silver Mining Company will be sold by public auction at the Bangor House, in this city, on Wednesday, Nov. 30. This will be a fine opportunity for a company of live men to secure at a bargain what there are many reasons for believing a valuable mining property. The Revere vein, which is perfectly well-defined and believed by Prof. Stewart to be a most valuable one, is located on the shore and exposed only at low tide. The shaft was started at some distance back from the water and driven to a depth of 130 feet. A crosscut was then started for the vein, before reaching which, however, the courage of the leading officers of the company gave out and the work was abandoned. These gentlemen are now desirous to dispose of their mining interests, and hence the sale of the property. We firmly believe that in the hands of an energetic company, the Revere would show up a valuable silver mine, at a trifling outlay of labor and capital.

Bagaduce.

NORTH CASTINE.—The hoisting machinery was shipped from Bangor by steamer Queen City and the lumber for the shaft house was shipped on the same day from this port by the schooner Gray. The shaft house will be completed as speedily as possible.

HERCULES.—The Hercules Mining Company have resumed work upon their valuable property in Penobscot, under the superintendence of H. H. Emerson, of Ellsworth, formerly superintendent of the Golden Circle. The coffer-dam is found to be very nearly tight and no serious trouble from a flow of water is anticipated.

MANHATTAN.—The magnificent showing of massive copper ore has brought the Manhattan into very deserved prominence. The underground developments have already reached quite an advanced stage at this mine. Under Supt. Darling, the mining work has progressed with great expedition. The shaft was sunk about 70 feet and then a crosscut was commenced which is now in about 220 feet. Several veins were cut and fine bodies of ore encountered. One of the veins was of large proportions and carried the very handsome ore alluded to previously. Drifts on the vein have been run and a great body of ore is exposed. During the past week a new shaft house has been erected over the shaft and some additional machinery has been procured.

BROOKSVILLE.—Supt. Darling is engaged in sinking a shaft and about twenty-five depth has been attained. Some good ore has been found and indications point decidedly to the existence of rich mineral deposits when good depth is reached.

CAPE ROSIER.—Rev. J. A. Seitz, of Norway, Me., editor and proprietor of "The New Religion," has recently visited this well-known mining property, and the current issue of his paper contains the following pleasant notice: "While at Castine, a fortnight ago, we visited the Cape Rosier mine, and through the kindness of Mr. B. G. Bean and Capt. Thomas Pollard were favored with the best of opportunities to make a thorough examination of the mine and the works about. We descended both shafts, in depth about 100 feet and took something of a survey of the width of the vein and the facilities for mining and raising the ore. This mine seems to be especially favorably situated. It is within a few rods of a good harbor where vessels of large burden may take in cargoes. When there, two vessels were about loading, one with two hundred tons of zinc ore for the smelting works at Bergen Point, N. J., and the other with one hundred tons of copper ore for the Portland

Smelting Works. The zinc ore sells on the wharf for \$8 per ton and the copper from \$12 to \$18. It does not cost over \$3 per ton to mine and as thousands of tons are now in sight and the ore all the time becoming more valuable we do not see why this mine is not already a great success. The Company have no stock upon the market, have managed most prudently in the way of putting up buildings and otherwise, have contracted no debts, and as they are prepared to send a cargo of ore from their wharf at least every ten days, for which they receive the cash without the cost or risk of smelting, their industry will be seen at once to be legitimate, paying and profitable. Other mining companies, we think, would do well to follow their example, in management, though it is doubtful if many others will be more favored by location, and richness and plenty of ore."

Sullivan.

MILTON.—The work in the various openings from shafts Nos. 1 and 2, continues as usual, and excellent progress is being made with the Burleigh Drills, which are doing good execution. The bottom of Winze in the westerly drift, from the southerly cross cut of shaft No. 1, is making a splendid showing. The drifts running east and west, from the southerly crosscut of shaft No. 2, are looking very well. A new Charcoal Iron Cable of a superior quality, has just been received from the manufacturers Messrs. John Roebling & Sons, New York, for use of shaft No. 2.—[Bulletin, Nov. 12.

Egypt.

Messrs. Marcus Mullan, W. W. Fisk and others, of Ellsworth, are operating on York's Point, in Egypt District, where they have discovered a remarkable showing of copper. They already have a shaft down some fifteen feet, and are finding considerable native copper. The property is in the immediate vicinity of the Copperopolis and Harvey Elliot mines.

COPPEROPOLIS.—Sinking shaft No. 1, with a day and night shift, and are making good progress. Are extracting some excellent ore while sinking. Shaft No. 2; the bottom is a very rich ore, but owing to recent rains, a greater influx of water than can be handled with present appliances, has been encountered, and further sinking is temporarily suspended, until the arrival of adequate steam pumping machinery. Both shaft houses and all other buildings necessary to ensure a vigorous winter campaign, are completed, and the place around the mine, presents an imposing appearance. The Copperopolis House is open and is doing a good business.—[Bulletin.

CUMBERLAND.—This property adjoins the Copperopolis on the west, and has recently been purchased by the Cumberland Copper Mining Company, an organization composed of well known capitalists and business men of Boston. We understand that it is the intention of the company to develop their property energetically. A shaft has already been started, and judging from the alacrity with which work was commenced, this company evidently means business.—[Ibid.

HARVEY ELLIOT.—The Harvey Elliot, under the direction of Supt. Smith, is being developed expeditiously. Considerable work has been done on the property and a considerable amount of ore identical with that on the Copperopolis has been discovered. The Harvey Elliot has a substantial shaft house and will be equipped with very elaborate mining machinery.

FRANKLIN EXTENSION.—The mine has been worked continuously and there has been no let-up in the vigorous prosecution of developments since operations were first begun. The shaft is about 115 feet in depth and a crosscut from the bottom is being run northwesterly and is now in 22 feet. Some very good ore has been taken out in sinking but it is anticipated that the large ore body will be encountered shortly in the crosscut. Mr. McDonald is in charge of operations at the mine.

BENJAMIN FRANKLIN.—At the meeting of the stockholders of the Benjamin Franklin Silver Mining Company, held in Ellsworth on Saturday last, it was voted to purchase the property of the old Franklin Silver Mining Company, and an assessment of two cents per share was levied upon the capital stock.

British Provinces.

Mr. A. D. Richard, of Dorchester, N. B., has leased a large tract of land at Memramcook, showing indications of extensive copper deposits.

The Satemo Company's mill started up on Thursday of last week. The Superintendent reports 1300 tons of ore on the dumps and everything prosperous.

The Halifax New Era says that Dr. Rae brought to town on Wednesday a large bar of gold, mined at Renfrew. The mine

is turning out well and indications are favorable to its continuance.

A Government sale of 29,000 acres of phosphate land was advertised to take place on the 16th inst., at Quebec. A number of French engineers have recently inspected the lands, and some exciting bidding was looked for.

The St. John Daily Sun says: "We are glad to know that the Dorchester mine is turning out well, and that the purchasers, who have had large interests in Lake Superior copper mines, are thoroughly satisfied with their venture. It is considered in Boston the best copper mine yet developed, the ore averaging thirty per cent."

The Sydney, Cape Breton, Advocate says the mine on Mr. Newcomb's farm is being steadily worked. One of the leads has been lost but by sinking deeper two other leads have been struck that are being profitably worked. W. C. Pipes, Esq., was put in charge by the Hopewell Manganese Co., and keeps two and three men at work.

A most interesting suit is now pending at Halifax, in the Equity Court, between Peter Paul, an Indian of some local fame, against A. K. and Henry and Timothy Archibald. Mr. H. W. C. Boak is conducting the suit for Paul. The declaration sets forth that Paul discovered a gold-bearing quartz lode and made its locality known on certain conditions, only in part fulfilled. The Indian now claims the fulfillment of the alleged agreement for half a share in the mine and half what has already been therefrom. This is one of the first, if not the first, suit ever brought by an Indian in this Province.—[New Era.

A correspondent of the St. John Telegraph writes from St. Martin's, N. B., that Mr. Burgess, Manager of the Boston Manganese Mines at that place, has discovered a deposit of bituminous coal in the Parish of St. Martin's, about a mile to the eastward of Tynemouth Creek, famous for the fine vessels built by Mr. Parker, and known as an excellent shipping port. When Mr. Burgess' attention was called to the matter, he found in the old bed of a brook, for its full width, about 4 feet, and for a depth of 60 feet, a clear coal shale, which he pronounced to be the out-crop of bituminous coal. That is a matter to be tested, and as he has secured a lease of the property, he will open up negotiations with some of his American friends, possessed of capital, in order to develop the property. It is hoped and believed that it will prove valuable.

An iron mine, of some considerable worth, has been discovered at Milford Haven, Guysboro' Co., Nova Scotia. A large quantity of ore was unearthed, and specimens shipped to the Londonderry Iron Co. Works, where it was burnt out with excellent results. A New York Company of speculators have taken hold of the lead, and are making every preparation to commence work next March. Recent indications lead the company to believe that a seam of coal runs through the property, in close proximity to the iron discovery, and the same company has secured the right to work the lead. Both the works can be operated in conjunction. A splendid harbor is within one hundred yards of the mines, making it a first-class port of call. Capt. Thos. McDonald, who was in town early in the week, is acting for the company at present.—[Halifax New Era.

Foreign capital seems to be flowing into Canada at an astonishing rate. Many new enterprises of considerable magnitude are already under way, and advices from Sherbrooke, Quebec, Montreal and other places indicate that the country is overrun with English and French mining engineers, representing large companies seeking a promising field for investment. An Ottawa dispatch to the Montreal Gazette, dated Nov. 11, says: "Yesterday there arrived in this city Mr. James St. Rieh, a delegate to Canada from the Societe Generale de Paris and the Societe Commercial de Paris. He was accompanied by M. Lenique, one of the most eminent French chemists, and M. Guerin, a practical miner of great experience. They came to Canada for the purpose of seeking good mining investments for the financial societies they represent. Mr. McLeod Stewart learned that they were in the Eastern Townships and invited them, through Mr. Bentley, Consul-General from Brazil, to come to this city. They arrived here yesterday, and at once visited the Geological Museum, where they spent some two hours in examining the specimens exhibited there. They were delighted with what they saw, and unanimously expressed a belief that Ottawa and vicinity was the best place for the company to invest their capital in. They were particularly pleased with the specimens of iron and phosphates from the Ottawa valley, and Mr. St. Rieh, a gentleman of wide experience and practical knowledge, who has visited all parts of the United States and Canada, said that he had yet seen no place which promised to give such a rich return for the investment of capital in mining property as this part of the country. The delegates represent

some twenty million of francs, for which investment is sought in the Dominion, and they intend upon their return to France to recommend that it shall be invested here. As the two societies named selected delegates of great experience, and in whom they place implicit confidence, there can be little doubt that there will shortly be a large influx of French Capital into Ottawa. The delegates expressed a belief that, owing to its geographical position and the immense mineral resources of its neighborhood, Ottawa is destined at no distant day to become one of the largest cities in the Dominion."

Southern Mining Notes.

A valuable asbestos mine has been opened in Edgefield county, S. C.

The average value of the gold ores of Virginia runs between \$5 and \$15 per ton.

Baltimore capitalists have invested \$1,500,000 in a gold mine in Davidson county, N. C.

The yield of gold in the South-Atlantic States to date is over twenty-three million dollars.

A Pennsylvanian recently purchased a gold mine in Goochland county, Va., for ten thousand dollars.

A company of Michigan capitalists are erecting buildings near Knoxville, Tenn., for zinc smelting works.

The Gulf Coal Mines in Chatham county, N. C., have been purchased by a Pennsylvania company for \$30,000.

The Mineral lands in the neighborhood of the Shenandoah Valley Springs are attracting the attention of Northern capitalists.

Georgia had four gold mills in 1875, and produced that year \$40,000. In 1881 she has 73 mills at work and will, it is estimated, approximate a \$4,000,000 production.

Gold, silver, iron, copper, lead, barytes, manganese, corundum, emery, mica, plumbago, asbestos, and kaolin, are freely distributed in the South-Atlantic States.

The copper mines at Linden, Fauquier county, Va., are panning out well. One hundred tons of rich ore have been taken out. One block of nearly pure copper weighed 233 pounds.

Missouri is the largest iron ore producing State in the South,—386,197 tons; Alabama is next—191,076 tons; Tennessee third with 104,465 tons; Georgia, 91,416 tons. In 1870 Alabama was not included in the list of ore producing States.

The North State Mining Company in Ashe county, N. C., own one of the finest beds of iron ore in the world. It is so pure and free from foreign substances that English steel manufacturers propose shipping the crude ore to England and work it up there. They own mica mines, soapstone quarries, and a bed of kaolin.

At the Atlanta Exposition are many choice specimens of marble and granite building stones, all highly polished. The more beautiful marbles are from Cherokee, Macon and Swain counties. The extreme beauty of these attracts attention. The famous mill stones from Moore county, said to be the equal of any in the world, are noteworthy. It is said that in Moore one of these stones has been in use a hundred years. Corundum, that rare and valuable mineral, is shown in its choicest condition. This and the mica exhibit are among the finest ever made in the world and are distinctively North Carolinian. More corundum is mined here than in all the other States. There are no less than 56 mica mines of importance, and this State is almost the sole source of supply.—[Carolina Watchman.

The Dahlonega (Georgia) Mountain Signal publishes a mining directory for Lumpkin County, according to which there are the following stamp-mills near Dahlonega: Findley, 30-stamp water-power mill and 30-stamp steam-power mill; Barlow & Hand, Pigeon Roost mill, 40 stamps; Bast mill, 20 stamps; Ivey mill, 20 stamps; Singleton mills, one 10 and one 5 built, and one 10 building; White's Pigeon Roost mill, 10 stamps; Fish Trap mill, 10 stamps, and a 20-stamp mill building by parties owning ground south of the Findley property. At Auraria, there are the 10-stamp mill of the Chicago Gold Mining Company, the 20-stamp mill of the Auraria Mining Company, the 20-stamp Bell mill, the 20-stamp Cleveland Mill, and the 10-stamp Wells mill. In addition, a 20 stamp mill is building on the Smith property.

The Mining Record thinks it has discovered a copper mine in the Guttenberg Tunnel, just north of Hoboken, near New York City.

Croppings.

[COMPILED, CONDENSED AND CONFISCATED FROM OUR EXCHANGES.]

Twelve California petroleum wells produce 600 barrels of oil daily.

Ruby Hill, Nevada, narrowly escaped destruction by fire, on the 6th inst.

The San Francisco Copper Mine, at Spenceville, Nevada county, Cal., produces monthly about 35 tons of precipitate of copper, which finds ready sale at 15 1-4 cents per pound.

The Philadelphia Mining and Smelting Company's works, at Ketchum, Wood River, recently started up, are producing from 15 to 18 tons of bullion per day, averaging about 245 ounces silver per ton.

The United States Consul at Carrara, Italy, says there is an opening for American capital in the quarrying and shipping of Carrara marble, which is now quarried in the rudest and most barbarous manner.

Mining "experts" as a class are not regarded with much favor in a mining camp and will not be until the race is thinned out. Their quantity is greatly in excess of their quality, which is not as it should be.

The New Mexican Mining News says: The number of dry washing or dry amalgamating companies springing up all over the country is something wonderful. Everything about them is dry, except the stock, which in some instances is watered to a fearful extent.

A company at Davenport, Iowa, sent an agent to invest its \$20,000 capital in Leadville mines. He put all the money into seven ventures that yielded nothing, while three others that turned out well proved to have been made on his own private account. The company has voted a lack of confidence in him.

The two English Gold Mining Companies in Plumas county, California, paid their semi-annual dividends in London last month. The Plumas Eureka paid a dividend of 75c per share, or \$30,469, making a total of \$568,750 to date. The Sierra Buttes paid 37 1-2c per share, or \$46,250, making a total of \$1,390,625 to date.

The World has a column article on the New York gold mines, in which the writer says: The Empire mine, the Railroad mine and the Metaburg mine, all in Saratoga county, yield from croppings, according to well established assays, from \$6.88 to \$16.90 per ton. In the Beryl mine the Company are down ten feet, where the ore averages over \$26 to the ton.

The precarious tenure of the mushroom towns that spring up in mining regions during times of excitement is exemplified in the history of Hamilton, Nevada. During the White Pine excitement of 1868 it had a population of thousands, two large daily newspapers, and all appearances of substantial prosperity. To-day it barely counts a population of sixty.

The Leadville stock exchange adjourned sine die on Monday evening. Its demise would have been more generally regretted had its transactions been conducted on a different basis. As it was, it was a mere bucket shop, which served the purpose of enabling adroit schemers to depreciate the stock of mining companies that desired to raise money by selling working capital.—[Leadville Circular.]

The Carolina Watchman says: "The last of the machinery for the Beaver Dam Gold Mining Company has arrived and they will commence running the first week in November. Mrs. Garfield will retain the interest held by her husband in this mine, and should operations at the mine prove as now anticipated she will visit it this winter. 20 hands at work; engine houses completed and now building dwelling houses.

Dr. Manes, 436 Lorimer street, Denver, Colorado, has invented a machine for saving the gold and silver hitherto lost in the tailings of stamp mills or flumes. The machine is self-acting, and is adapted for free milling gold or silver ores, or refractory after roasting. Steam, electricity and mercury are used. Some of the advantages claimed for it are the saving of a large portion of the metal passed through it, the saving of the mercury used and the small cost of treating the ore.

A vein of what is supposed to be a new metal, is said to have been found in digging a well near Battle Creek, Michigan. The vein is in a stratum of rock about 28 feet below the surface. Pieces of some of the nuggets taken out, it is said, have been melted up, and have all the appearance of the best gold, but when the acid test is applied to the metal it corrodes, showing that it is not the genuine precious metal. It is not known what metal it is, and specimens have been sent away for analysis.

The Old Hickory Copper Mine, in Beaver county, Southern

Utah, has now over twenty miners actively employed, and a still further increase of the force is soon to be made. Sinking on the main shaft still continues with the ore body widening at every stroke of the pick. This copper bonanza is situated about four miles west of Milford, easy of access, and within sight of the Utah Central R. R. The ledge is ninety-two feet wide at its outcrop and will average ten per cent. copper and carries gold and silver. The main shaft is being sunk at the most advantageous point and has now reached a depth of 100 feet. Ores going twenty-five to thirty per cent. copper are now being extracted. The outlook is very encouraging.

The famous Western Mining Company, of Tombstone, Arizona, has reorganized under the name of the "Contention Consolidated Mining Company," with a capital of \$12,500,000, divided into 250,000 shares. The formation of this new corporation involves the consolidation of the Western, Flora Morrison and Sulphuret. The apportionment is made as follows: Western to receive for its mine 200,000 shares; Flora Morrison to receive for its mine 32,000; Sulphuret to receive for 600 feet of the southerly end of its mine 18,000 shares. The Western declared a dividend of \$1 per share payable on the 10th inst., and there will be another final dividend in settlement. The gross product of the Western mine is given at \$1,502,742.39. It has paid \$900,000 in dividends during the past year, and the dividend recently declared will bring the amount disbursed up to a round million.

The Eureka Sentinel publishes a tabulated statement from the State Comptroller's books of the gross bullion yield of the State of Nevada for the half year ending June 30, 1881. The statement is official, being the amounts returned by the Assessors of the several counties. The total yield was \$4,542,507.67, as against \$5,689,323.25 for the six months preceding the first half of the present year, showing a falling off of a little over \$1,000,000. It is believed that the semi-annual statement, to be made at the close of December next, will about hold good with the figures of the first six months of the year. In that event, the decrease in Nevada's product of the precious metals for the year 1881 will amount to something like \$2,000,000, as compared with the output of 1880. For the current year, Eureka District has produced a little more than one-third of the whole bullion product of the State.

What we want in the way of metals, says the Chicago Journal of Commerce, is a good supply of native tin, to render us independent of British operators, who have laid their hands on the product of the existing mines in Cornwall and the far East. Tin enters so largely into our manufactures that on the score of purity alone a native supply is desirable. Our canned goods trade has been injured by admixture of lead with the tin in heavy proportions, and a good proportion of culinary articles are tin only in name. The business of tinning or covering iron with tin is a rapidly growing one. With a full supply of this metal, business in it would be vastly extended. Fortunately, an enormous deposit of the ore has been discovered at Ponomo, Cal., no great distance from Los Angeles, assays from which show a result of \$89.70 per ton in tin. The mass of tin ore had been previously mistaken by prospectors for common rock stained with iron.

One of the most awful and bloodcurdling accidents that has ever happened in the copper district occurred at the Quincy mine last Monday night between 11 and 12 o'clock. Joseph Meyer, a young lad engaged in the act of warning cartridges of high explosive powder, Olaf Hauvava and Wm. Jarvela (the last two, Finlanders) were instantly blown into eternity, by the sudden explosion of the cartridges that were being warmed by the boy Meyer, and the subsequent explosion of six or seven boxes of the same blasting material stored in the immediate neighborhood. Such was the tremendous force of the explosion that the three unfortunates were literally torn to pieces, or so horribly mutilated as to be quite beyond recognition. Men in the 230 fm. level, over 400 feet above the point where the explosion occurred, were knocked down and partly stunned by the frightful concussion. The damage done to the workings in the immediate vicinity of the explosion had not been fully ascertained up to 4 o'clock yesterday afternoon. The unfortunate victims of this accident, the cause of which, in the absence of any living witness, can only be conjectured, were buried this morning.—[Northwestern Mining Journal.]

The diamond industry in South Africa continues to be exceedingly productive. The gross weight of diamonds sent through the Kimberley post office last year was 1,440 pounds avoirdupois, valued at nearly \$17,000,000. According to the Manchester Courier, the annual value is estimated as follows: Kimberley, £4,000,000; Old de Beer's, £2,000,000; Du Toit's Pan, £2,000,000; Bultfontein, £1,500,000. At the end of last year 22,000 black and 1,700 white men were employed at these mines. From the Kimberley and Old de Beer's mines alone dia-

monds to the extent of 3,200,000 carats are annually raised, while the other two mines above named yielded 300,000 carats last year. At the diggings on the Vaal River about 250 men were at work last year. The other important mining industries of the colony are the copper mines of Namaqualand, from which last year 15,310 tons of copper were exported, valued at £306,790. From the manganese mine in the Paarl division 206 tons were exported; while at the coal mines in the Wodehouse and Albert divisions about 1000 tons were raised. The salt pans in Simon's Town, Malmesbury, Piquetberg, Fraserberg, Uitenhage, and Cradock, yielded about 9,000 tons of salt. Mineral springs abound in the colony, many of them being well resorted to, but accommodation for visitors is, as a rule, indifferent.

The Bodie Free Press of the 1st inst., says: Probably all the mines now running will be kept in operation during the coming winter, and not impossibly others may, after the deep shafts have drained down somewhat deeper, take up their work where it was left months ago in consequence of too much water. The Standard shaft is now down 1090 feet; the Lent, 775; and the Red Cloud 640. The Lent reports most of its water from the 700 and 740 levels, and not from the bottom. The Red Cloud has far less to contend with in this regard than formerly, and there seems a reasonable probability that as still greater depth is attained the obstacles which this element has presented may disappear altogether. The completion of the Mono Lake Railroad will render it possible to obtain supplies of wood and lumber in the winter time without greatly increased costs or inconvenience. The Standard-Bulwer mill has been undergoing a thorough overhauling the past week, the first for a year and a half. The Noonday mill of forty stamps has completed its contract with the Bechtel, and has resumed crushing ore from the Noonday and North Noonday mines. The contract of the Oro company with the Silver Hill has also expired. The Oro company advertise for bids for a contract to sink their shaft 150 feet further. This will give them a level equivalent to the 600 level of the Red Cloud. The Tioga, Blackhawk, Champion, Goodshaw, Addenda, and others of our mines are prosecuting their explorations steadily. The Bodie Tunnel mill, it is anticipated, will be completed by the 1st of December.

PEABODY, COLORADO.—The George Peabody lies immediately west of the Joe Reynolds and other mines that have made Silver Creek famous. It is owned by the Peabody Silver Mining Company of Boston and Bangor, and is under the management of C. L. Janes, of Lawson, whose industry, energy and faith in the mines of this county have secured him interests in some of the best mines in this district. A short time ago the mine was the property of the Oshkosh Mining Company, but changed hands through the negotiations of the present superintendent, and is now owned in common with the Oshkosh mine. The shaft on the Peabody, as before mentioned, is 50 feet deep, and a contract for sinking it an additional 50 feet was let about the first of October. When this is done levels will be run from the bottom of the shaft, which is 90 feet east of the discovery shaft. The timbering has been done in splendid shape and is a credit to both the workmen and the superintendent, and this suggests the fact that but few mines in the county are so well situated for securing fine timber for mining purposes cheaply and conveniently, a forest of noble pines stretching away to the south, running in close proximity to the mine. The bottom of the shaft carries a foot of mineralized quartz that will be very apt to run into ore more or less solid as depth is gained. The surface ore assayed as high as 23,000 and 24,000 ounces. Of course these were carefully selected specimens. Mill runs of the ore went up to 400 to 600 ounces of silver per ton. Specimens recently taken from the shaft are rich in native silver. An assay made a short time ago gave \$81 ounces of silver per ton. Quite a peculiarity of this mine is the presence of oxide of uranium in fine crystals of a brilliant green color. The ore is now lumpy, as is usual near the surface, but sinking will doubtless prove greater regularity in the mineral deposits. A new shaft house, 12x16 feet in size, is one of the permanent improvements of the property. A good boarding house fifty rods away from the mine, situated close to two excellent springs of water, is another. Work is progressing on the shaft with night and day shifts, and everything is looking well and progressing satisfactorily. The mine is well located and its active development is abundantly warranted by the quality of the mineral and the strength of the lode.—[Georgetown Miner.

—The annual meeting of the stockholders of the European & North American Railway was held in this city on Wednesday. The reports of the Superintendent, Treasurer and Directors show the road to be in a very prosperous condition. It is understood that a dividend will be declared from the earnings during the coming year.

Gold in New York State.

[New York World.]

Who would suppose that in the State of New York, 757 persons could have been found with sufficient faith to file claims for 597 veins said to contain gold and silver? Yet such is the fact, as shown by the records in the office of the Secretary of State in this city. The disparity between the number of claimants and the number of veins claimed by them is explained by the fact that in many cases men who own the lands have taken out claims to protect themselves and their farms from the claims of others. Although the law declares that locators before they can work their mines shall procure from the owners of the land a written permission to do so, it also provides that if this permission be refused the miners may procure from the Supreme Court an order permitting them to enter upon and break up the lands in question. In order, therefore, to avoid tedious litigation and annoying suits, the farmers have in many cases made things secure by filing claims themselves.

The position of the claims shows four well defined gold fields. The first begins somewhere about Plattsburg and runs in a southerly direction into the counties of Hamilton, Fulton and Saratoga. It then divides into two branches, going west into Herkimer and east into Washington county. The second is south of this in the neighborhood of Dutchess county. The third is still further south in Westchester and Rockland counties. The fourth is in the western part of the State in Erie and Alleghany counties. From the fact that the Geological Survey has not yet made any examination of these alleged gold fields, it can only be said in a general way that quartz is known to exist in the neighborhoods where these gold and silver veins are said to be. It is therefore impossible without examination to say how much basis there is for the faith shown by the locators. In a few instances the notices filed in the office of the Secretary of State contain statements of assays made and work done, but these are not enough to found a judgment upon as to whether these gold fields will commercially pay. They simply indicate that the locators have, in some instances, proved their faith by their works.

Nuggets.

- The Harrison Gold Mining Company has been organized in Portland.
- A masquerade ball will be given at East Blue Hill Thanksgiving evening.
- Important improvements are proposed on Hancock Neck before another season.
- There is a discussion of the gas lights in Bangor being replaced with the electric light.
- Work has been commenced at the "Kerana" property, in Gouldsboro. Two shafts have been started.
- A vessel arrived in this port recently from Nova Scotia with a cargo of plaster rock for Morse & Co.
- A small steamer is to be built in Lamoiné this winter to ply over the waters of Frenchman's Bay next season.
- It is understood that the Castine and Acadian Houses at Castine will receive large additions before another season.
- Two vessels were loaded with ore last week at the Cape Rosier mine, one for Portland Smelting Works and the other for Bergen Point, N. J.
- The large schooner Weir G. Sargent is at Blue Hill loading with paving stones from the granite quarry of Wescott and Hinckley for New Orleans.
- The large and handsome steamer now being built at Bath for the International Line between St. John, Portland and Boston is to be named "State of Maine."
- The fine little steamer "River Belle" will be moved to Pushaw Lake in the spring and will be run during the summer for the accommodation of excursionists and pleasure seekers.
- The Second National Bank have leased a store on the ground floor of the Wheelwright and Clark block and will fit up an elaborate banking establishment. The bank will front on West Market Square.
- The amount of lime shipped by the Cobb Lime Company, during the past week, was 16,300 barrels, of which 1,300 were shipped by rail. Seven hundred barrels were held back on account of the scarcity of cars.—[Rockland Courier.
- The spacious vault is being rapidly put in place in the new banking establishment on West Market Square in this city.

The Kenduskeag National Bank and the Penobscot Savings Bank will probably open in their new quarters in January.

—We are indebted to the Boston publishing house of William Ware & Co. for a copy of the Farmer's Almanac for 1882. This standard almanac grows in interest and value with each successive season. The publication of this series was commenced in 1793 by Robert B. Thomas.

—Messrs. J. W. Davis & Son, of Ellsworth, have purchased the Kenney Grindle property, so-called, in the town of Brooksville, and are conducting explorations. An excellent showing of copper has been made. The property is in close proximity to the well-known Tapley mine.

—The Home Journal states that Mr. Thomas Pray, Jr., managing editor of the Boston Journal of Commerce, is endeavoring to have the Institute of Technology negotiate for the splendid collection of minerals and wood specimens by the several Southern railroad companies, at the Atlanta Exposition.

—A valuable plumbago mine has been discovered in Anderson county, S. C. Professor Charles Fromm cut out a block weighing 240 pounds. Plumbago is used in so many of our manufactures that its value is very great. This is said to be the largest body of graphite or plumbago ever discovered.

—The steamer May Field has commenced running between Bucksport and Rockland. She will leave Rockland every Monday and Thursday at 9.30 a. m., touching at Camden and Belfast, connecting at Bucksport with the afternoon train for Bangor. Returning, leaves Bucksport every Tuesday and Friday.

—A wrestling match was held in the Town Hall at Blue Hill on Friday evening last. Harrigan and O'Neil were the contestants and the combat was decided in favor of the former. The stake was \$20. It is understood another trial of strength will occur between these two individuals on the 25th when a stake of \$50 will be offered.

—Hunnewell's Point, at the mouth of the Kennebec, where Fort Popham is situated, has been taken in hand by a stock company, and another fashionable watering place is to be established on the coast of Maine. The company is composed of gentlemen from Augusta, Bath, Boston and New York, and they start with a capital of \$75,000.

—The famous Whitmore & Clark's Minstrels will play in Norombega Hall, Bangor, on Tuesday evening next. The company embraces among its talented performers the celebrated Hank White, and W. A. Huntley, the world-renowned banjo artist. The tickets are for sale at D. Bugbee & Co.'s. Dr. George W. Huntley is the popular advance agent.

—It is believed that a vein of gold and silver bearing rock has been discovered in the town of Avon, Franklin Co., at the foot of Day Mountain. Some of it has been assayed and gives a good showing. The vein is eight feet wide at the surface and the rock was taken 8 1-2 feet below the surface. This region ought to be productive of much mineral wealth.—[Rockland Courier.

—Four mines in New Hampshire—the Essex, Mascot, Silver Lake and Granite State—are being actively and intelligently worked, with every prospect of becoming remunerative enterprises. These mines are all on a producing basis. The Essex is equipped with a ten stamp mill; the Mascot will market its high grade ores till the reduction works are completed; the Silver Lake has a concentrating mill in operation and the Granite State is building reduction works.—[Advertiser.

—Mr. Wilkie Darling, the new proprietor of the Castine House, is exhibiting his usual enterprise and has commenced important improvements at this well known public house. The Castine House was built about 1812 and has very interesting historical associations connected with it. The main house will be put in thorough repair and a French roof will be put on, by which several additional rooms will be secured for guests. An addition to the hotel will be built and this will be 32 feet by 58 feet in size. The ground floor of this new part will be converted into a large reading room facing the bay and a billiard room in the rear. The upper stories of the addition will be divided into rooms for guests, and eighteen fine rooms will thus be added to the capacity of the house. These improvements will be vigorously pushed and will reach completion by early spring. Mr. F. H. Coombs, the well known draughtsman, has recently been engaged in making plans for these improvements.

—The residents of the eastern portion of Hancock county are loud in their complaints of the manner in which the game laws of the State are openly violated in their section. A correspondent of the Ellsworth American says: "The laws of the State which prohibit hunting deer with dogs, have been violated

during the past three or four weeks to an extent hitherto unknown in this county. From the up river lakes to tide-water, the deer have been hounded, worried, and killed, not alone by a set of men who habitually defy the laws, but by men who have always professed to be law abiding citizens. Even deacons of churches have knowingly and wilfully set the laws at defiance. Is it not time that those who would like to see our forests and streams once more abound in game, take some effective method to have the laws against hunting deer with dogs, and trapping ducks enforced? There is no lack of evidence against guilty parties, but there seems to be no officer to enforce the law. A county warden appointed by the Governor, from some central point in the county, who would appoint deputies in towns where the laws are violated, would check the business at once. Shall it be done? It is to be hoped that those in possession of evidence against violators of the law, will treasure it up for future use, and that a game warden will be appointed immediately. Shall we hear from others in regard to this matter?"

New Incorporations.

Name of Company.	Where Organized.	Date.	Capital.
Renfrew Consolidated Mining Co.,	Portland,	Oct. 31,	\$ 60,000.
Benjamin Franklin Silver Mining Co.,	Ellsworth,	Nov. 10,	500,000

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, NOV. 16, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Allouez.....	3 1/2	3 3/4	3	3 1/2	3	3 1/2	3	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
Atlantic L. S.....	14 1/2	15	14 1/2	15	14	15	14 1/2	15	14 1/2	15	14 1/2	15
Atlas.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper..	1 1/2	1 3/4	1 1/2	1 3/4	1 1/2	1 3/4	1 1/2	1 3/4	1 1/2	1 3/4	1 1/2	1 3/4
Brunswick.....	6 1/2	7	6	7	6	7	6	7	6	7	6	7
Calumet & Hecla.	224	225	224	224 1/2	220	225	225	225 1/2	224	225	224	225
Catalpa.....	3/4	7/8	3/4	7/8	1	3/4	7/8	3/4	7/8	3/4	7/8	3/4
Central.....	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls.....	3 1/2	4 1/2	3 1/2	4 1/2	3	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	4 1/2
Contentment.....	...	...	...	...	...	...	...	...	...	...	...	...
Douglass.....	1 1/2	1 3/4	1 1/2	1 3/4	1	1 1/2	1 1/2	1 3/4	1 1/2	1 3/4	1	1 1/2
Dana.....	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver....	3/4	3/4	3/4	3/4	3/4	3/4	3/4	40c	3/4	40c	3/4	40c
Empire.....	...	...	...	...	...	...	...	...	...	...	...	...
Franklin.....	11 1/2	12 1/2	12 1/2	13	11	12	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2
Harshaw.....	6	5 1/2	5 1/2	5 1/2	5	6	5	5 1/2	5 1/2	5 1/2	6	5 1/2
Huron.....	3 1/2	4	3 1/2	3 1/2	3 1/2	4	...	...	3 1/2	3 1/2	...	...
Hanover.....	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt.....	...	...	...	...	...	...	...	...	...	...	...	...
International.....	...	...	...	...	...	...	...	...	...	...	...	...
National.....	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Oscoda.....	...	...	...	...	...	...	...	...	...	...	...	...
Pewabic.....	12 1/2	13	12 1/2	12 1/2	12 1/2	13	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	41	41 1/2	40	41	40	41	41 1/2	42	41 1/2	42	41 1/2	42
Ridge.....	4	4 1/2	4	4 1/2	...	...	...	...	3 1/2	4	...	...
Silver Islet.....	35	36	35	35	33	30	37	40	35	30	...	...
Star.....	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan.....	3 1/2	3 1/2	3 1/2	3 1/2	...	...	3 1/2	4	3 1/2	4	...	...

AUCTION SALE

—OF—

Mining Property.

At a meeting of the Stockholders of the Revere Silver Mining Company called for the purpose of determining whether to proceed further with the work at the mine or to close up the affairs of the Company, a majority of the stock voted to cease operations and to sell the property of the corporation.

In accordance with said vote, the entire corporate property, consisting of the mineral rights of a tract of land situated at "Blue Hill Neck," so called, with plant, boarding house, office, stable, wharf, etc., etc., will be sold at public auction to the highest bidder, at the Bangor House, in Bangor, Maine, on WEDNESDAY, the 30th of November, at 2.30 P. M.

For further particulars apply to

F. O. BEAL, President,

WM. E. BROWN, Treasurer.

Bangor, Maine.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Bluehill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FRANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb., 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, P. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris E. Boynton, Henry Farnum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. F. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. F. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Roddick, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$300,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.


MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

PEABODY SILVER MINING COMPANY,
Property situated on Columbian Mountain, Col. Stock unassessable.
President, J. W. Johnson, Boston; Vice President, E. C. Nichols, Bangor; Secretary, S. P. Johnson, Bangor; Treasurer, E. K. Walker, Boston; Directors, J. W. Johnson, S. C. Hursh, W. C. Bradley, N. W. Gannett, C. T. Plimpton, A. C. Goss, E. C. Nichols. Treasurer's and Transfer Office, 386 Washington St., Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp, July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett. P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
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CHANGE OF TIME, Oct. 8, 1881.

	A.M.	A.M.	P.M.	P.M.
Leave Bucksport,	5.30	10.00		5.00
Arrive Bangor,	6.42	11.15		6.05
Leave Bangor,	7.35		2.00	8.10
Arrive Bucksport,	8.45		3.15	8.10

The 5.30 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.00 P. M., trains from Bangor await arrival of trains from the west.
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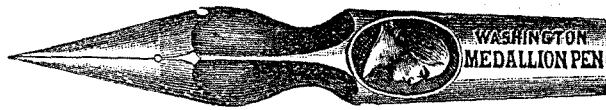
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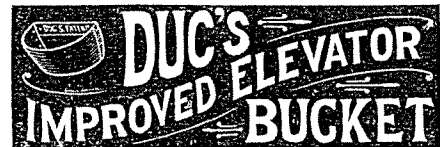
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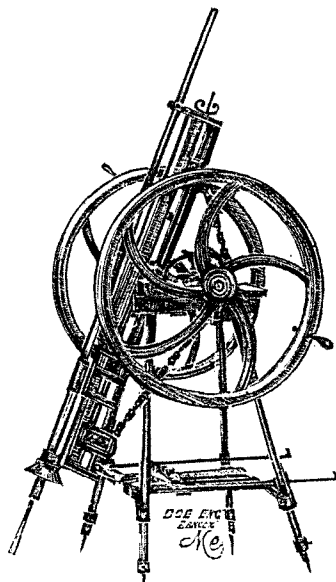
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BANGOR, ME., Nov. 14, 1881.

Notice is hereby given that at a meeting of the Board of Directors held on the 11th day of November, 1881, an assessment of One Dollar per share was levied upon the Capital Stock of this Corporation, payable to the Treasurer, November 30, 1881, by Stockholders of record at the close of business, November 25, 1881, after which date no stock will be transferred until the assessment thereon shall have been paid.

Any stock upon which the assessment shall remain unpaid on the 30th day of December, 1881, will be delinquent, and will be advertised for sale at public auction, and unless payment be previously made, a number of shares of said stock sufficient to pay the delinquent assessment, together with costs of advertising and expenses of sale, will be sold.

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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

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Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, NOVEMBER 25, 1881.

The latest quotations of ingot copper are highly satisfactory. Sales were made on Tuesday for 19 1-8c while 19 is freely being offered for immediate and 20 for January deliveries. It is believed by many that copper will touch 22 within sixty days.

In order that our compositors may have an opportunity to enjoy the Thanksgiving turkey and recover from its effects at their homes, we are obliged to omit a considerable amount of editorial matter and interesting mining news. It will keep, however, until next week.

Attention is called to the advertisement in another column of the Douglass Copper Company. The assessment of one dollar per share is payable Nov. 30 to the Treasurer, Frank H. Williams, at the office of the Company, 12 West Market Square, Bangor. Stock upon which the assessment remains unpaid by Dec. 30 will be delinquent and will be subject to sale at auction. The transfer books close to-day (Friday).

The share market has been depressed during the past week by the flurry in banking circles. There are, however, some bright features to the market and the marked rise in ingot copper will soon give mining stocks a strong upward tendency. On the Old Board, on Wednesday, Douglass sold at \$1 and closed at \$1 bid and 1 1-2 asked, Blue Hill was offered at \$1 and 50c bid, and \$2 3-4 was bid for Sullivan and 3 1-4 asked. At the Mining Board, Milton has the lead and advanced on Wednesday to \$1.29 and \$1.53 buyer 60 days. Copperopolis remained at \$2.15, Edgemoggin sold at 47c and 56c buyer 60 days, Deer Isle has declined to 50c, Twin Lead to 45c and Granger to 3c.

During the past week financial circles have been somewhat excited over the bank troubles in Boston. On Friday last the Pacific National Bank suspended and on the day following the Central National experienced a heavy run and was obliged to temporarily suspend. The Central speedily perfected arrangements and resumed business after a suspension of less than two hours. The Pacific is, however, in a much worse fix and its future movements are entirely uncertain. It is as yet unsettled whether the Bank will continue business or wind up its affairs. The chief cause of the trouble was the loaning by the Pacific Bank without ample security of very large sums to Theodore C. Weeks, an extensive operator in railroad and mining stocks. Weeks has been carrying large blocks of Eastern R. R., Silver Islet, Quincy and Brunswick Antimony stock and the decline in the share market prevented him from coming to time with the collateral to liquidate the claims against him. The depositors in the Pacific will ultimately lose nothing, but it is a heavy blow to the stockholders of the corporation and Pacific stock was held quite largely in Maine, more especially in Augusta, Bath and Thomaston.

The Engineering and Mining Journal thus alludes to the metal market: While, on the whole, current transactions in metals are on a limited scale, there is an undercurrent of excitement in many of them, the outlook for the early future giving rise to many and varied shades of opinion. One feature that is becoming more and more apparent, and that is calculated to affect our markets somewhat, is the report of a growing consumptive demand abroad, accompanied by hardening prices. The market for copper has continued to develop more strength, the Lake companies continuing firm. As heretofore repeatedly noted, the principal consumers are nearly all supplied until the close of the year, and the market is now watched chiefly for indications pointing to its course after that time. There is an indication that smaller consumers are beginning, in a limited way, to lay in a store beyond their present wants. During the week, from 400,000 to 500,000 pounds of Lake copper were sold at 18 1-4c, and now 18 1-2c is asked by holders, under which figure little or nothing can be had. Baltimore copper is quoted at 18 1-4 a 18 1-2c. We are informed that in London prices are higher, some reporting Chili Bars at £65, while others give as high as £66 10s.

CANADA PHOSPHATE LANDS.

In another column will be found a condensed report of the recent Government sale of Phosphate Lands in the county of Ottawa, which took place at Quebec on the 17th inst. The numerous companies engaged in the mining of phosphates in this district are, almost without exception, carrying on a lucrative business. The industry is yet in its infancy and the immense territory has scarcely begun to be developed, although some two thousand men are already engaged in the various sections. One company of gentlemen owning upwards of 600 acres in Wakefield are taking out immense quantities of phosphate and shipping it to Boston, where it finds a ready market. They have recently received a very good offer for their entire property from a Boston firm, but are holding it for the rise in prices which they be-

lieve to be close at hand. The phosphate trade is certainly 100 per cent. more brisk than at the same period of last year, and in view of the above facts we are somewhat surprised at the low prices realized from the Government sale. A large number of our countrymen have visited Canada during the past season with a view to investing in some of these lands, and in many instances the only thing which prevented them from making purchases was the high price at which lots were held by the owners. The absence of American capitalists from this auction sale would indicate that it was not very generally known, and we are of the opinion that for so large a sale very little advertising was done.

Personals.

MR. S. R. PRENTISS and E. H. BLAKE, Esq., of Bangor, are in San Francisco.

SUPT. DUFF, of the Mammoth and Twin Lead, was at the Bangor House on Sunday last.

MR. H. V. REDFIELD, the well known Washington newspaper correspondent, has died of consumption.

MR. CHARLES CROCKER, of San Francisco, has given \$20,000 to the California Academy of Science.

HON. J. Y. MARSHALL, President of the Robert E. Lee mine, has been elected district judge at Leadville.

HANK MONK, the famous stage driver who drove Horace Greeley "across the continent", is reported seriously ill at Carson City.

MR. A. A. HAYWARD, Supt. of the Faneuil Hall and Sullivan, passed through the city the first of the week on his way to Boston.

MR. GEO. W. SMILEY, Chairman of the American Mining Stock Exchange of New York, has been seriously ill but is now convalescing.

HON. JAMES G. BLAINE, it is stated upon good authority, will accept the presidency of the Missouri, Kansas & Texas Railroad as soon as he leaves the cabinet.

CAPT. JONATHAN G. RILEY, a gentleman prominently associated with the mining interests of the country, died recently at the Sturtevant House, New York city.

MR. W. A. ROOKS, mining superintendent at Wood River, will leave for Boston during the present month and will pass the winter in Boston, New York and Philadelphia.

MR. THOMAS STEPHENS passed through Bangor Saturday morning, en route to take charge of the Sullivan mine. Mr. Stephens is a gentleman of long mining experience and comes highly recommended.

MR. L. R. WIGGIN, of Farmington, N. H., was in Bangor on Friday evening last and gave us a pleasant call. Mr. Wiggin is one of the pioneer miners of New England and has important mining interests not only in Maine and New Hampshire but at the Chaudiere in Canada and at Montague in Nova Scotia. He was returning from a trip to the copper mine at Dorchester, New Brunswick, and was accompanied by MR. HAMILL, a Boston gentleman who has had mining experience in Colorado. They affirm that the Dorchester is a veritable bonanza.

The Pendleton House, Blue Hill, closes for the season Nov. 30.

Dips, Spurs and Angles.

—When a broker goes out shooting he takes a pointer along.

—A Montana man while indulging in a hearty sneeze fractured a rib.

—It is said when Geo. D. Roberts sneezes the mining exchanges catch cold.

—Plump girls are said to be going out of fashion. The plumper the girl the slimmer her chance.

—Arkansas is becoming so enterprising that every cross-roads horse-trough is called a watering place.

—A ballet dancer died recently in Naples, leaving a large fortune. This shows how easy it is to accumulate wealth when one dresses economically.

—Bears have turned up again in Maine and as bulls were always plenty in the Pine Tree State some one had better start a stock-broking establishment down there.—[Boston Home Journal.

—The following from the Denver Republican is the unkindest thrust of the season: "The extreme scarcity of ore on the Comstock necessitates the watching of it, otherwise the most of it would be carried off by curiosity hunters."

—When a Boston girl is presented with a bouquet she says: "Oh, how deliciously sweet. Its fragrance impregnates the entire atmosphere of the room." A "Down East" girl simply says: "It smells scrumptious; thanks, Reuben."

—A Canadian editor was recently assailed at his residence by roughs who threw large rocks through the parlor windows. The editor states that if the "amusement" is repeated a lead mine will be discovered at the *post mortem* examination.

—A sarcastic Georgia editor, in noticing a fair which recently came off in Macon, says: "One of our contemporaries took a very valuable premium, but a meddling and very firm policeman made him put it right back where he took it from."

—A story is told of a German shoemaker, who having made a pair of boots for a gentleman of whose financial integrity he had considerable doubt, made the following reply to him when he called for the articles: "Der boots ish not quite done, but der bill ish made out."

—A New Jersey widow couldn't earn six dollars a week over the washtub. She became a clairvoyant, and her income increased to sixty. It just shows that a man begrudges the quarter he pays for washing his shirt, while he will give a dollar to stick his nose into the other world before the show begins.

—"Please do not tumble down the shaft," is the polite notice posted at the mouth of a Nevada mine. It is much better than the rude "Keep off the grass" which greets the stranger on the Boston Common when there is a foot of snow on the ground and not a blade of grass anywhere about.—[New Orleans Picayune.

—A California editor last week started to accomplish the oft-attempted feat of eating thirty quail in as many consecutive days. The experiment failed in consequence of the singular behavior of a restaurant keeper, who refused to furnish the quail for nothing. Thus it is that the progress of scientific inquiry is defeated and retarded by the narrow prejudices of the ignorant and debased.

—The Menominee iron district in Michigan has a Charley Ross case growing out of the sudden disappearance of a son of a mining superintendent down there named Dickenson. The missing lad is about six years old. At first it was thought that he strayed into the woods and lost his way. A thorough search of the forest in the vicinity leads to the conclusion that the boy has been kidnapped by some one who wants to make money out of the abduction.

The Rosier Mine.

A VALUABLE PROPERTY IN THE BAGADUCE MINING DISTRICT—A MAINE MINE ON A DIVIDEND-PAYING BASIS—WHAT CAN BE ACCOMPLISHED BY GOOD MANAGEMENT.

A flying trip to Cape Rosier during the past week and a hurried inspection of the works and underground developments at the Rosier Mine have furnished us with material for a brief description and a few interesting details of what is to-day one of the most promising mining properties in the Eastern States. Although the mine has been in active operation scarcely more than twelve months and, as yet, is opened only to the first level, the developments have been carried forward so vigorously and intelligently that not only are the buildings, machinery and other equipments all that will be required for a long time to come, but the Company are free from debt and are realizing from the sale of their product upwards of \$1000 per month over and above all expenses. The Rosier, notwithstanding its splendid showing, is not an exceptional property; and its present condition only furnishes further proof of what we have long and persistently asserted—that the only thing required to place many of these Maine mines upon a paying basis and build up a legitimate and profitable industry in this section is able and intelligent management at the hands of practical business men.

Cape Rosier is a bold headland, some three or four miles in breadth by about seven in length, on the eastern shore of Penobscot Bay, at the entrance to the Bagaduce River, and constitutes a portion of the town of Brooksville, in Hancock County. In the spring of 1880, during the period of excitement over the recent mineral discoveries in eastern Maine, vague reports of the existence of mineral veins in the vicinity of the Cape came to the ears of E. B. Cram, Esq., of Portland, who accordingly sent Mr. John Holland, a miner and prospector of considerable experience, to investigate. The result was the location of what is now the Rosier Company's vein. Mr. Cram succeeded in enlisting several wealthy New York gentlemen in the enterprise, and the property was purchased and work commenced in April, 1880. The outcroppings of the ledge, which occurred at low-water mark, were considered sufficiently encouraging to warrant exploitation, although they were irregular and somewhat meagre, and gave no reliable indications of the character or permanency of the deposit. A shaft was started, however, and more or less ore, consisting mainly of zinc blende intermixed with bunches and stringers of copper pyrites, was encountered for a distance of about thirty-five feet, at which depth it had almost entirely disappeared. The Company were at a loss what to do, and feeling considerably discouraged, thought seriously of abandoning the enterprise. About this time, however, the services of Capt. Thomas Pollard, an accomplished mine manager and superintendent of half-a-century's experience, were secured to make a thorough examination of the property and, if considered advisable to continue the work of development, he was requested to assume charge of the mine. Capt. Pollard, after a thorough inspection of the surroundings, became convinced that the property was a valuable one, and under his advice and direction operations were resumed in November last with renewed energy and have vigorously continued up to the present time, with what results will be seen below.

It was evident that the original or No. 1 shaft had passed through the vein, and with a view of tapping it at greater depth where its trend, width and character would be better and more fully defined, it was driven vertically to a depth of 100 feet. From the bottom a crosscut of 12 feet broke through the foot-wall and penetrated the ore body. From this time on no waste rock has been extracted, as the entire contents of the vein as far as developed are all ore. No. 2 shaft was also started about 200 feet farther up the hillside, and after sinking through soil for a short distance the apex of the vein was encountered and

the foot-wall followed to the present depth of about 80 feet. This shaft has followed the inclination of the vein (about 25 degrees from the vertical) and has been in massive ore all the way, across its entire width. From the crosscut at No. 1 shaft drifts were carried both east and west along the course of the vein; the easterly drift was extended 23 feet, but this being under the waters of the bay, work has been suspended in this direction until the next level is reached; the ore-body was also found to be richer to the westward, and the westerly drift, where considerable stoping has been done, has been extended 57 feet toward No. 2 shaft, with which connection will eventually be made. Two winzes have also been started on the vein, one of which is 17 feet and the other 6 feet in depth. The great extent of the ore-body at this depth may be appreciated when it is stated that a crosscut has been run toward the hanging wall of the vein and, at present writing, has penetrated 24 feet and no wall reached. Ten feet of this is massive, high grade ore, and the remainder is fair grade and saleable at a profit. No. 2 shaft is quite dry; No. 1 is rather wet, but an immense Cornish pump keeps the mine free from water and is abundantly able to take care of all the water likely to be encountered.

A year ago, when Capt. Pollard arrived at the mine, there was neither a building nor machinery of any kind on the premises. At present, the plant is quite an extensive one. No. 1 shaft house is 20 feet square, and is attached to a large frame building 60x100 feet in size and two stories high, used as an engine-house, machine and carpenter shop and dressing house. It contains two large boilers; a horizontal engine of 75 horsepower, with 16 inch cylinder and 33 inch stroke, made by Borden & Co., Brooklyn; also a Blake crusher and Cornish rolls, and a number of jigs which the company are putting up to concentrate their light weight ores. No. 2 shaft house is 24 feet square and has connected with it cobbing-house and sheds about 30 feet square. In close proximity is the engine and boiler-house, 36 feet square, containing a large boiler and a 15 h. p. horizontal hoisting engine. The other buildings on the property consist of the office, 30x28 feet, two stories; small cobbing house with picking tables; powder magazine 12 feet square; three good sized houses occupied by miners and their families, and two small camps, for workmen. The buildings will all be completed inside of two weeks. The company have also built a substantial wharf 100 feet long on the shore and 50 feet wide, giving 7 feet of water on the frontage at extreme low tide. The works are supplied with an abundance of fresh water from a never-failing source, secured by stopping the course of a small rivulet about a hundred yards above the mine. The water is brought from the pond through pipes, and the elevation is sufficient to furnish all the pressure required.

The ore as it comes from the mine is broken and sorted by men and boys into three grades or classes—one of zinc and two of copper. The zinc ore as thus separated averages 40 per cent. and sells, on the company's wharf, at \$8 per ton; from 3-4 to 7-8 of the copper ore is first grade; the second grade averages 3 1-2 per cent. Eighty-five tons of first grade treated at Portland some time since averaged 8 1-2 per cent; the present first grade will run much higher and will certainly average 10 to 12 per cent. The ore has improved and is improving in quality with increasing depth and the zinc is rapidly being replaced by massive, high grade copper sulphurets. The waste amounts to little or nothing; indeed, less than 300 tons of waste rock have been taken out since the mine was first started. Shipments of ore have but recently commenced. Three hundred tons of zinc ore have been shipped to Bergen Point, N. J., and 700 tons of copper to the Portland Smelting and Reduction Works. Upwards of 500 tons remain on the dumps. The Company are mining at the rate of 500 tons per month, and shipping from 300 to 400 tons monthly. They pay \$1.25 per ton for stoping, and the whole is mined, cobbled and hauled to the wharf for considerably less than \$4 per ton. Additional facilities are being provided for handling the ore, and improvements are constantly

being made which must very materially reduce expenses. One hundred and five men are on the pay roll of the Company the present month. Of these, twenty-four are at work underground. Twenty are experienced miners from Vermont, and the rest natives.

The property of the Rosier Company covers an extent of 50 acres. The course of the vein is very nearly N. E. and S. W., giving them upwards of 2700 feet length of vein. The location of the mine could scarcely be surpassed. It is completely sheltered from the winds by the high hills and bluffs which surround it, and has an abundance of excellent dumpage ground and the best of drainage facilities. The wharf is but a few hundred feet distant from the works and could easily be reached by a short tramway, thus saving considerable expense of hauling. The harbor itself is a beautiful little cove just inside the head of Cape Rosier, exposed neither to winds nor tidal currents and having a sand or mud bottom. The tides rise and fall from 10 to 14 feet and, as before stated, the water on the wharf frontage has a minimum depth of 7 feet at low-tide. It is distant, by water, about 3 miles from Castine, 38 from Bangor, 30 from Rockland and but little more than 100 miles from Portland.

The Rosier Mining Company is a thoroughly substantial organization and is largely composed of some of the most solid and influential business men of New York City. The original Company was organized in April, 1880, under the laws of New York State, with a capital stock of \$1,000,000, divided into 100,000 shares of par value \$10 each. This Company held title to but 1000 feet of vein. Afterwards 1700 additional feet were added and the capital stock increased to \$2,000,000. Of the 200,000 shares 75,000 were placed in the treasury. The present Board of Officers is constituted as follows: President, R. G. Beardslee; Vice-President, E. H. Kirvy; Treasurer, Ernest Grosbeck; Secretary, J. B. Miller; Trustees, Col. Lewis Carr, Ernest Grosbeck, E. H. Kirvy, Grant B. Schley, Walter S. Poor, E. C. Preiss, Chas. C. Dodge, Geo. D. Schofield, all of New York, and J. H. Drummond, of Portland. Judge Beardslee is a member of the Board of Education in New York City; Gen. Dodge is a son of Mr. Dodge of the well-known firm of Dodge, Phelps & Co.; Mr. Grosbeck is a son of David Grosbeck, a retired Wall street operator, reputed to be worth two to three millions; Mr. Kirvy is Assistant Secretary of the Continental Fire Insurance Co., and all are gentlemen of the very highest business standing. Mr. B. G. Bean, of New York, is General Manager for the Company and makes his headquarters at the mine. The Company have never advertised their mine, have offered no stock for sale, pay no salaries in New York, and the proceeds from the sale of treasury stock, taken almost to a share among themselves, has all gone toward the development of the mine.

To Capt. Thomas Pollard is due the merit of having opened up this promising mine which is destined to become alike a source of profit to the owners and a credit to the State in which it is located. Coming upon the ground at a time when the property was making but a poor showing and the outlook for its future was far from encouraging, he has in one short year transformed it into a profitable enterprise and thus laid a corner stone in the foundation of what is destined to be Maine's most important industry. Nor is this the first time Capt. Pollard has been similarly successful. He it was who took the famous Vershire mine, in Vermont, in its darkest days, and placed it in a condition to pay the large dividends which have enriched its owners for so many years past. The Rosier mine is, then, in safe hands; and we shall be greatly disappointed if, under a continuance of the economical and intelligent management which has thus far characterized its developments, this property does not more than fulfill its present promise and become one of the most noted and remunerative mines in the country.

Large deposits of plumbago have been discovered in Alaska.

Prof. Shepherd's Visit to Mt. Mica.

In Sept. 1825, Prof. C. U. Shepherd discovered some remarkable crystals of tourmaline at Mt. Mica, and published an account of them in Silliman's Journal in 1830. We republish this account as it will be new to most of our readers and interesting to those who are watching the explorations at this extraordinary locality.

"I commenced my researches directly upon the top of the tourmaline ledge, not indeed in the firm granite, but rather in a covering of loose materials reposing upon it, to the depth of four or five feet. Here a slight digging had been commenced over a surface of a few feet, apparently in search of the fine crystallizations of brown quartz with which it would seem this particular spot formerly abounded.

On causing the exploration to be renewed an abundance of this substance was thrown out and very soon I began to meet with masses of lepidolite, completely studded over and penetrated by finely colored crystals of green and red tourmaline; drusy fragments of granite whose cavities were lined with the same materials; the feldspar being nearly opaque, of a delicate whiteness and possessing the beautiful chatoyment which this species often presents; crystals of greyish white quartz several inches in length and thickness and penetrated by tourmalines, and finally loose crystals of tourmaline and rubellite from a quarter of an inch to two inches in diameter. Thus we followed the digging in every direction so long as it continued to afford these products, which it did until within a short distance of the rock. The majority of pieces seemed to occupy a vein one foot wide and three ft. long by about two ft. in depth. Of these crystals and fragments of crystals I shall describe a few which appear to me to be the most interesting.

No. 1 is one inch and a half of the extremity of a green tourmaline whose diameter equals its length. Its color is an intense grass green with a tinge of blue.

No. 2 is a fragment three quarters of an inch in length by one inch and two-tenths in diameter, the extremities of which have been rendered flat by the lapidary. Its colors are faint and it exhibits transition of pink into green.

No. 3 is a crystal two inches long by one inch and a half in thickness. Its sides are coated with green tourmaline to the depth of about a line, the whole interior from end to end consisting of the most beautiful rubellite. The color is most intense at one extremity and is deepest throughout at the centre. One end is of a dark and exceedingly rich blood red color, becoming slightly amethystine towards the circumference, while the other approaches more the color of a crimson in which very little if any blue is discernible.

No. 4 is a crystal two and a half inches by one inch. Viewed across its axis, at one extremity it exhibits a fine sea green, while at the other it is of a rich crimson red. A joint detached from the green end presents, when viewed in a line parallel with its axis, a grass green bordering on a pistachio green color.

No. 5 is a crystal measuring an inch and a half each way. Its color when viewed across the prism is sea green with a large proportion of blue, but it passes into a pale rose color at one extremity. A brooch was cut from the green end of this crystal which measures nineteen-twentieths of an inch long, sixteen-twentieths broad and eight-twentieths in thickness. It is cut after the manner of a large emerald. Its color is intermediate between grass green and pistachio green and its transparency perfect. It contains but one flaw, which is invisible when the brooch is held in ordinary positions.

No. 6 is a section of a prism about one inch in length by two inches in diameter, of a pale pink color except a thin coating which is green. This crystal is an exception to the others here enumerated as regards its transparency, freedom from flaws and beauty of color, and is noticed only on account of its magnitude.

No. 7 is a rubellite brooch cut after the manner of the green one above described and which measures three quarters of an inch in length, thirteen-twentieths of an inch in breadth and four-tenths of an inch in thickness. When viewed by transmitted light it reminds one of the finest Syrian garnets; but seen by reflected light it gives much of the crimson red peculiar to the Oriental ruby. Its freedom from cracks, united to its transparency, lustre and beauty of color have caused it to be much admired by jewelers. Another crystal which I have seen in the hands of a lapidary in London, I am informed has afforded a red brooch which is regarded as a great curiosity.

A few crystals of transparent indicolite of a deep color were met with which were associated with rubellite and imbedded in lepidolite. From one of these I had two tables, five-eighths of an inch by half an inch, cut and mounted; but although of good color their beauty is injured by several cracks. Fragments of a less transparent variety of indicolite were pretty abundant; also small, somewhat flattened crystals of rubellite

with one or two polished faces and possessed of good color and considerable transparency, and a few transparent prisms of the green tourmaline precisely resembling the same mineral from Brazil."

An Important Maine Industry.

THE LIME BUSINESS—ITS HISTORY AND ITS STATISTICS—EXTENT OF THE INDUSTRY—PROBABILITIES AS TO THE FUTURE.

[Correspondence of the Boston Journal.]

ROCKLAND, Nov. 11, 1881.

Most of the cities and large towns of Maine have their specialties—Bath, shipbuilding; Bangor, lumber; Hallowell, granite; Lewiston, cotton manufacturing; Auburn, boots and shoes, and this city, lime. Rockland enjoys the distinction of being the largest lime-producing city of New England, if not of the United States, but the adjoining town of Thomaston enjoys the distinction of being the oldest town of Maine engaged in this business.

HISTORY OF THE INDUSTRY.

Thomaston originally embraced the territory now comprising the towns of Thomaston and South Thomaston and the city of Rockland, and was a part of the original Waldo patent or grant made by the English Government to Samuel Waldo about 1730. Gen. Waldo, in selling land to settlers, reserved mill sites and lime quarries. He commenced the burning of lime at Thomaston near the present site of the State Prison in 1735, Robert McIntire, an emigrant from Ireland, having charge of the business. In 1763 lime burning was carried on more extensively for General Waldo by a firm styled Wheaton, Briggs & Whipple, who monopolized the business. Lime was at this time shipped to Boston in empty molasses hogsheads and rum puncheons, and later in large casks holding 100 gallons. At the close of the Revolutionary war General Henry Knox succeeded by inheritance of his wife, who was a grand-daughter of General Waldo, and by purchase of other heirs to the Waldo estates in Maine, built a \$50,000 mansion at Thomaston, and immediately began extensive improvements, and carried on lumbering, burning brick and lime, and farming on a grand scale. From obtainable data a fair estimate of the lime produced by him in 1804 was an amount equal to about 25,000 to 30,000 of the present sized casks. In 1784 the first manufacture by citizens other than by authority of the proprietors commenced, but operations were at first very small. In some cases farmers would burn a kiln or two, keeping the business along with their agricultural operations, cutting kiln-wood and making casks during the long winters.

Thomaston, incorporated in 1777, with a population of 175, was for a long time the important town and port of Maine east of the Kennebec River. The present village at the confluence of Georges and Mill Rivers, a fine harbor, was the base of operations of the proprietors of the Waldo patent for many years. The State Prison was located here in 1824, the decisive reason for locating appearing to be the lime quarry, which it was supposed could be advantageously worked by the prisoners. Quarrying rock and burning lime was the principal business done for some years. In 1840 the burning of lime was abandoned and in 1863 all work in the quarry was suspended, and it is now flooded with water. Rockland was set off from Thomaston in 1848, and incorporated as a town called East Thomaston. The name was changed to Rockland in 1850 and the place was chartered as a city in 1853, with a population of 5052. In 1804 the first lime shed was erected in what is now Rockland City. In 1808, 30 kilns were in operation, and in 1828 the number had increased to 160 in the town of Thomaston. These kilns were, of course, nothing like the kilns of to-day or the output would have been enormous. In 1845 the annual manufacture amounted to 663,600 casks, valued at 85 cents per cask, employing 100 quarrymen, 150 kiln tenders, 50 teamsters, with wages computed at \$73,800 per annum. In 1861 the amount manufactured at Rockland and Thomaston was reported by the inspector to be 1,000,000 casks, but 25,000 of that amount at the latter place. The lime business was brisk during the war and after the war until 1873, when it fell off more than fifty per cent. and business was remarkably dull at the Lime Rock city. Prior to this the annual product varied from 1,000,000 to 1,300,000 casks. Since 1875 the business, in sympathy with the lumber business, has been gradually picking up, and this year is probably above the ante-bellum figures. The output of the kilns last year was in round numbers 1,000,000 casks, with a prospect of 1,100,000 to 1,200,000 casks for this year.

THE PROCESS OF MANUFACTURING.

There are now about forty patent kilns in operation in Rockland, seven in Rockport and Camden and five in Thomaston.

These kilns have an average capacity, when running, of 100 casks in twenty-four hours, and can be run continuously day and night except when closed for repairs. It requires the work of ten men and four horses to keep each kiln running. The rock is first blasted with giant powder in the quarry, then broken in pieces small enough for a man to handle easily, then loaded upon teams and drawn one mile to the kilns, located at the wharves, unloaded at the mouths of the kilns, broken with hammers into pieces about the size of a half-peck measure, and fed into the kiln as it is needed. It takes from eighteen to twenty tons of rock daily to furnish each kiln, and it is drawn from the quarries by teams consisting of four heavy horses each. Each kiln uses from five and a half to six cords of dry, soft wood every twenty-four hours. The wood is mostly brought from the coast and islands east and west of Rockland in small "coasters," and costs now about \$5 per cord, having advanced from \$3 early in the season. The lime is drawn out from the kiln three times in twenty-four hours, spread out upon a broad hearth 25 feet square, where it cools, is broken into the right sized lumps and put in casks. The whitest and purest lumps are sorted out and put in casks, and branded "white lump," for finishing purposes; the balance is branded "No. 1." and is the lime used in all except the nicest work.

THE COST OF PRODUCTION.

Lime has advanced since early in the season from 65 cents to 90 cents per cask, nearly 40 per cent, labor 20 per cent. and wood nearly 75 per cent. The casks, holding 2 1-2 bushels, are made in shops near the kilns and in shops outside and in adjoining towns, and drawn in with teams in large racks built expressly for the business, or shipped by boat or vessel. The casks this year cost 22 cents each and are an important item in the cost, being above one-third of the value of a cask of lime early this season and nearly one-fourth of the present price. To manufacture lime successfully the investment of quite a large capital is required. A good quarry is necessary, and this commands a high price now. The quarry must be kept from flooding by a pump run by steam. Kilns as now constructed, with extensive sheds and convenient wharves, teams, tools, etc., require a large outlay of money to advantageously prosecute the business. Small operators cannot compete with larger ones; the business must be done on an extensive scale, in such a manner as to take every possible advantage in order to be made profitable. The business has usually been conducted by business firms. The Cobb Lime Company, a corporation formed of a number of men and firms already in the business, was incorporated by a special act of the Legislature in 1871, but the act meeting with strong opposition, was repealed at the same session of the Legislature, and the corporation was organized under the general law in April of the same year. This corporation owns several quarries and forty kilns, with sheds and wharves, and has the facilities for doing an immense business. Twenty-three of its kilns are in operation this season. Scarcity of wood, the supply of which has not kept pace with the increased demand of lime-burners, has prevented this corporation from running more kilns this year. Hon. Francis Cobb is President of this corporation, and Hezekiah W. Wight is the business manager. These gentlemen, as well as the Directors, are thoroughly familiar with the lime business, and have ample facilities for putting lime upon the market at as low figures as any other concern or party. Among the other lime manufacturers who appear to be doing a thriving business are A. F. Crockett & Co., Ferrand & Spear, White & Case and R. & C. Shearer. A. F. Crockett & Co., next to the Cobb Lime Company, are the largest manufacturers this season. Owning their quarries, teams, kilns, sheds, wharves and a large supply store, they have the facilities and ability to do a fine business. They have grown up in it and know it thoroughly.

It is readily seen that it takes a large amount of labor to produce 1,000,000 casks of lime. There are 400 men in the quarries and at the kilns. The making of 1,000,000 casks, the cutting, hauling, shipping and handling of at least 60,000 cords of wood, besides loading and shipping the lime, take a small army of men, horses, etc.

The market for lime is the Atlantic States, principally. Formerly large quantities were sent further South, but Southern manufacturers are now supplying the Gulf States largely, and the West is not now dependent upon Maine, as formerly. The Knox and Lincoln Railroad has handled 70,000 casks this season, and the balance has been shipped by water.

HYDRAULIC CEMENT.

The Cobb Lime Company, in connection with the lime business, has established the manufacture of Portland hydraulic cement, which appears to be of superior quality, and is meeting with very satisfactory sale. The average tensile strength of this cement is warranted to be 250 pounds to the square inch when seven days old, and it frequently stands the test of 400 pounds. The material of which this cement is made is ready

at hand and costs nothing but the drawing from the quarries and the digging of the clay from a bank close to the works. The lime rock used is the mass of lime chips that accumulate in quarries, too small to be burned into lime, and but for this new use would be worthless. These lime chips are carted to the works, crushed and ground into powder, thoroughly mixed in water with the required amount of clay, dried in a huge oven and then placed in kilns between alternate layers of coke and burned. It is then taken and again pulverized by powerful machinery, packed in 400-pound casks and is ready for market. These works were erected in 1830, have three kilns, and produce 200 barrels per week. The company has sold everything it has made, and contemplates increasing its business by adding four new kilns, which, by putting in a sufficiently powerful engine, will treble the capacity of the works. Mr. A. W. Shaw, the manager and a large owner, served his time at this business in England. There is no other manufactory of this kind in the United States, and it is difficult to see why the enterprise may not prove to be a very successful one. The location certainly is most advantageous for it.

THE FUTURE OF THE BUSINESS.

The question naturally arises whether the supply of lime rock will hold out. There have been no new quarries opened of late. The belt of land seems to be narrow in which the rock appears near the surface, but the quarries appear to be thus far inexhaustible in depth. There is at least no present prospect of exhaustion, but if worked very much deeper machinery will have to be employed to hoist the rock to the surface instead of the present method of drawing it out with teams on heavy grades. But one quarry as yet employs machinery for hoisting the rock to the surface. There is no apparent reason why the lime business may not be successfully prosecuted in Rockland for a generation at least unless the supply of lumber for casks and kiln wood gives out, and if it ever does there will be something found by the inventive genius of some Rockland Yankee to supply the deficiency.

MAINE.

The Megantic Consolidated Copper Mining Co. of Canada.

A Syndicate of Massachusetts gentlemen have perfected an organization of the Megantic Consolidated Copper Mining Company with a capital of \$3,000,000, divided into 300,000 shares of a par value of \$10 each and have purchased the extensive and valuable copper mines heretofore known as the Harvey Hill Copper Mines, in the township of Leeds, county of Megantic, and province of Quebec, and located eight miles from Broughton,—a station on the line of the newly constructed Quebec Central Railroad. The property embraced in the purchase consists of four thousand acres of farm, wood, timber, and mineral lands, including the extensively-developed copper mines above referred to, together with large reduction works—60x100 feet, three stories—supplied with all the necessary machinery consisting of crushers, stamps and tools, etc., of the most improved make, and required for the reduction of the ore; also one large engine-house with one one hundred and fifty (150) horse-power engine, with boilers, shafting, pulleys, steam-pump, etc. Connected with the engine-house is a substantial brick chimney, 75 feet high by nine feet square at the base, surmounted by a neat and substantial cast-iron cap; a main-shaft house, 50x40 feet, two stories; one air-shaft house, 30x50feet, one story; blacksmith and machine shop, saw-mill, carpenter-shop, three large store-houses; also one large barn, two stables, harness and tool house, twelve tenement houses, and one large boarding house; one store and office building, and one ice-house. In the centre of the village is a large reservoir; also one other reservoir situated on an eminence considerably higher than the centre one, and about one hundred yards distant. These reservoirs supply the engine with water, and also are ready for use in case of fire, and are sufficient for the use of the whole village.

These mines consist of five veins, which have been fully opened, and seven shafts sunk, of varying depths, from ninety to seven hundred feet. Although strong cupriferous mineral indications have been discovered at various points, the principal mining operations have been confined to near the summit and on the northern slope of that part of the company's property called Harvey Hill, on lot 17 of the 15th range. The geological formation of this part of the above township is "taicoid mica slates" which, from their lustre, are called "nacreous slates," and are of the Quebec group—Lower Silurian. These slates are in bands, varying in color from deep to light blue, buff and pearly white. They underlie to the northwest at about twenty degrees from the horizon, and some of them are thickly studded with chloritoid; and one near the ridge of the hill is much charged with steatite, and is known as the "soapstone bed."

In these slates have been discovered some remarkable lenticular masses and inter-stratified beds of copper ores, and these ores present, with the slates in which they are embedded, geological features totally unlike those of the general copper mining districts, but may be considered a type of an extensive cupriferous formation, peculiar to this part of the Dominion, and which there are abundant reasons for believing contains a vast deposit of mineral wealth yet to be developed. From the appearance and character of the copper ores, when first discovered at the surface, they were supposed to be simply the out-cropping of what in depth would prove regular and well defined lodes, as they did not coincide with the slates either in strike or dip, but, after being opened and yielding large quantities of valuable copper ores, they were found to thin away from their centres, both horizontally and vertically, and disappear, having assumed the form of lenticular masses, variable in size, and succeeding each other at irregular intervals, and principally composed of quartz associated with very rich ores and bitter spar. In their occurrence and productiveness they are governed somewhat by bands of slates in which they are embedded. The average size of these lenticular masses is from fifty to seventy-five feet in length by thirty in height, and at the centre from twelve to twenty-five feet in thickness. Many have been found to far exceed these dimensions, and some are considerably less. They are equally variable in production, some yielding small quantities of rich ore, while others have yielded many tons. Of a lot of three hundred tons of copper ore taken from workings made in these masses, about twenty-nine thousand dollars worth of pure copper was obtained.

Of this quantity a very large per cent was obtained from the shaft "Fanny Eliza" alone, which has been discovered and worked to the depth of about six hundred feet from the surface by a cross cut from Kent's shaft. This valuable discovery proves a singular and important feature in this enterprise, and one greatly in its favor, namely, that the lenticular masses found at the deepest point have yielded the greatest quantities of rich copper ore, and from its appearance and the favorable geological character of the nacreous slates, there is every evidence that at a greater depth these lenticular masses increase in size and productiveness. In sinking Fremont's shafts to prove one of these lenticular masses the soapstone bed previously referred to was intersected ninety feet from the surface where some portions of it carried copper ore between the laminae of the rock; about 700 feet north of this bed another band of slates has been intersected in No. 2 Grass shaft, at a depth of about ninety feet, where the ore-bearing portion of the slates is termed "inter-stratified bed." It is at this point about six feet thick, and from it large quantities of good ore have been taken, dressed and shipped. The ore portion of the bed in this shaft terminates abruptly in descending, but enlarges on its western course towards Kent's shaft (900 feet west of Martin's shaft.) in which the same or a similar kind of bed has also been opened and worked at the 60, 120 and 180 foot levels. At the first level it has a thickness of twelve feet. The upper portion near the hanging wall carries yellow and the lower, or that on its foot wall, purple copper ore. At the one hundred and twenty foot, or second level, the same size and peculiar division of the ore is observable.

Under previous operations a large outlay of capital was expended in purchasing the property, developing the mine, construction of buildings, and the purchase of machinery and tools. There is now on the property a complete plant costing over \$100,000, and in good condition. The suspension of operations on the mine in 1878 was mainly through a general disagreement among the stockholders, which caused a lack of capital to operate it; the absolute need of first-class smelting works on the property and necessary railroad facilities sufficiently near the mine to avoid the large outlay for transportation to the then nearest railway station. At that time the nearest shipping point was twenty-one miles distant, while at present, and since the opening of the Quebec Central Railroad, the distance to the nearest shipping point has been reduced to little less than eight miles.

It is the intention of the Megantic Consolidated Copper Mining Company to re-open these mines on a very large scale and under the charge of Mr. W. G. Burnham operations have been commenced. The buildings will be repaired, the machinery thoroughly overhauled and the shafts pumped out. One thousand cords of wood and two hundred thousand feet of lumber will be cut on the land of the company this winter for use in and about the works.

—Work on the line of Telephone connecting the Milton works with the Copperopolis and other mines in that district has been begun. A crew of men under the superintendence of Mr. Jerry Hurley, of Ellsworth, are setting up the line of posts, and we expect to announce in our next issue the full completion of the line. Bad weather has somewhat retarded the work during the past few days.—[Sullivan Bulletin.]

CORRESPONDENCE.

The Oriental Mine, of Newburyport.

BOSTON Nov. 19th, 1881.

To the Editors of the Maine Mining Journal:

GENTLEMEN: The writer, not long since, made payment of his subscription for the JOURNAL, and was requested to furnish any items of interest in relation to the Oriental mine, of which he is Treasurer. The public have contributed nothing towards the purchase of the land owned by this company, or to the developments that have been made to date, consisting of 1 shaft 85 feet in depth, 1 about 60 feet deep, 1 shaft-house 25 1-2x65 feet, one 18x24 feet, 1 Blacksmith shop, and the necessary tools, machinery, &c., including steam boiler, steam pump, batteries, &c.

Instead of assays the management have had runs of ore made at various depths for the sole purpose of ascertaining just what might be reasonably expected to follow. The runs were made at the times indicated by the dates below, and the number of pounds of ore used at each run is also stated, which forms the basis for the result per ton of 2000 lbs.:

Jan. 19, 1881, 100 lbs. ore—35 ozs. silver.....	\$ 40.25	
1060 lbs. lead.....	53.00	\$ 93.25
March 2, 1881, 200 lbs. ore—38 ozs. silver.....	43.70	
1020 lbs. lead.....	51.00	94.70
June 3, 1881, 700 lbs. ore—84 ozs. silver.....	73.00	
1040 lbs. lead.....	52.00	125.00
Oct., 1881, 1571 lbs. ore produced 862 lbs. of silver lead bullion..		105.75

The company was organized in March last under the laws of New Hampshire, with a capital stock of \$250,000. The persons interested are Chester Downer, of Sharon, Vt., President; W. H. Harrington, of Boston, Treasurer, and in connection with them as directors are D. Gilbert Dexter, Cambridge, O. A. Gould, Boston, Prof. Thomas Binns, of Boston, John J. Pratt, of Wakefield, and E. B. Towne, of Nashua, N. H.; Prof. A. H. Kidney, Supt.

Work on the mine will soon be begun again and pushed vigorously forward until we place the mine upon a basis that will require no conjecture as to results.

W. H. HARRINGTON.

Gold Mining in Nova Scotia.

[Special Correspondence Maine Mining Journal.]

MONTAGUE GOLD MINES, N. S., Nov. 21st, 1881.

The prospects of the Rose Mining Co. are daily increasing, as they are at present crushing some 60 tons of quartz daily and the plates on the crusher show an increase over last crushing both from the main pump shaft, and the Western Deep shaft. (The specimens of quartz now being raised in this Western Deep Shaft are really a sight, and I only wish I could send you some of them for your cabinet—coarse, heavy, nuggetty gold, sticks out in the quartz like plumbs in a pudding.) Messrs. Kenty and Hawes, the contractors, are overjoyed at their prospect.

At the Friendship Gold Mine, work still progresses and the lead seems to widen at every foot taken out, and at this writing the contractors, Messrs. Kenty and Hawes, have finished about 12 feet of their contract in the main shaft, or shaft No. 1. The specimens of quartz now being taken out of the 75-foot stope are very rich and greatly encourage the owners of the mine. Messrs. Foster and Partner have large claims elsewhere and are anxious to commence operations upon them; and in all probability may dispose of the Friendship Gold Mine, and open and operate other claims that are equally as rich as the one they are at present working in this district. Several offers have been made for the Friendship Gold Mine; but nothing has been accepted thus far.

THE DOMINION CONCENTRATING COMPANY

are running full blast, day and night shifts, their machines for separating the arsenical iron from the sand and thus extract the gold and arsenic, and the iron is made into pure mineral paint. The Manager, Capt. Hale, is satisfied at the success these machines are giving and through the thoroughly learned manipulations of Mr. H. M. McLaughlin they are producing wonderment to everyone here in this section of the province.

a complete, continued success is gained, the gold mines of this district are enhanced almost double their values, as enough gold is lost in tailings from mill crushings to more than pay the running expenses of any mine in Montague.

The Symonds-Kaye Mine still continues to pull out the gold in quantities to reach an average of \$1,000 per month, yet their mine is not running a full compliment of men. Mr. Wm. Skerry, the manager of this mine, showed your correspondent some of the gold taken from their lead, and stated that there

seemed to be no "let up" to its coming out in just such rich quantities.

Major McDonald, an officer of rank in the English Army, in company with one Mr. Stether, of Halifax, has been operating on Range 16, 17 and 18, about 1-8 of a mile south of the Rose Mine, and have met with success. On range 17 they sunk a shaft about 30 feet and struck a lead 7 inches in width carrying good gold. Harry DeLouchre is the Supt. and they have hopes of a paying mine soon.

CHEZZETCOOK GOLD MINES.

Situated about 23 miles from Halifax, N. S., comprising as far as explored an area of some 6,000 feet long and 2,000 feet wide, having leads running through the different properties of from 5 to 18 inches width.

The Anderson claims have 7 leads running through them, ranging from 5 to 18 inches in width, and are all of them bearing gold. The richest is about 1/2 inch wide and carries about sixty to seventy ounces of gold to the ton. This property has recently been bonded to E. F. DeCamp, Esq., in the interest of Messrs. Clark & Bothwell, of New York City, owners of the famous Satemo Gold Mine, at Tangier.

Messrs. Dr. A. C. Cogswell, Johnson Hunt, John Weston and Mr. Anderson are owners of the next best claims in this district; they have 88 claims next adjoining the Anderson-De Camp claims on the west, and 62 on the east, covering the entire belt, now known as the gold belt of Chezzetcook. Their leads that have been opened are as follows:

The first one at the southern extremity of their claims is about 8 inches wide and carries 3 to 4 ounces to the ton; the next north is two inches; the next three inches, the next 4 inches, the next 12 inches, and the next three of about 1 inch; these all carry gold. Another of about 8 inches they are now prospecting for that carried 5 to 6 ounces to the ton and from 3 to 4 feet in width as found on the adjoining property which certainly must run through their claims. They recently bonded their entire property to a St. John company who have seemed rather slow in bringing things to a bargain until the time of their bond expired, and they are now going at work on their claims, and place a 15 stamp mill upon their property.

A. McLeod is still prospecting and has found the 12 inch lead, which shows gold as well as the 8 inch lead.

Vesey Barker, John Wright and L. F. Brown, whose claims lie directly west adjoining those of Cogswell, Weston and others, are now prospecting for the leads spoken of in other claims surrounding them. They have met with partial success. If Messrs. Cogswell, Weston and others put up a crusher on their claims they will have all they can attend to, both night and day, from property owners surrounding them. It is a delightful district to work in, having a beautiful climate and accessible both by post road and water. Its harbor, called the East Chezzetcook harbor, is very fine and admits of heavy draught vessels.

H. A. F.

LODES, LEADS AND VEINS.

GARDNER MOUNTAIN.—The annual meeting of the stockholders of the Gardner Mountain Copper Mining Company will be held at the office of Fred Atwood in Winterport on Tuesday, Dec. 6th, at 2 o'clock p. m, for the election of officers and to act upon any other business that may legally come before said meeting.

SUNBURST.—M. Donelan, Treasurer and Secretary of the Sunburst C. and S. M. Co., writes: "I have now got the shaft house, 20x26, finished. At the end of the shaft house I have put up a building 18x18, and have erected a whim for the horse to haul from the shaft. The whim works exceedingly well and quick, and we are now in good trim for sinking down. The vein has never looked better. The whole shaft is well mineralized. I believe before long the Union River will be one of the richest ore producing districts in Maine, for gold, copper and silver."

BENJAMIN FRANKLIN.—The Benjamin Franklin Silver Mining Company—the reorganized Franklin Silver Mining Company—is organized upon an assessable basis, with a capitalization of \$500,000, divided into \$200,000 shares of the par value of \$2.50 each. Assessments not to be levied oftener than once in three months, nor more than five cents to be levied at any one time, and not to exceed, in the aggregate, fifty cents on each share. The officers are as follows: President, Jeremiah Wooster, of Hancock; Vice-President, Walter M. Haynes, of Ellsworth; Treasurer and Secretary, T. J. Hodgkins, of Hancock. Directors, Jeremiah Wooster and Marcus Mullan, of Hancock; N. P. Doe and J. C. Towle, of Bangor; Walter M. Haynes, of Ellsworth; S. M. Carleton, Portland, and Edward Mullan, of Albany, N. Y. The Directors held a meeting at the Franklin House in this city on the 26th.

COPPEROPOLIS.—Work in this mine is being carried forward promptly and vigorously, day and night, and from the bottom of the shaft excellent ore is being taken out.—[Bulletin Nov. 19.]

FANEUIL HALL AND SULLIVAN.—Supt. Hayward reports the usual progress made and everything as moving along satisfactorily. A large compressor is now being built and will be ready for work in December. The foundation for the compressor is finished.

British Provinces.

The mines of the Sherbrooke district in Nova Scotia gave during the month of October 182 ozs. 3 dwts. of gold from 364 tons of quartz.

The Chignecto Post says Mr. Revere will probably commence next week sending away ore from the Dorchester (N. B.) mine to be smelted.

It is understood the Bay of Fundy Quarrying Company is embarrassed by the suspension of the Pacific National Bank of Boston, President Benyon being the principal stockholder.

The Duncan mine on the north shore of Lake Superior has suspended work for the winter. The New York mining expert who recently examined the property made an unfavorable report.

A vein of iron ore 40 feet wide and of unknown depth has been discovered near Charleston Lake, Leeds county, P. Q. within three miles of the Grand Trunk Railway and eight miles of the St. Lawrence River. The ore is said to be rich.

Mr. Rae in his book just published—made up of carefully revised correspondence to the London Times—expresses regret at the lack of enterprise of Nova Scotia moneyed men. Nova Scotians, he thinks, are too ready to grumble, and are deficient in a patriotic faith in the resources of Canada and in the capacity of her sons to develop them. He believes, however, that the "Royal Province" has a great future, as "the capitalist, the mining engineer, the agriculturist, the sportsman and the emigrant, can all find within the ample and untenanted limits of Nova Scotia an incomparable field wherein to realize the fondest desires of their hearts."

SALE OF PHOSPHATE LANDS.—As stated in our last issue, the Canadian Government offered 29,000 acres of Phosphate Lands at public auction in Quebec City, on the 17th inst. Of the whole lot only about 7500 acres were sold, the principal purchaser being M. Chas. Dumoulin, President of the French Phosphate Company, of Paris, France. Several other prominent French capitalists were present, among them being M. Legru, of the Franco-Canadian Credit Mobilier, and Senator Fabre. The upset price being \$3 per acre, the majority of lots sold were disposed of at that figure. The highest prices paid were \$11.50 per acre for one lot and \$30.50 per acre for another, both being purchased by Mr. Dumoulin. All the sales were made subject to the mining laws and regulations of the Province now in force. Purchasers had to pay for their lots in cash, on adjudication.

The Deloire, or Aux Liards, where the latest gold discoveries have been made, is a tributary to the Great Mackenzie river of the North. A party of British Columbians, who during the past summer visited this far away spot, brought back with them reports of rich "diggings." To reach them they had to travel hundreds of miles through a rugged country, and pass through numerous dangers. In one instance, to make a three mile portage, their boat had to be drawn out of water up the perpendicular face of a rock 150 feet in height. The river, which, from a point called Hellgate, is said to be navigable for 500 miles to its entrance to the Mackenzie, is full of dangerous canons, rocks, sharp bends and whirlpools. In one of the whirlpools sticks of timber of large size and 50 feet in length have been known to disappear end foremost. Chinamen in large numbers have found their way here. When white men failed, the indefatigable Celestials set up their rockers, and, although the gold on the bars is fine and hard to save, make from ten to twenty dollars a day per man. These Chinamen have grown potatoes and cabbages on the banks of the river, but the agricultural prospects of the region are not cheering. Ducks, grouse and other game are plentiful. Trappers state that during the winter quicksilver freezes sufficiently solid to make into bullets, but notwithstanding the intensity of the cold they experience no ill effects from it.—[North Shore Miner.]

RENFREW CONSOLIDATED GOLD MINING CO.—Announcement was recently made of the organization in Portland under the laws of Maine of the Renfrew Consolidated Gold Mining Company. The Halifax New Era says the Renfrew mine is sure to yield large returns now that it has dropped into skillful hands,

and Dr. Rae, the manager, is the right sort of man to manage and develop its resources. We congratulate the company on their wise selection. The property is located in Renfrew District, Nova Scotia, thirty-five miles from Halifax, twenty-eight miles by rail, and seven by a fairly good wagon road, and consists of 34 acres of land (about 28 acres), through which ten good veins of quartz run, the quartz carrying what is termed free gold. Four of these veins have been reopened. No. 1, or the Brook Vein, has been opened in three places, with two shafts sunk to a depth of seventy feet. No. 2, or the hard lead, has four shafts, sunk to a depth or from fifty to eighty-seven feet. No. 3, or the slate lead, has two working shafts on it, one at a depth of one hundred and sixty feet, the other ninety feet. Six veins or leads have not been re-opened, but were formerly worked to a profit. No. 10, or the Bain Lead, has one shaft sunk two hundred and fifty feet, and it is proposed to run the cross tunnel from this shaft two hundred and eighty feet south, so cutting or tapping all the veins at its depth. The veins all dip about forty-five degrees, with good solid walls of what is termed Win Rock, which rock is we believe peculiar to Nova Scotia, and is a combination of granite and feldspar. Nos. 1, 2 and 3 veins are all equipped for work, and pay ore is now being raised from the mines. This ore contains from \$5 to \$100 per ton, of gold, and is of a character easily worked. About one hundred acres of timber, suitable for mining purposes, adjoins the mines.

Croppings.

[COMPILED, CONDENSED AND CONSOLIDATED FROM OUR EXCHANGES.]

The Alice mine is to be placed on the stock board of London.

An exchange estimates the number of mines working in Colorado this winter as 17,000.

A very large and rich gold lead has recently been discovered in the vicinity of Fort Maginnis, Montana.

Comstock bears report that Fair and Flood have quarrelled and that their future operations will be inharmonious.

While hydraulic mining will be quiescent during the winter months in California, gold quartz mining will be more active than for many years.

The total shipments of iron ore from Lake Superior districts the present season aggregate the large amount of 2,110,319 tons. This is an increase of 303,277 tons over the shipments of 1880.

The Calumet & Hecla mine produced in October, 1640 tons and 560 pounds of copper mineral. For the ten months of 1881, ending Oct. 31, the aggregate production was 16,230 tons and 1,433 pounds.

The Philadelphia Mining & Smelting Company has during ten days' work obtained from one smelter in Wood River over 160 tons of bullion, valued at over \$32,000, which is now on its way to Philadelphia.

Tuscarora, Nevada, a town which was named Cornucopia from the supposition that it was to be the "horn of plenty," has had such a set back that it has almost returned to the original wildness of nature.

Attracted by recent developments, Eureka, Nevada, is filling up with mining men and many important sales of mining property are under negotiation. A boom for the Eureka district is confidently looked for soon.

The Mining World says if ore can be reduced at an expense of one or two dollars per ton, whole mountains in New Mexico and Arizona can be torn down and treated with a profit. An immense fortune awaits the man who invents such machinery.

Wells, Fargo & Co.'s bullion shipments from Silver Reef, Utah, for the month of October aggregated \$83,690.41. The outlook of the sandstone district was never brighter, and the yield for the ensuing season promises to be the largest since its discovery.

The St. Louis Steel and Ore Company with a capital of \$5,000,000, is the latest St. Louis combination. The company is the consolidation of the Vulcan Steel Company, the Pilot Knob Iron Company and the Grand Tower Mining and Transportation Company.

The Tombstone Epitaph describes a camp called the Santa Catalina which promises to become the coming district of Southern Arizona. Two of the leading mines, the Apache, copper, and the American Shield, silver,—have recently been sold to Eastern parties.

About 200,000 ounces fine silver was turned into the San Francisco Mint on the 4th, for account of the Government, at

\$1.13 per ounce, which was the price offered that day for lots over the counter. The above amount was awarded at Washington, the Nevada bank getting 110,000 ounces.

Old Dominion Copper official report states that the hoisting works and the remainder of the machinery arrived at the mines on Nov. 9, and that the smelting furnaces will be completed and running before Dec. 1. The superintendent says that everything is in proper shape for a steady run for years.

A Tucson dispatch says: Advices from Altar, Sonora, are to the effect that Leopold Vacencia, attorney of the Santa Felafía and Caborco Mining Companies, was attacked by a squad of soldiers, sent to Altar on a secret mission by Gov. Ortiz, and his papers were taken from him. The documents are supposed to be of value in a suit brought against the mining companies by Borquez & Garcia, with whom Gov. Ortiz is acting.

Late advices from Wm. Denton, M. E., who is now at the San Nicolas mine, Chapatuato, belonging to the Michoacan Syndicate, state that there is now about \$150,000 worth of high grade ore on the dumps of that remarkable property, and that the entire cost of opening and excavating up to date has been only \$6,061, and that includes supplies, tools and buildings. It will be seen that the work has been done economically. The Syndicate properties, not only at Chapatuato, but at Zinda and Ozumatlan, are being developed systematically with the most satisfactory results, and the Syndicate shareholders are to be congratulated.

Nuggets.

—There is talk of a through fast train between Boston and St. John.

—The track of the Bangor & Katahdin Iron Works Railroad is now laid from Milo to Brownville.

—Thanksgiving occurred yesterday and the stock exchanges were accordingly closed on that day.

—The wires of the Mutual Union Telegraph Company have been extended this week to St. John.

—Mr. Wm. Weeks, of Rockland, has purchased an interest in the Granite Hotel, Vinalhaven, and will hereafter manage the house.

—A Fellowship in Mining has been established at Princeton University which is to be open to the senior class and to post graduate students.

—A new shaft has replaced the broken one on the steamer Mount Desert and she is now making her regular trips between Rockland and Sullivan.

—The Railroad Gazette reports that up to the present time this year, 6,000 miles of railroads have been constructed. This far surpasses any previous record.

—The auction sale of the mining property of the Revere Silver Mining Company will come off at the Bangor House, on Wednesday, November 30th at 2.30 P. M.

—Director of the Mint Burchard says that \$50,000,000 of gold has been coined at the Philadelphia Mint during the year, a sum five times greater than the amount coined during any previous year.

—Mr. Winthrop W. Fisk, the well-known assayer, has removed from Ellsworth to Boston for the winter and located at 238 Harrison Avenue in that city where he will promptly attend to any work in his line.

—During last winter about fifteen thousand cords of wood were cut for use at the Katahdin Iron Works. The crews have commenced work again and it is expected this winter about twenty thousand cords will be cut.

—We are indebted to J. M. Smith, of Chloride, New Mexico, for Beckwith's Guide to the great mining districts of Central New Mexico. The pamphlet gives valuable information in regard to Socorro, the Black Range, and other famous mining camps and contains a reliable map.

—The children of Oakes Ames have given a public hall to the people of North Easton, Mass., to commemorate their father. The building has cost \$60,000, and will be known as the Oakes Ames Memorial Hall. Mr. Fred M. Ames established a free public library at North Easton a few years ago, at his own expense.

—A shooting accident occurred at Blue Hill on Friday afternoon last. A sixteen year old son of Ezra Carter, of that village, received a charge in the neck from a small revolver. Several boys were firing at a target with a revolver and young Carter ran in front of the weapon just as it was being dis-

charged. The bullet after entering the neck took a downward course and is supposed to be lodged behind the collar bone. The boy has been as comfortable as could be expected since.

—Mr. F. O. Beal, the popular landlord of the Bangor House, has largely increased his hotel interests. Our readers will remember we chronicled a few weeks since the purchase by Mr. Beal of the Bangor House for \$50,000. Mr. Beal has now made another large purchase and for a sum approximating that paid for the Bangor House has secured the Penobscot Exchange. It has been but a few years since he assumed the management of the Bangor House, but he possessed important qualifications for the position and his efforts have been crowned with wonderful success. The Penobscot Exchange will continue under the charge of Messrs. Smith & Thayer until April next when it passes into the hands of Mr. Beal, and the Bangor House and Penobscot Exchange—the two leading hotels of this city—will then be run under the personal management of this gentleman, assisted by persons of long experience in the business. Our congratulations are extended to Mr. Beal for the valuable hotel property which he has secured by these extensive purchases and we are confident in our belief that the most sanguine hopes of this enterprising and industrious gentleman will be more than realized, that the Bangor House and Penobscot Exchange will enjoy a patronage larger than ever before and that the wants of the travelling public will be subserved in a highly satisfactory manner.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, NOV. 23, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.		Tues.		Wed.	
	Bld.	Ask.	Bld.	Ask.	Bld.	Ask.	Bld.	Ask.	Bld.	Ask.	Bld.	Ask.
Allouez.....	3 1/4	3 3/4	...	...	3 1/4	...	3 1/4	3 3/4	3 1/4	3 3/4	3 1/4	3 3/4
Atlantic L. S.....	14 1/2	...	14 1/2	...	15	...	...	...	15	...	15 1/2	17 1/2
Atlas.....	...	...	...	...	...	...	...	...	...	...	...	...
Aztec.....	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper..	1 1/4	1 1/2	1 1/4	1 1/2	1 1/4	1 1/2	1 1/4	1 1/2	1 1/4	1 1/2	1 1/4	1 1/2
Brunswick.....	...	...	...	...	...	...	...	...	...	...	...	...
Calumet & Hecla..	...	224 1/2	...	225	220	221	220	222	225	227	225	226
Catalpa.....	...	...	...	...	...	...	...	...	...	...	...	...
Central.....	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls.....	...	...	...	...	...	...	1	4	...	...	2 1/2	5
Contentment.....	...	...	...	...	...	...	...	...	...	...	...	...
Douglass.....	1	1 1/4	...	...	1	1 1/4	...	...	1	1 1/4	1	1 1/4
Dana.....	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver.....	...	...	...	...	...	...	...	1 1/2	...	...	...	1 1/2
Empire.....	...	...	...	...	...	...	...	...	...	...	...	...
Franklin.....	...	13	13	...	12 1/2	...	11	12	12	12 1/2	12 1/4	12 3/4
Harshaw.....	...	5	5	5 1/4	5 1/4	...	3	5	4	5	4	4 1/2
Huron.....	...	...	3 1/2	3 1/2	2 1/4	...	2 1/4	2 1/4	3	3 1/4	3 1/4	3 1/2
Hanover.....	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt.....	...	...	...	...	...	...	...	...	...	...	...	...
International.....	...	...	...	...	...	...	...	...	...	...	...	...
National.....	2 1/4	2 1/4	2 1/4	...	...	...	...	...	2	2 1/4	2 1/4	2 1/2
Osceola.....	...	...	...	...	...	...	...	...	...	...	...	...
Pewabic.....	12 1/4	...	12	...	12	...	12 1/2	13	13	13 1/2	...	...
Phoenix.....	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac.....	...	...	...	...	...	...	...	...	...	...	...	...
Quincy.....	43 1/2	44	...	...	41 1/2	42	41	42	43	43 1/2	43 1/2	44 1/2
Ridge.....	...	3 1/2	...	...	3 1/2	...	...	...	...	...	...	...
Silver Islet.....	35	...	25	50	26	...	24 1/2	25 1/4	22 1/2	23	23	23
Star.....	...	...	...	...	...	...	...	...	...	...	...	...
Sullivan.....	...	4	3 1/2	3 1/2	3 1/2	3 1/2	...	...	...	...	...	3 1/2

AUCTION SALE

—OF—

Mining Property.

At a meeting of the Stockholders of the Revere Silver Mining Company called for the purpose of determining whether to proceed further with the work at the mine or to close up the affairs of the Company, a majority of the stock voted to cease operations and to sell the property of the corporation.

In accordance with said vote, the entire corporate property, consisting of the mineral rights of a tract of land situated at "Blue Hill Neck," so called, with plant, boarding house, office, stable, wharf, etc., etc., will be sold at public auction to the highest bidder, at the Bangor House, in Bangor, Maine, on WEDNESDAY, the 30th of November, at 2.30 P. M.

For further particulars apply to

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Bangor, Maine.

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CHARLES K. MILLER, Supt., Camden.

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A. A. HAYWARD, Supt.

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Leave Bucksport,	5.30	10.00		5.00
Arrive Bangor,	6.42	11.15		6.05
Leave Bangor,		7.35	2.00	8.10
Arrive Bucksport,		8.45	3.15	8.10

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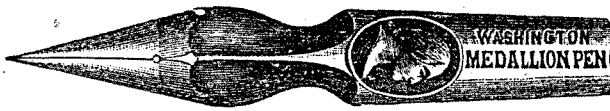
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Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

Judge A. P. WISWELL, President. C. C. BURRILL, Treasurer.

J. B. REDMAN, Sec'y. FRANCIS WORCESTER, Manager.

Directors—A. P. Wiswell, C. C. Burrill and Eugene Hale, all of Ellsworth.

W. I. VALENTINE, Superintendent.

Milton Mining and Mining Co.

OFFICE, 4 SEARS BUILDING, BOSTON, MASS.

MINES, SULLIVAN, ME.

Capital, \$500,000. 200,000 Shares. Par value, \$2.50

CHAS. H. LEWIS, Pres't. GEO. E. HARRINGTON, Treas.

W. O. ARNOLD, Secretary.

Directors—Chas. H. Lewis, Geo. E. Harrington, Geo. West, J. D. Prescott, O. Arnold.

JOHN SHOENBAR, Superintendent.

Pine Tree Silver Mining Co.

OFFICE: 24 BROAD STREET, NEW YORK; MINES, SULLIVAN, MAINE

Capital, \$500,000. Par Value of Shares \$5.00.

Unassessable.

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W. OSCAR ARNOLD, Secretary.

Directors—COL. CHAS. H. LEWIS, GEN. JOHN M. CORSE and ROBERT L. CUTTING, Jr., of New York.

Revere Silver Mining Company.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

F. O. BEAL, President. WM. E. BROWN, Treasurer.

WM. E. BROWN, Secretary.

Directors—F. O. Beal, W. J. Webb, George W. Knight, Ezra L. Sterns, A. H. Thaxter, Bangor.

JAMES MITCHELL, Superintendent.

Stewart Copper Mining Com'y.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 100,000 Shares. Par Value, \$5.00.

HON. FREDERICK M. LAUGHTON, President. C. F. BRAGG, Treasurer.

C. F. BRAGG, Secretary.

Directors—Frederick M. Laughton, F. W. Hill, C. F. Bragg and Thomas White, of Bangor; S. N. Stockwell and G. B. Putnam, of Boston.

DANIEL DUNN, Superintendent.

Sullivan Mining Company.OFFICE, 17 Tremont Bank Building, BOSTON, MASS.,
MINES, SULLIVAN, ME.

Capital, \$500,000. 100,000 Shares. Par value, \$5.00.

GEORGE B. BROWN, President. F. R. NOURSE, Treasurer.

CHARLES L. PERRIN, Secretary.

Directors—Geo. B. Brown, B. S. Grant, C. F. Farrington, J. G. Russell, Dudley R. Child, E. A. Birchard and Frederic R. Nourse.

THOMAS CAHILL, Superintendent.

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OFFICE, PORTLAND, ME. MINES, SHELBURNE, N. H.

Capital \$500,000. 100,000 Shares. Par value, \$5.00.

I. D. M. SWEAT, President. WM. E. GOULD, Treasurer.

C. W. HOBBS, Secretary. STEPHEN JENNINGS, Managing Director.

Directors—L. D. M. Sweat, Charles A. Dyer, C. D. B. Fisk, C. H. Chase, C. S. Morrill, Geo. L. Warren, John E. Burnham, Wm. E. Gould, Stephen Jennings.

GEORGE D. HOLT, Superintendent.

Twin-Lead Mining and Smelting Co.

OFFICE, BANGOR, ME. MINES, BLUE HILL, ME.

Capital, \$500,000. 125,000 Shares. Par Value, \$4.00.

EUGENE M. HERSEY, President. SAMUEL STERNS, Vice President.

JOHN R. MASON, Secretary and Treasurer.

Directors—E. M. Hersey, Samuel Sterns, John S. Jenness, Jacob Stern, F. H. Williams and Thomas N. Egery, of Bangor; Charles Duff, of Blue Hill.
CHARLES DUFF, Superintendent.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund \$6,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Erastus Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Corinna.
Office at Oldtown, Me.

FAVORITE MINING COMPANY.
Blanchill, Me. Incorporated July 1, 1881.
Capital, 500,000 Shares, \$5 each; assessable.
President, A. E. Herrick, Blanchill, Vice-President, H. A. Tripp, Blanchill; Treasurer, H. B. Darling, Blanchill; Secretary, H. A. Tripp, Blanchill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FANEUIL HALL & SULLIVAN MINING CO.
Incorporated Feb. 1880.
Capital, \$500,000, divided into 100,000 shares, forever unassessable.
Company's office at the Mine, West Sullivan.
President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
Littleton, N. H. Incorporated under laws of Maine, Dec. 1879.
Capital, \$500,000; Shares, \$5 each; Treasury Fund, 95,000 Shares.
President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. E. Putham.

LADY ELGIN COPPER MINING COMPANY
Blue Hill, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Rodier, of Boston; Arthur S. Newman, of Portland; Roderick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
Organized under the laws of the State of Maine. Capital Stock \$500,000; Number of Shares 100,000; Par Value \$5; Full paid and forever unassessable. Treasury Fund 20,000 Shares.
President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
Hancock, Me.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

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Property situated on Columbian Mountain, Col. Stock unassessable.
President, J. W. Johnson, Boston; Vice President, E. C. Nichols, Bangor; Secretary, S. P. Johnson, Bangor; Treasurer, E. R. Walker, Boston; Directors, J. W. Johnson, S. C. Hursh, W. C. Bradley, N. W. Gannett, C. T. Phipps, A. C. Goss, E. C. Nichols.
Treasurer's and Transfer Office, 336 Washington St., Boston.

ROBERT EMMETT SILVER MINING CO.
Egypt Bay, Hancock, Me. Incorp. July, 1879
Capital, \$400,000; Shares, \$10 each.
President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett.
P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
Bucksport, Me. Incorporated, Feb., 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
Of Surry, Me. Incorporated, February, 1881.
Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 268,500 Shares.
President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
P. MULLAN, Supt.
Office—Ellsworth, Me.

[ESTABLISHED 1848.]

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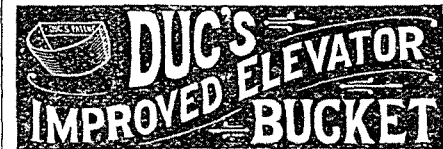
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CHANGE OF TIME, Dec. 5, 1881.

	A. M.	P. M.
Leave Bucksport,	5.30	A special train 5.00
Arrive Bangor,	6.42	runs in connect- 6.05
Leave Bangor,	7.35	tion with Sanford 7.15
Arrive Bucksport,	8.45	Steamers. 8.25
The 5.30 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.15 P. M., trains from Bangor await arrival of trains from the west.		
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" " " " Bar Harbor, 3.00
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ASSESSMENT NOTICE.

OFFICE OF THE TREASURER

— OF THE —

Douglass Copper Company,

— OF —

BLUE HILL, ME.,

12 West Market Square, Bangor, Me.

BANGOR, ME., Nov. 14, 1881.

Notice is hereby given that at a meeting of the Board of Directors held on the 11th day of November, 1881, an assessment of One Dollar per share was levied upon the Capital Stock of this Corporation, payable to the Treasurer, November 30, 1881, by Stockholders of record at the close of business, November 25, 1881, after which date no stock will be transferred until the assessment thereon shall have been paid.

Any stock upon which the assessment shall remain unpaid on the 30th day of December, 1881, will be delinquent, and will be advertised for sale at public auction, and unless payment be previously made, a number of shares of said stock sufficient to pay the delinquent assessment, together with costs of advertising and expenses of sale, will be sold.

By order of the Board of Directors,

FRANK H. WILLIAMS,

Treasurer.

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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

28 West Market Square, Bangor, Maine

E. M. BLANDING, }
W. F. BLANDING, } EDITORS.

E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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All letters should be addressed to

THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, DECEMBER 2, 1881.

Copper stocks are booming.

What has become of the "Hamilton Process?"

Owing to an unusual demand for extra copies of our last issue, which we were unable to supply, we republish this week our article upon the Cape Rosier mine. We flatter ourselves, however, that in addition to this the usual amount of interesting matter will be found in our columns.

A Western exchange remarks that the obituary builders attached to our contemporaries in the mining camps are kept quite busy this cold weather in recording the many virtues of the gentlemen who thaw out giant powder cartridges on top of stoves and "pass to the shadowy beyond."

The San Francisco Exchange thinks the recent scientific decision of the solidity of the earth must surely be cheering to the holders of Comstock securities—there is so much more "room for a bonanza," you know, than if this terrestrial ball had been merely a shell only forty or fifty miles thick, as some have pretended.

Ingot copper is still very strong and going higher every day. There is none to be had for less than 19 1-2c, and as high as 19 5 8 has been offered. The Lake companies evidently control the market, and as supplies are likely to be scarce owing to the close of Lake navigation they are indifferent sellers even at present prices. The Mining Record thinks the consumption of the present year will undoubtedly be the largest in the history of the country, and it is claimed that the increased production will barely meet the increased requirements of consumers.

The following, from the Lake City (Col.) Silver World, illustrates a phase of the mining industry familiar to all who have ever attempted to urge the development of the mineral resources of our Eastern States: "From a window opposite our desk we can look out upon a strip of mountain-side not one-fourth of a mile wide, heavily clothed with timber and not a mile from Lake City, which contains no less than six brittle silver veins, any one of which has superior surface showings to any of the noted mines of the northern part of the State. Their accessibility is their only drawback. There is always something better 'a little farther west' and nearer heaven, among eternal snows and to which timber must be hauled at great expense. Verily, the ways and notions of investors are mysterious and past finding out."

The mining share market during the present week has been marked by no special changes. The sales of Maine mining stocks have not been large but a strong undertone has generally characterized the market. The latest sales on the Boston Stock Exchange have been Douglass \$1 3-4 and Sullivan \$3 1-4. On the Boston Mining and Stock Exchange, Milton, Copperopolis and Edgemoggin have been the strong features. Milton sold up to \$1.29 cash and \$1.56 buyer 60 but on Wednesday declined to \$1.24 and \$1.45 buyer 60. Copperopolis has advanced to \$2.22 and several sales are reported at those figures. Edgemoggin shows a sharp advance and on Wednesday sold at 54c and 65c buyer 60. Deer Isle has exhibited strong fluctuations selling on Saturday as high as 84c and declining subsequently to 51c on Wednesday. Twin Lead has sold down to 46c and Grainger 3c.

Concerning the "tribute system" of operating mines, so much in favor in the old country, the Eureka (Nev.) Sentinel says that tributing, as carried on in some of the mines of that district, has proven more beneficial than otherwise to the companies fostering or allowing it. Usually when miners cannot get work at regular wages they are willing to take chances in the abandoned portions of the mine. Sometimes they run for months without finding a pound of ore. There is a stipulation in every tributer's lease that whenever he strikes a body of ore sufficiently large to admit a set of timbers, then he must surrender it to the company. If a party of miners have been in bad luck, and driven long lines of drifts, and at last come on ore, the companies are in the habit of doing the fair thing by them, that is to say, that they are in many instances allowed to get even on all of their dead work, which is but fair, since these finds are in ground that would not be prospected on day's pay.

It would seem that New York is really to have a new Stock Exchange. The present institution has long been considered by many to be "old fogyish" and far behind the spirit of the age in its methods and scope; the immediate incentive of the movement, however, is said to be recent arbitrary rulings which have caused much dissatisfaction, and the arrogance with which the representatives of many important organized interests are habitually treated by the Governing Committee. The preliminary steps for organization have been taken, and the names of the largest railroad men and capitalists in the country—including W. H. Van-

derbilt, Jay Gould, C. P. Huntington, E. D. Morgan, Cyrus W. Field, H. J. Jewett, David Dows, Russell Sage, D. O. Mills and Sidney Dillon—are mentioned positively as among the projectors. The new institution will possess many advantages over the old Stock Exchange, and will be conducted on a more equitable and liberal basis. The refusal of a building on Broadway in an advantageous location has been obtained, and it is proposed that in addition to the Board rooms it will contain offices to be occupied by a bank and trust company, through which the new Exchange will transact its business. The capital proposed is \$5,000,000, and each member is to hold not less than \$5,000 of stock. It is intended that in the building there shall be direct telegraphic communication with all the leading markets of the world and with the principal cities of the country.

ASSESSABLE MINING STOCKS.

It is with no small degree of gratification that the *MINING JOURNAL* calls attention to the change of sentiment which has come over the investing public during the past year with regard to assessable mining stocks. Our readers will remember the storm of opposition and abuse raised by our advocacy of the assessment system, not many months ago. Communications poured in to us from subscribers—many of whom were among our most esteemed friends—deploring a course which, they assured us, if persisted in would surely greatly retard and perhaps ruin the young and struggling mining industry of Maine; many of our valued contemporaries, notably several of the Boston dailies which had taken the Maine mining interest under the shelter of their wings, held up their hands in holy horror at the audacity displayed in advocating such a policy in opposition to their expressed opinions, based upon “the experience of years,” and commiserated the lack of wisdom and forethought shown in pursuing a course tending to “utterly destroy our influence.” At the time of the Sullivan reorganization, for which the management were so shamefully abused, the *MINING JOURNAL* was, so far as we are aware, the only newspaper which stood by them; to-day, many who were loudest in their denunciations of the Sullivan for adopting such a “suicidal” policy are among the strongest advocates and supporters of this system of organization, of which the Stewart Copper Mining Company, of this city, is the pioneer. One after another the other Maine companies have followed their example until at the present time nearly all the active mining operations in this State are being conducted on the assessment plan. All the Blue Hill companies are now established upon this basis.

Of the results of these reorganizations it is scarcely necessary to speak; they are familiar to all. But for them many of our most promising mines would be lying idle, their shares would have no market value and the industry, in this section, would be in a sorry condition. Contrary to general expectation, the shares of assessable companies have been found to be in greater demand as desirable investments than those which claim to be “forever unassessable.” Time has proven the wisdom of our assertions; and, whatever others may think of it, the people of Maine have come to look upon the assessment plan, as permitted and authorized

by the laws of this State, as the only one which positively insures the development of a mining property and the demonstration of its worthlessness or value. That our readers may see that older and abler authorities than we are of a similar opinion, we append the following extracts from the *New York Bullion*, an able and conservative sheet, and the *Mining Record*, the leading mining journal of the United States:

[From *Bullion*, Nov. 7.]

The reference to the Comstock as a terrible example of the assessment plan might be a weighty argument but for the fact that for every dollar lost in assessments in the Comstock mines, ten dollars have been lost in non-assessable mines, which had to stop working because they hadn't money enough to put them on a paying basis. The absurdity of the non-assessable system lies just here; while the stockholders are not permitted to assess themselves, they are allowed to mortgage their property. This, as everyone knows, is a more wasteful course than levying assessments. Mortgages on mines do not usually get placed except at an extortionate discount, and the stockholders are compelled to pay the loss. While the law prevents a stockholder from paying more than once “for the same thing,” it also compels him to pay twice for it whenever the debts of the concern amount to as much as the capital stock, so that the law in itself is inconsistent. But what we urge in regard to the assessment system is this: The power to assess ought to be lodged in a majority in amount of the stockholders, not in the trustees, who can dispose of all their stock before levying an assessment, and thus save themselves from their share of the charge. If, in the opinion of a majority of the stockholders, the condition of the property will justify an additional expenditure which can be met only by assessment of the stock, and if they are willing to tax themselves for that purpose, then, we contend, the minority ought to be compelled to do their part towards the protection of the property of all. Under the non-assessable system it has been the invariable result that the man with five or ten thousand shares has been willing to put his hand in his pocket and pay his part of a general contribution, so as to protect his large holding. The man with a hundred shares, however, feeling that the other has more to lose than he has, and that he will be bound to protect his big interest anyway, says: “I won't pay anything; he can pay what he likes, and if the property pays in the end, I will benefit by it without losing anything, and if it doesn't pay he will stand all the loss.” There are a number of companies so placed to-day by a few stockholders with small interests but unlimited meanness and assurance, that they can do nothing unless the majority of stockholders choose to pay all the costs, while they can only share in the profit. Generally these factious small holders have such a keen vision for the main chance that they won't even sell their holdings, because they think the other stockholders will advance the money and make their shares ultimately more valuable. Familiarity with the workings of both systems, the assessable and non-assessable, has demonstrated the fact that the latter puts it in the power of a minority very often to destroy the property in which they are interested; and that the former has frequently put a mine on a paying basis which otherwise would have had to be abandoned because of lack of money to bring it to a proper stage of development.

[From the *N. Y. Mining Record*, Nov. 26.]

It seems that the *Leadville Chronicle* has been urging the superiority of the plan of incorporating mining companies with the power on the part of the trustees to levy assessments over that of non-assessable shares. And this, it seems, also was done under the impression that not a journal in the East agreed with the *Chronicle* in that regard. Our contemporary is mistaken. Before the *Chronicle* had existence, and ever since, the *Mining Record* has held that the

assessment plan is the safest and most effective method of working a mining property, with certain modifications of the Pacific Coast method, which would assure stockholders against the flagrant and barefaced manner in which the system has been perverted in that quarter. We have believed it to be practicable to formulate a system of financial administration, which, embracing the power of assessments, at the same time would assure the stockholders against dishonest trustees better upon the assessment than upon the non-assessment plan, and that is still our belief. We exhausted the subject several years since under all its aspects. Meanwhile, and quite recently, we have consulted with parties largely interested in mining under the non-assessable system, for a definite, practical movement here in New York, to secure from the next Legislature such necessary modifications of the laws of this State as shall authorize assessments, under certain conditions and restrictions, which we trust to see so carefully and intelligently framed, as to remove all legitimate objections to the assessment-power.

Personals.

SENATOR FAIR, of Nevada, is in Washington.

CAPT. DANIEL DUNN, Supt. of the Stewart mine, was in the city on Wednesday.

FREDERICK H. PRINCE, son of Mayor Prince, has been elected a member of the Boston Stock Exchange.

MR. CHAS. DUFF, the well known mining superintendent, was in Bangor on Saturday and the MINING JOURNAL is indebted to him for a pleasant call.

MR. WILKIE DARLING has been in the city during a portion of the week. Wilkie is enthusiastic over the prospects of the mines with which he is connected and believes the Bagaduce to be the "coming district."

GENERAL B. F. BUTLER has been quietly investigating the merits of some of our Maine mining properties for several months past. It is reported that he has recently purchased a claim adjoining the Milton Mine, at Sullivan.

A. R. SAVAGE, ESQ., returned from his New Mexico trip, Tuesday afternoon. He has been absent five weeks, has travelled 6,000 miles and comes home recruited in flesh and color. He reports the Lewiston-owned mines as looking finely and the stockholders expect to hear a very interesting statement from him.—[Lewiston Journal.]

GEO. W. GREEN, High Sheriff of San Mateo county, Cal., who formerly belonged in Belfast, Me., recently met his death by drowning at the junction of Redwood Creek and San Francisco Bay. He was out in a sailboat in company with his family and a trusted prisoner. Both he and the convict were drowned by the upsetting of the boat in a squall, but the family were rescued.

MR. JAMES M. SMITH, of Chloride, New Mexico, writes us concerning his "mysterious" absence which so alarmed his friends in the Black Range. Learning while on his way West that the mail line to the Black Range had been cut off by the Apaches, he camped at the Sherman House, Chicago, until the troubles had blown over. He states that this is the third time he has been killed since he took up his residence in the Black Range. Mr. Smith further says that the mines of that district are developing finely, showing large veins of silver glance and free gold. In his mining experience of twenty years he has never seen a mining camp which equals

that in richness, and if there is no further trouble from Indians during the winter, a big boom is anticipated in the early spring.

Dips, Spurs and Angles.

—Gentlemen may cry cashier, and cash there; but when the board of directors wake up there is cash nowhere.

—It is said that owing to snow it requires two summers to get into the Sawtooth Mountain mines, and then—unless a man is expert on snowshoes—about three summers more to get out.—[Virginia (Nev.) Enterprise.]

—In alluding to the fact that the new gold mines of New York are found near Saratoga, the Grass Valley (Cal.) Tidings says it seems a wise provision in nature when it is considered how people who visit there are charged.

—An old Greek was found on an emigrant ship recently, trying to beta passage to America. He was a mega-looking chap when they hauled him from the hold, but he revived when the steward delta ration of grog out to him.—[Boston Globe.]

—Both Morse, who invented the telegraph, and Bell, the inventor of the telephone, had deaf-mute wives. Little comment is necessary, but just see what a man can accomplish when everything is quiet around them.—[San Francisco Exchange.]

—A hen is a most inconsiderate and unaccountable creature. Now that she can lay eggs worth three cents apiece, she takes a vacation and refuses to have anything at all to do with business. By and by, when chicken seed are down to fifteen cents a dozen, she will put on extra help, and even work nights to flood the market. The hen is no financier.—[Springfield Union.]

—A "ghost" is rampant in the Pennsylvania coal mines. The Mt. Carmel News says: "On Wednesday, two Poles working in a breast at Alaska shaft were startled to see a man dressed in white apparel opposite them. They made no necessary inquiries but threw down their tools and ran into the breast adjoining theirs. It followed them and then laid down on the rock, rolled over and disappeared."

—Nobody ever knows where lightning is going to strike. It appears that in running a railroad tunnel just north of Hoboken, New Jersey, what promises to be a big vein of copper has been uncovered. We have always wondered at the cheek of the malarial, lantern-jawed, woe-begone Jerseyman who could proudly boast his arrival from the mosquito-laden Hoboken flats. The origin of "brass" seems now explained.—[Colorado Miner.]

—It has been left to a Canadian to interpret the Hittite inscriptions, which European scholars found unsolvable. The Rev. Professor Campbell, of Montreal, has discovered that the Hittite and Aztec alphabets are identical, and by applying the latter to the former he has been enabled to read inscriptions belonging to the ninth century before Christ. A mine of historical knowledge is thus opened up, and the study of Aztec questions will shed much light on Old World problems.

—"The Great West" is a great country. Wonders never cease there. A few years ago a spring was discovered in one of the territories wherein ran genuine chicken soup, steaming hot, and now Arkansas comes to the front with the announcement of the discovery of a spring that bubbles over with a substance resembling 'Jersey Lightning' and which is said to have the flavor and the effect of the best apple brandy. There can be no doubt of the genuineness of the article, as many of the inhabitants where the spring is situated have been found lying about it daily in various stages of intoxication.—[Republic.]

—Boston has analyzed her drinking water, and the Globe of that city prints a map of the result, which is quite an in-

teresting menagerie. Among the animalculæ shown we recognize the skeletons of the megatherium, the glyptodon, the ichthyosaurus, the plesiosaurus, and the pterodactyl, all of which lived before the flood. The vegetable matters brought to light by the microscope include what appears to us to be a broken cart wheel, a section of stove pipe, a prize beet, a clothes horse and an old saddle. It is not surprising that the temperance party in Massachusetts is making progress backward.—[Portland Advertiser.

—The profuseness of the Pacific Coast newspaper man's cheek is proverbial; its hardness is well illustrated by the following from the San Francisco Daily Report: A Chronicle reporter found a small dynamite torpedo lying in the hallway of Irish American Hall an evening or two ago, after one of the meetings of the League, and thinking it was a package of candy or something of the kind, proceeded to tear it open with his teeth. It exploded of course, tearing all the plaster off the walls, breaking the windows, lifting several doors off their hinges, turning the staircase upside down and making a hole in the sidewalk three feet deep. The swelling on the side of the reporter's face had not quite subsided even yesterday.

—A cable dispatch states that recently the King of Ashantee killed 200 maidens in order to mix their blood with the mortar for a new temple he was erecting. The Mormon temple of this city is built much on the same plan. For nearly thirty years its walls have been creeping up from the foundations. For every stone in the wall a wasted life was laid down; for every trowel of mortar a poor family was robbed, and for every corner of the wall there was a victim to the cowardly murderers of the Danite band. The structure is the embodiment of the crimes, cruelties, robberies, and hypocrisies of Mormonism since it first sprang into life, a noxious weed, springing from the garbage heap of superstition.—[Salt Lake Tribune.

—The first piece of gold found in California was worth 50 cents, and the second \$5. Since that time one nugget worth \$43,000, two \$21,000, one \$10,000, two \$8,000, one \$6,500, four \$5,000, twelve worth from \$2,000 to \$4,000, and eighteen from \$1,000 to \$2,000 have been found and recorded in the history of the State. In addition to the above, numberless nuggets worth from \$100 to \$500 are mentioned in the annals of California gold mining during the last thirty years. The two first referred to were exchanged for bread, and all trace of them was lost. The finder of one of the \$8000 pieces became insane the following day, and was confined in the hospital at Stockton. A carefully compiled history of the gold hunters of 1850-'60 would be interesting reading in these latter days.

—The Welt-No-More Mine, situated about seven miles northwest of the Horn Silver mine, is one of the finest properties in the country (to spend money on.) It is easy of access (by balloon) and it has the best dumping facilities of any mine south of Alta. The only drawback to the property is the lack of ore; with plenty of that it would rival the Comstock lode. There is a shaft forty-two inches deep from which a drift can be run 100 feet. This valuable property will be placed upon the Eastern stock market if a syndicate can be formed that will get out papers at its own expense. The owners will furnish some very rich specimens of ore (from the Horn Silver mine) for samples, and a diagram in blue and red, showing the course the vein ought to run. The float found a mile away, is pronounced by experts as being a rich chloride of assessment. The close proximity of the Welt-No-More to the Horn Silver makes it a desirable property, (for wild cat speculators.) The integrity of the owners is so well established that the mere mention of their names is enough to assure the most skeptical that it is no fraud, for with such names as John Taylor, Geo. Cannon and Ben Tasker at its head it is bound to succeed.—[Southern Utah Times.

The Rosier Mine.

A VALUABLE PROPERTY IN THE BAGADUCE MINING DISTRICT—A MAINE MINE ON A DIVIDEND-PAYING BASIS—WHAT CAN BE ACCOMPLISHED BY GOOD MANAGEMENT.

A flying trip to Cape Rosier during the past week and a hurried inspection of the works and underground developments at the Rosier Mine have furnished us with material for a brief description and a few interesting details of what is to-day one of the most promising mining properties in the Eastern States. Although the mine has been in active operation scarcely more than twelve months and, as yet, is opened only to the first level, the developments have been carried forward so vigorously and intelligently that not only are the buildings, machinery and other equipments all that will be required for a long time to come, but the Company are free from debt and are realizing from the sale of their product upwards of \$1000 per month over and above all expenses. The Rosier, notwithstanding its splendid showing, is not an exceptional property; and its present condition only furnishes further proof of what we have long and persistently asserted—that the only thing required to place many of these Maine mines upon a paying basis and build up a legitimate and profitable industry in this section is able and intelligent management at the hands of practical business men.

Cape Rosier is a bold headland, some three or four miles in breadth by about seven in length, on the eastern shore of Penobscot Bay, at the entrance to the Bagaduce River, and constitutes a portion of the town of Brooksville, in Hancock County. In the spring of 1880, during the period of excitement over the recent mineral discoveries in eastern Maine, vague reports of the existence of mineral veins in the vicinity of the Cape came to the ears of E. B. Cram, Esq., of Portland, who accordingly sent Mr. John Holland, a miner and prospector of considerable experience, to investigate. The result was the location of what is now the Rosier Company's vein. Mr. Cram succeeded in enlisting several wealthy New York gentlemen in the enterprise, and the property was purchased and work commenced in April, 1880. The outcroppings of the ledge, which occurred at low-water mark, were considered sufficiently encouraging to warrant exploitation, although they were irregular and somewhat meagre, and gave no reliable indications of the character or permanency of the deposit. A shaft was started, however, and more or less ore, consisting mainly of zinc blende intermixed with bunches and stringers of copper pyrites, was encountered for a distance of about thirty-five feet, at which depth it had almost entirely disappeared. The Company were at a loss what to do, and feeling considerably discouraged, thought seriously of abandoning the enterprise. About this time, however, the services of Capt. Thomas Pollard, an accomplished mine manager and superintendent of half-a-century's experience, were secured to make a thorough examination of the property and, if considered advisable to continue the work of development, he was requested to assume charge of the mine. Capt. Pollard, after a thorough inspection of the surroundings, became convinced that the property was a valuable one, and under his advice and direction operations were resumed in November last with renewed energy and have vigorously continued up to the present time, with what results will be seen below.

It was evident that the original or No. 1 shaft had passed through the vein, and with a view of tapping it at greater depth where its trend, width and character would be better and more fully defined, it was driven vertically to a depth of 100 feet. From the bottom a crosscut of 12 feet broke through the foot-wall and penetrated the ore body. From this time on no waste rock has been extracted, as the entire contents of the vein as far as developed are all ore. No. 2 shaft was also started about 200 feet farther up the hillside, and after sinking through soil for a short distance the apex of the vein was encountered and

the foot-wall followed to the present depth of about 80 feet. This shaft has followed the inclination of the vein (about 25 degrees from the vertical) and has been in massive ore all the way, across its entire width. From the crosst at No. 1 shaft drifts were carried both east and west along the course of the vein; the easterly drift was extended 23 feet, but this being under the waters of the bay, work has been suspended in this direction until the next level is reached; the ore-body was also found to be richer to the westward, and the westerly drift, where considerable stoping has been done, has been extended 57 feet toward No. 2 shaft, with which connection will eventually be made. Two winzes have also been started on the vein, one of which is 17 feet and the other 6 feet in depth. The great extent of the ore-body at this depth may be appreciated when it is stated that a crosst has been run toward the hanging wall of the vein and, at present writing, has penetrated 24 feet and no wall reached. Ten feet of this is massive, high grade ore, and the remainder is fair grade and saleable at a profit. No 2 shaft is quite dry; No. 1 is rather wet, but an immense Cornish pump keeps the mine free from water and is abundantly able to take care of all the water likely to be encountered.

A year ago, when Capt. Pollard arrived at the mine, there was neither a building nor machinery of any kind on the premises. At present, the plant is quite an extensive one. No. 1 shaft house is 20 feet square, and is attached to a large frame building 60x100 feet in size and two stories high, used as an engine-house, machine and carpenter shop and dressing house. It contains two large boilers; a horizontal engine of 75 horsepower, with 16 inch cylinder and 33 inch stroke, made by Borden & Co., Brooklyn; also a Blake crusher and Cornish rolls, and a number of jigs which the company are putting up to concentrate their light weight ores. No. 2 shaft house is 24 feet square and has connected with it cobbing-house and sheds about 30 feet square. In close proximity is the engine and boiler-house, 36 feet square, containing a large boiler and a 15 h. p. horizontal hoisting engine. The other buildings on the property consist of the office, 30x28 feet, two stories; small cobbing house with picking tables; powder magazine 12 feet square; three good sized houses occupied by miners and their families, and two small camps, for workmen. The buildings will all be completed inside of two weeks. The company have also built a substantial wharf 100 feet long on the shore and 50 feet wide, giving 7 feet of water on the frontage at extreme low tide. The works are supplied with an abundance of fresh water from a never-failing source, secured by stopping the course of a small rivulet about a hundred yards above the mine. The water is brought from the pond through pipes, and the elevation is sufficient to furnish all the pressure required.

The ore as it comes from the mine is broken and sorted by men and boys into three grades or classes—one of zinc and two of copper. The zinc ore as thus separated averages 40 per cent. and sells, on the company's wharf, at \$8 per ton; from 3-4 to 7-8 of the copper ore is first grade; the second grade averages 3 1-2 per cent. Eighty-five tons of first grade treated at Portland some time since averaged 8 1-2 per cent; the present first grade will run much higher and will certainly average 10 to 12 per cent. The ore has improved and is improving in quality with increasing depth and the zinc is rapidly being replaced by massive, high grade copper sulphurets. The waste amounts to little or nothing; indeed, less than 300 tons of waste rock have been taken out since the mine was first started. Shipments of ore have but recently commenced. Three hundred tons of zinc ore have been shipped to Bergen Point, N. J., and 700 tons of copper to the Portland Smelting and Reduction Works. Upwards of 500 tons remain on the dumps. The Company are mining at the rate of 500 tons per month, and shipping from 300 to 400 tons monthly. They pay \$1.25 per ton for stoping, and the whole is mined, cobbled and hauled to the wharf for considerably less than \$4 per ton. Additional facilities are being provided for handling the ore, and improvements are constantly

being made which must very materially reduce expenses. One hundred and five men are on the pay roll of the company the present month. Of these twenty-four are at work underground; twenty are experienced miners from Vermont, and the rest natives.

The property of the Rosier Company covers an extent of 50 acres. The course of the vein is very nearly N. E. and S. W., giving them upwards of 2700 feet length of vein. The location of the mine could scarcely be surpassed. It is completely sheltered from the winds by the high hills and bluffs which surround it, and has an abundance of excellent dumpage ground and the best of drainage facilities. The wharf is but a few hundred feet distant from the works and could easily be reached by a short tramway, thus saving considerable expense of hauling. The harbor itself is a beautiful little cove just inside the head of Cape Rosier, exposed neither to winds nor tidal currents and having a sand or mud bottom. The tides rise and fall from 10 to 14 feet and, as before stated, the water on the wharf frontage has a minimum depth of 7 feet at low-tide. It is distant, by water, about 3 miles from Castine, 38 from Bangor, 30 from Rockland and but little more than 100 miles from Portland.

The Rosier Mining Company is a thoroughly substantial organization and is largely composed of some of the most solid and influential business men of New York City. The original Company was organized in April, 1880, under the laws of New York State, with a capital stock of \$1,000,000, divided into 100,000 shares of par value \$10 each. This Company held title to but 1000 feet of vein. Afterwards 1700 feet more were added and the capital stock increased to \$2,000,000. Of the 200,000 shares 75,000 were placed in the treasury. The present Board of Officers is constituted as follows: President, R. G. Beardslee; Vice-President, E. H. Kirvy; Treasurer, Ernest Grosbeck; Secretary, J. B. Miller; Trustees, Col. Lewis Carr, Ernest Grosbeck, E. H. Kirvy, Grant B. Schley, Walter S. Poor, E. C. Preiss, Chas. C. Dodge, Geo. D. Schofield, all of New York, and J. H. Drummond, of Portland. Judge Beardslee is a member of the Board of Education in New York City; Gen. Dodge is a son of Mr. Dodge of the well-known firm of Dodge, Phelps & Co.; Mr. Grosbeck is a son of David Grosbeck, a retired Wall street operator, reputed to be worth two to three millions; Mr. Kirvy is Assistant Secretary of the Continental Fire Insurance Co., and all are gentlemen of the very highest business standing. Mr. B. G. Bean, of New York, is General Manager for the Company and makes his headquarters at the mine. The Company have never advertised their mine, have offered no stock for sale, pay no salaries in New York, and the proceeds from the sale of treasury stock, taken almost to a share among themselves, have all gone toward the development of the mine.

To Capt. Thomas Pollard is due the merit of having opened up this promising mine which is destined to become alike a source of profit to the owners and a credit to the State in which it is located. Coming upon the ground at a time when the property was making but a poor showing and the outlook for its future was far from encouraging, he has in one short year transformed it into a profitable enterprise and thus laid a corner stone in the foundation of what is destined to be Maine's most important industry. Nor is this the first time Capt. Pollard has been similarly successful. He it was who took the famous Vershire mine, in Vermont, in its darkest days, and placed it in a condition to pay the large dividends which have enriched its owners for so many years past. The Rosier mine is, then, in safe hands; and we shall be greatly disappointed if, under a continuance of the economical and intelligent management which has thus far characterized its developments, this property does not more than fulfill its present promise and become one of the most noted and remunerative mines in the country.

Exports of gold from Russia are rapidly increasing.

LODES, LEADS AND VEINS.

ACTON.—The York County Advocate says the mining interest in Acton has taken a new lease of life, and some of the mines are being energetically worked.

PORTERFIELD LEDGE.—The Porterfield Ledge Mining Company, in order to procure funds for developing their mine, offer to dispose of one-half their stock and the controlling management at a very low figure. The property is located on the shore of Penobscot Bay, between Camden and Rockland, within fifty feet of deep water. The shaft is down about 100 feet, showing a well-defined vein, with two clean, smooth walls, from two to five feet in width and mineralized with sulphurets containing copper, silver, gold and nickel. Assays of the ore have given \$98 in silver and \$20 gold per ton. The mine is fully equipped with shaft and ore house 50x20 feet, 20-h.-p. boiler and engine, Blake steam pump, Brian steam drill, electric battery for blasting, blacksmith shop and all necessary mining tools. The Company own the mineral right to fifty acres of land, comprising about 1200 feet on the veins; two parallel veins to the one already opened can be reached by a crosscut of 200 feet.

Sullivan.

SULLIVAN.—A slight fire occurred at the Sullivan works on Thursday morning of last week. The only damage was to the small shaft-house over the inclined shaft and the loss is much more than covered by insurance. The fire will occasion no delay in the prosecution of underground developments.

MILTON.—The regular routine of work has been carried forward during the past week in every department, and the usual good progress has been made in drift and winze. The vein in bottom of winze is rapidly improving and the outlook for the immediate future becomes more and more bright.—[Bulletin, Nov. 26.]

Egypt.

The Egypt mining district is fast becoming a remarkably busy locality. The large, well conducted and commodious Copperopolis House, is filled with active, intelligent and industrious workmen, mechanics and laborers, engaged at the several mines. A large schooner is now discharging machinery, boilers and coal for the Harvey Elliot. A force of men are busily employed in constructing the line of telephone connecting the mining districts of Egypt and Sullivan. With such mining properties as the Copperopolis, Harvey Elliot, Cumberland and others not now in active operation, Egypt must ere long rank among the first of busy places in Hancock County.—[Sullivan Bulletin, Nov. 26.]

COPPEROPOLIS.—The ground in the shaft is more favorable for working, and rapid progress is being made in sinking. The same uniform good ore is found as depth is attained, which has characterized this mine since its first opening.—[Ibid.]

CUMBERLAND.—Operations on this property are progressing very finely, considering the severe weather during the past week. They are piling up on the dump very rich ore, and it is the opinion of those who are capable of judging, that in time it will become a formidable rival of its neighbor the famed Copperopolis.—[Ibid.]

Blue Hill.

DOUGLASS.—Stockholders are rapidly paying their assessments. The mortgage on the property was liquidated on Wednesday. At the mine operations are progressing as usual. Some improvements are being made in the shaft house. A large Cornish pump is now being put in place.

STEWART.—Supt. Dunn reports that Shaft No. 2 has reached a depth of 86 feet and Shaft No. 3 a depth of 84 feet. Both shafts are making a very good showing of copper. A shaft house will be soon erected over Shaft No. 2.

MAMMOTH.—About fifty tons of Mammoth ore have been hauled from the mine to the Blue Hill Steamboat Wharf and will be shipped soon to Portland for treatment at the Portland Smelting and Reduction Works. The matte obtained at the Hersey Smelting Works in Blue Hill from Mammoth ore was shipped to the Revere Copper Company and very excellent returns have been received. The amount of the matte was 4 tons and 2095 pounds and it averaged 25 9-10 per cent. copper. The Revere Copper Co. paid \$3.25 per unit, equal to \$84.18 per ton, or \$411.71 for the lot. Supt. Duff is now engaged in constructing a shaft house on the Mammoth property. This building will be modelled after the Twin Lead shaft house. It will be 30 ft. by 45 ft. in size with a foundation 15 ft. high and the height to the top of the roof will be 50 ft. The building will be completed as speedily as possible and underground work will then be pushed. It is proposed to extend the shaft down vertically to a depth of 100 ft. and then crosscut for the vein.

ECLIPSE.—A crew of men, under the charge of Mr. Arthur Hunt, have been prospecting the Eclipse property. Mr. Hunt reports the developments as very satisfactory and a well mineralized vein has been encountered.

BLUE HILL.—The Blue Hill Copper Mining and Smelting Company have for some time past contemplated a reorganization upon an assessable basis. Arrangements are now rapidly being perfected; a corporation was organized under the laws of Maine on the 21st inst. to be known as the Blue Hill Copper Mining Company, to whom the old company propose to sell. S. C. Blanchard is President, and Wm. M. Jewett, Treasurer.

TWIN LEAD.—Sinking is progressing rapidly in the winze, which is now 35 feet deeper than the bottom of the inclined shaft. There is no particular change in the amount or quality of the ore.

Bagaduce.

The Bagaduce Mining District embraces the tract of country drained by the Bagaduce River, and includes portions of the towns of Castine, Penobscot, Blue Hill, Sedgewick and Brooksville, comprising an area of nearly 100 square miles in extent. It lies in a W. and S. W. direction from the Blue Hill District, from which it is separated by an elevated ridge of land forming the dividing line between the water-sheds of Blue Hill and Penobscot Bays, and is undoubtedly a part of the same great mineral belt. The Bagaduce District is destined to become one of the most important mineral producing regions in the Eastern States, and the vigorous developments contemplated and already in progress are rapidly bringing it into prominence. Mineral veins of great extent abound, not only on the main land but on the surrounding islands; indeed it is said that every one of the innumerable islands in the river and bay shows one or more of these veins. In but few instances have the veins been penetrated to any considerable extent, and nowhere to a greater depth than 100 feet; yet the surface work has abundantly demonstrated that the ore-bodies are both large and of a permanent character, and the ores, although containing many base elements, are massive and can be mined at a profit, while they rapidly improve in quality and richness with increasing depth.

ROSIER.—The Rosier is the pioneer mine of the district and has reached the most advanced stage of development. A description of the mine and works is given in another column. It is already earning money for its stockholders.

TAPLEY.—The property so long known under the above name, the sale of which from various causes has hung fire for more than a year, has at last fallen into the hands of a strong and energetic company of capitalists. The transfer was completed yesterday, and substantial developments will be commenced at once and pushed vigorously. The name of the purchasers and the price paid we are not at liberty to state at present. This property has made a most wonderful showing of ore, and from 600 to 700 tons of high grade copper sulphurets have been quarried out from near the surface and repose on the dump. It is extremely gratifying to know that all the differences existing between the owners of this and the adjoining properties have been satisfactorily adjusted and that the mine will now be energetically worked for what it is worth. The sale was effected through the efforts of W. L. Johnson, of this city, and Wilkie Darling.

MANHATTAN.—This valuable property is an extension of the so-called Tapley and immediately adjoins it on the southwest. It is owned by Messrs. Taylor & Proctor, of Portland, and has been in active operation for several months under the superintendence of Wilkie Darling. The shaft is down 65 feet, from the bottom of which a crosscut of 220 feet has cut four distinct veins. The third vein from the shaft showed about 3 feet of massive, high grade copper ore, which in drifting 40 feet increased to fully four feet in width. In driving this drift 45 barrels (about 12 tons) of ore were taken out and hauled to the wharf for shipment to Portland, which is expected to net upwards of \$100 per ton. Steam machinery is used and a new and substantial shaft-house has just been completed. A large force of men will be put to work immediately and drifting in either direction upon all four veins will at once begin. Mr. J. A. Lawrence, formerly connected with the Northern Belle mine, Nevada, is the engineer in charge.

BROOKSVILLE.—The developments at this property are also in charge of Wilkie Darling, who is operating for a Portland company. It is not far distant from the Manhattan, and makes an excellent showing. The shaft is down about 30 feet and progressing favorably.

KENNEY GRINDLE.—This property, which is also in the vicinity of the Tapley, has been previously referred to by us as having recently been purchased by Messrs. J. W. Davis & Son, of Ellsworth. Active operations were commenced on Monday of last week. After drilling through eighteen inches of cap rock

a white quartz vein was uncovered, showing three feet in width heavily charged with sulphurets of copper and iron. Samples from the vein may be seen at the office of E. M. Hersey, in this city.

LIVERPOOL.—This is an English company, and a strong one, recently organized in Portland to operate a mine in this district, the location of which we are not at liberty to state. The facts will soon be made public. George H. Starr, British Consul at Portland, is president of the company.

THE DODGE AND JONES is a valuable property situated on the Brooksville shore of the river in a nearly direct line between the Rosier and Hercules mines. Two veins of unknown extent and showing the characteristic ore of the district (massive zinc blende and copper sulphurets) have been uncovered, on one of which a shaft has been sunk nearly 30 feet. It is not worked at present.

THE HERCULES shows an immense vein, fully thirty feet in width, cropping out in the river and exposed only at low tide. The company, composed of Portland and Boston gentlemen, built a coffer-dam over the ledge, preparatory to sinking a shaft, more than a year ago. Owing to troubles and differences among themselves the work was temporarily abandoned and has but recently recommenced. The showing has not been excelled in Maine.

THE MERMAID makes a similar showing to the Hercules, and is likewise located in the river, but is exposed at all times of tide. Nothing but prospect work has been done. It is owned by Messrs. J. W. Milliken and W. A. Pearson, of this city.

THE COLTON AND HIGHLANDS are two properties destined to develop into magnificent proportions, situated perhaps a mile distant from the Hercules on the Penobscot side of the river. The Colton is owned by Messrs. Milliken and Pearson, and has a shaft down about 50 feet and a crosscut of 50 feet, all in ore. Neither of these properties are being worked at present.

NORTH CASTINE.—Situated on the Castine shore of the river and owned and operated by a Bangor company. Shaft down 100 feet, from the bottom of which crosscutting is in progress. The company have recently placed an engine and boiler on the ground and are erecting a substantial shafthouse with the intention of sinking another 100 feet. The developments have shown quite a large quantity of very excellent ore, but the formation is so much broken and distorted that the present depth is insufficient to fully demonstrate the character or permanency of the lode.

CASTINE.—The Castine Copper and Silver Mining Company are operating at Castine Head, near the lighthouse, and at present are driving a tunnel into the bluff from the water's edge. The company is composed of Castine gentlemen. Quite a quantity of good ore has been shown, some of which has been shipped to Portland for treatment. The prospect is sufficiently encouraging to warrant a considerable outlay in development.

British Provinces.

Boylston Iron Mines, Guysboro, N. S., are about being sold to an American Company.

The Amherst Gold Mining Company, of Caribou, Halifax County, Nova Scotia, has been incorporated under the laws of New York State.

M. Legru, the Paris capitalist, now in Quebec, says that fifty millions of francs have been subscribed in France for investment in local industries in Quebec Province.

Reports are in circulation that several parties have been exploring for minerals in the vicinity of Demoiselle Creek, (Surrey, N. B.), and that the indications have produced very favorable impressions.

The Kingston Chronicle and News says the phosphate industry in the vicinity of Sydenham continues to increase. Messrs. McVety and Lacey have made a perfect honey-comb of the shores of Gold and Eel Lakes.

Mr. Robert Belloni of the International & Blockhouse Coal Mines, Cape Breton, in an interview in Halifax stated that the out-put from Cape Breton mine this year would amount in round figures to 450,000 tons, 70,000 tons more than last season.—[New Era.

The Chignecto Post reports promising copper indications at Malagash, N. S., owned by Dr. McLean, of Amherst and Conductor Hillson, of the Intercolonial R. R. Mr. Couch and his friends have been examining it and pronounce the quality of the ore superior.

DORCHESTER.—About twenty men are employed getting out copper under the superintendence of Mr. Revere. A boarding house is being erected by Mr. John Tidd and also a blacksmith

shop. The miners on Tuesday struck a new seam of sufficient richness to ensure the success of the mine even though nothing else should be found.—[Sackville Post.

A party of capitalists, representatives of a New York Company, visited the Iron mines at Boylston, Guysboro' Co. last week. We have been informed that negotiations for the transfer of the property from the present holders to the American Co. are all but completed, if not by this time actually perfected. And thus it is, surely if slowly, Nova Scotia is coming to the front as a great mineral producer. One or two more iron-works and a few more manufactories, and the country will not require to go begging, as in times past, for a market for coal.—[Annapolis Journal.

Mr. M. Obalaski, the Government Engineer of Mines, has just completed an inspection of a number of mines in the Eastern Townships in company with Mr. Legru, of the Credit Mobilier. They visited the Orford Nickel and Copper Mines, and descended into mother earth to a depth of 800 feet and found the most satisfactory deposits of copper. These strata are composed of copper pyrites, the sulphur of which can be utilized into sulphuric acid, useful in turning the phosphates of Canada into superphosphates. Here we have at once two new industries—sulphuric acid and superphosphates. Messrs. Legru and Obalaski next visited the Colrairie Mines, where they found entire mountains of asbestos, which in a state of nature sells at from \$80 to \$250 a ton. The gentlemen believe that the supply in Colrairie is abundant enough to meet the demands of commerce throughout the world.—[Kingston Chronicle and News.

Croppings.

(Compiled, Condensed and Confiscated from our Exchanges.)

The reorganization of the Empire Mining and Milling Co. has at last been perfected.

The Torrence Mine, New Mexico, is reported sold to Ex-Governor Tabor, of Colorado, for \$575,000.

The works of the several smelting companies operating on Wood River have closed down for the season.

Forty-eight miners were killed recently by an explosion of gas in the sulphur mines of Calla-Nisetta, Sicily.

According to the Virginia Enterprise, but 538 men are at present employed on the Comstock, 362 of whom are miners.

The Sultan of Zanzibar pays Joseph Thomson, a young Scotch geologist, \$2000 a year and expenses to hunt for gold in his dominions.

The Empire State Gold and Silver Mining Company has been organized, with a capital of \$1,000,000, to do business in Edinburg, Saratoga County, New York.

Twelve hundred colliers employed in the Ostran Coal Mines, the largest mines in Austria, belonging to the Northern Railway Company, are on a strike. Serious results are feared.

The smelters of the Santa Rita Copper Company will be put up as soon as the grading of the mill site is completed. The mills will be furnished by the Pacific Iron Works, of San Francisco.

The Quicksilver Mining Co., New Almaden, Santa Clara county, California, are sinking a new shaft which is called the Garfield shaft, in honor of the late President of the United States.

Manager Ewing has resigned his position as general manager of the Robinson Consolidated mines and the stock has declined in New York to \$4.50. Nevertheless, he reports the property as looking finely.

The San Pedro and Canon del Agua copper smelter has been constantly running for several weeks, turning out over three tons of copper bullion daily; their new silver smelter is about ready to start up, and their 40-stamp mill is also nearly or quite ready.

The production of the precious metals in Mexico, from 1519 to the present time, is estimated to be some \$4,200,000,000; of which silver has furnished \$3,800,000,000. The annual product of the precious metals in that country is said to be \$15,000,000 of silver, and \$1,000,000 of gold.

Petroleum has been discovered in the Gunnison country. A company has been organized with a capital of \$2,000,000, divided into 100,000 shares of \$20 each. Over \$6,000 worth of machinery has already been purchased, and most of it is on the ground already. It is expected to begin boring at once.

An Italian gentleman, named Angelo Possi Ponti, is organizing a stock company, with a capital of \$500,000, to draw off the supposed gas and oil from the reservoirs beneath Mount Vesuvius, thus preventing explosions and earthquakes and gaining vast wealth by the acquisition of the oil deposits. The stock is not yet all taken.

The Grand Central, of Tombstone, during six months' run of the mill, has turned out \$848,176 in bullion from working 18,000 tons of ore. Out of this have been paid, first, the total expense of developing the mine, building two hoisting works and mill, at a cost of \$300,000, and four dividends of \$50,000 each, making a total of \$500,000.

We were pleased to receive a call yesterday from Mr. A. R. Savage, of Lewiston, Me., who has valuable mining property in the San Andreas which he has been examining. He expresses himself well pleased with his property and the country in general, which he thinks is to be the greatest mining district in this country.—Socorro (N. M.) Miner.

The Tombstone Epitaph reports the Copper Queen looking better than ever. Good experts estimate that 130,000 tons of 29 per cent. ore are developed. Two furnaces turned out 15 tons of copper bars on Sunday. The average production is 360 tons per month. There is great activity in Bisbee. The new developments being made show many promising mines.

The Rocky Mountain News is authority for the statement that Col. P. R. Smith, who has superintended the construction of extensive smelting and reduction works at Golden, Col., with branch works at several other points, is about erecting similar works for a Boston syndicate for copper smelting in the rich mining regions of New Mexico. The exact location is not mentioned.

Regular work is being vigorously pushed at the Horn Silver Mine. No dead work is being done. The working shaft is now at a depth of 483 feet and it is probable that one more week will take them to the 500 level, where the 5th station will be cut out. A vast amount of ore is being taken out of 1 and 2 and railroaded to the company's smelters. The working force has been increased to more than 100.

The annual gold product of the world is gradually but steadily decreasing. It reached its highest point in 1852, when the enormous sum of \$160,000,000 was mined and brought to market. Last year the product was only \$102,000,000, and this year it will probably be less than \$100,000,000. The California hydraulic mines produce about \$12,000,000 annually, or one-eighth of the entire gold product of the world.

Mining began in Utah in 1870. The out-put has been fifty-six million dollars—lead, silver and gold. The mining area is co-extensive with the mountains. Mines have been found in every county. There are 80 mining districts, embracing five million acres. Many are now abandoned, but with better facilities of inter-communication and more experience in reducing ores, they will be revisited and work resumed, not again to cease.—[Salt Lake Herald.

The Carson Appeal says articles of incorporation of the Nevada Midland Railroad Company, with capital stock at \$5,000,000, divided into 500,000 shares, have been filed in the office of the Secretary of State. It is to be constructed from a point on the eastern boundary line of the State of Nevada in White Pine County, to and through the counties of White Pine, Nye, Eureka, Lander, Churchill, Lyon, Douglass, Esmeralda, Ormsby and Washoe, to a point on the western boundary line of the State, in the County of Douglass.

The Salt Lake Tribune says work on the Old Hickory Copper Mine still continues with the most encouraging results. Negotiations for one of Rankin, Brayton & Co.'s improved copper smelters have been entered into. These new copper smelters are now doing splendid work for the Copper Queen mine, Bisbee, Arizona, and have developed a good property. Other places in Arizona, California and Colorado are using these smelters and meet with unbounded success. B. A. Spear, who is their agent in Utah, expects to have, before the close of another year, quite a number of them running in Utah.

An Austrian engineer, named Lauer, has discovered a new method of disintegrating rock. The chief feature of his system is to employ a hollow cylinder, like gas pipe, and to place the dynamite charges, not as hitherto in a hole bored into the rock to be blasted, but in the cylinder in question. The cartridge only touches the surface of the rock it is desired to shatter. The explosion of the dynamite is effected by electricity, and the effect is said to be greater than with the usual cartridge in a hole bored in the rock. The rock is shattered into fragments so small that a fair stream is able to wash them away without help.

The entire basin of Utah has been a laboratory where the primitive processes of nature were long active. Amongst the results, aside from silver, gold, lead, iron, and coal, are sulphur, gypsum, red and yellow ochres, salt, mineral wax, soluble salts, manganese, antimony, bismuth, copper, zinc, arsenic, cobalt, cinnabar, mica, molybdenum, brick and fire clays, fatty, potter's, and porcelain clays, and firestone. Granites, sandstones, and limestones for building, occur in profusion, and marble in great variety, some kinds taking a high polish. Ante-

lope Island affords fine beds of green and royal purple slate of good quality. Volcanic products, and fossils of all the formations abound.—[Salt Lake Herald.

A well-known gentleman of extensive mining experience has just returned from Montana, where he made a full examination of the works and mines of the Alta-Montana Company. He reports the new reduction works of this company as the finest in the country, being arranged to treat ores by concentration, smelting and amalgating, with refining works to separate the silver from lead bullion when desired. An immense stock of charcoal and wood for fuel, and iron ore and lime rock for fluxes have been accumulated at the mine, being sufficient to run to full capacity for eight months. The Alta, Custer and Comet mines now show ore enough uncovered to run to full capacity for two years. The Alta-Montana have struck in the Bonanza crosscut, 700 feet deep in the Alta mine, 7 feet of ore assaying 100 ounces silver and 50 per cent. lead, being the most important development ever made in the mine.

The copper ores found in the Burro Mountains, New Mexico, are said to be of great richness. Ore taken from the surface croppings shows by assay a large percentage of that metal, and the veins are generally found to widen and increase in richness as the work of development progresses. The Silver City Telegram gives the following description of ores seen in a collection made from a few leads in that range: The ores of the different mines are varied both in the richness of quality and appearance. Black pyrites and sand carbonates of copper were among the collection. The latter is new, and differs from any of the copper ores heretofore discovered in this country. It is a brittle, conglomerated mass—a compound of sand, quartz, mica, granite and other ingredients, which taken in the whole will yield from seven to fifteen per cent. copper, while if you crush it between your hands, the green chloride will become disconnected, and this will yield forty per cent. copper. It has been discovered in immense quantities, and the lode is traceable for a distance of 600 yards, where it becomes lost to view.

The story is being published in some of the Nevada papers that parties working the once famous Eberhardt Mine on Treasure Hill, in White Pine County, have struck another body of white chloride fully as rich as that which astonished the world in 1867. It will be remembered that it was simply a vast pocket, without any hanging wall or other definite indications of a true fissure vein. In 1868 it began to "pinch out," and by 1870 it did not pay working expenses. Since then it has been sold for assessments, over and over again. Never did two towns come up as fast or go down as rapidly, as Hamilton or Treasure Hill. At the former town in March, 1869, were upwards of 5,000 people, all of whom had brought money with them, and as the man at Bellevue said "the outside money makes the game" in all these mining excitements. Putnam & Ayres started the Daily Inland Empire, worked on a double-cylinder Hoe press, and its second week's receipts from advertising alone amounted to \$1,450. It died out long ago, while its more obscure rival, the White Pine News, was removed from Treasure Hill to Cherry Creek. The two bustling and lively towns were turned over to the owls and bats that flitted about through the dim veil of the Pogonip. The parties now working the Eberhardt tunnel are reported to have struck irregular bunches of ore in their progress, that will go as high as \$20,000 to the ton. This is the result of striking in deep and working hard. In most parts of the Pacific Coast, this once famous mine would have been abandoned altogether and its shafts allowed to fill up with water. The men who have worked it along, in spite of continued discouragements and reverses, deserve all honor and praise for their untiring pluck and energy.

What a Mining Expert Should Know.

[St. Louis Mining News.]

He should understand geology, for it is by a knowledge of this science that he will be able to ascertain the kind of lead he is dealing with, and the best manner of developing and draining it.

He should understand mineralogy, so as to be able to determine accurately the quality of the ore that is in the vein, and the nature of its crystallization.

He should understand how to analyze the various kinds of ore, more particularly the process of assaying them, in order to learn the cheapest, quickest and most practical method for their reduction to gold and silver bullion.

A knowledge of every process now in use, and the cost of such process, is an essential pre-requisite.

Such knowledge must be supplemented by practical experience in a mine.

—Colby's Atlas of Washington County will be ready for delivery to subscribers in about a week.

The Calumet and Hecla.

THE GREATEST COPPER MINE IN THE WORLD—DESCRIPTION OF THE MINE AND WORKS.

[Correspondence: Detroit Post and Tribune.]

CALUMET, Mich., October 31.

In my last letter, dated at Negaunee, I wrote of the great iron industry of the northern peninsula. On account of unavoidable delay of the completion of the railroad between Marquette and Mackinac, I postponed further writing from the iron district until about the 15th of November. In this letter I shall show something of the magnitude of the copper mines of Michigan.

Taking cars at Negaunee, a ride of about 60 miles over the Marquette, Houghton and Ontonagon Railroad in a westerly direction lands one at L'Anse, the terminus of the road. A steamer running in connection with the railroad conveys passengers to Houghton, a distance of 30 miles. At this point I am on the border of the copper region. The Atlantic, Huron and Isle Royale mines are located here. At Hancock, on the opposite side of Portage Lake, are the famous Quincy, Franklin and Pewabic. I shall speak more particularly of these mines in a future writing. The Mineral Range Railroad, running from Hancock to Calumet, 12 1-2 miles north, lands me in the center of the copper producing country, 102 miles northwest of Negaunee.

Calumet takes its name from the celebrated Calumet copper mine. At one time there were three distinct mines in operation here. The Calumet, Hecla, and Red Jacket. The three were consolidated under one management, and are known as the Calumet and Hecla. This copper mine is undoubtedly the richest in the world. In the last eight years it has paid \$20,-350,000 in dividends to the stockholders and expended in the neighborhood of \$5,000,000 in improvements. The vein worked by this company is known as conglomerate, the copper being mixed with a species of rock of reddish color and very hard. This vein is from 8 to 17 1-2 feet in thickness, dipping into the earth at an angle of about 33 degrees. The vein runs northeast and southwest, extending the entire length of the Keweenaw peninsula, and is supposed to be the same vein that passes under Lake Superior and crops out at Isle Royale, 70 miles distant. There are several veins running parallel with this one, some of which are very rich, and are being worked at different points along the northern end of this peninsula. The Calumet company are making test of a vein 600 feet east of the Calumet, which promises rich returns, and can be worked very satisfactorily with the machinery operating upon the Calumet. The question of the formation of these veins or belts of copper has not yet been satisfactorily settled by the scientific men and geologists who have attempted it. Many theories and speculations are advanced, but little is known outside of the developments brought to light by working the mines.

To give a full description of the Calumet and Hecla works would require a large volume, and I shall not attempt to go much into detail, as it would require weeks of searching to compile an article of that description. I might preface what I have to say by stating that everything connected with the mine in the way of buildings and machinery is constructed upon the most durable and improved plan, impressing the visitor with the idea that they propose to operate the mine a hundred years hence. That the reader may have an idea what it costs to mine copper I will give a brief description of the workings of this celebrated mine.

The town of Calumet has a population of 6,100, who are directly connected with the mine and dependent on it for their support. In order to have the laborers necessary to carry on the work, provisions must be made to keep them in close proximity to the mine. For that purpose a town has been built by the company around the mine for the workmen to live in. The large-hearted liberality of the company is exemplified in all the details of the town. The streets are wide and finely graded. The cottages are built of wood and nicely painted, and have an attractive and home-like appearance. That the town may not lack in social and religious advantages, six beautiful churches have been built, representing the different denominations and nationalities represented here, that all may have a congenial place of worship.

A large union school building, large enough to accommodate 2000 pupils, built by the company in the most attractive portion of the town, is a conspicuous monument of their generosity. That the sick and maimed may be well cared for, a large hospital is constructed on a mutual plan. Each male employed about the mine contributes \$1 per month, into a fund, the company adding to the fund an amount equal to the whole amount paid in by the employes. When sick or disabled the hospital affords the best of medical treatment and nursing free of charge. There is a first-class system of water works, supplying each house with good, pure water; a first-class hotel for

the accommodation of visitors; also a boarding house for those interested in the mines that spend only a portion of the year at Calumet. S. M. Streeter, by long experience has gained an enviable reputation as manager of the hotel.

In speaking of the works I may seem to be extravagant in my description. If any one should be disposed to think so an investigation will convince him that only extravagant language will convey anything like a correct idea of the magnitude of the works on this mine. There are eight principal buildings at the mine, in which the machinery necessary to work the mine is operated. These eight buildings would, if placed in a group, cover about three and a half acres of ground. The materials used in their construction are of the most durable kind. Nothing but the best quality of stone, brick, iron and slate was used, the foundation being solid rock from 10 to 36 feet below the surface, upon which a bed of cement is laid until the surface is reached. Upon this foundation the massive walls are built. The reason for this immense outlay of money in securing a solid foundation will become more apparent a little further along. The distance between the extreme south and north building is nearly one and a half miles, the Calumet at the north, the Hecla at the south. Between these two points 10 shafts are sunk, varying in depth from 1,199 to 2,650 feet. Up these shafts the rock is hoisted by power derived from the machinery in the large buildings spoken of. At each one of these shafts are high, tower-like buildings, connected with what is called the rock-house by an elevated railway. The rock-houses are at the two extreme ends of the grounds in which the shafts are sunk. In addition to the shafts there is the man-hole, a shaft down which the men go into the mine. There are a large number of miscellaneous buildings, all of which are built regardless of expense. Durability and strength are the two things sought for. The company have facilities for doing every kind of repairs—large machine shops running in full blast, ready for any emergency outside of manufacturing the heavy machinery, a blacksmith shop where all the drills are kept in repair, a paint shop, warehouse, coal sheds, a magazine containing large quantities of materials used in blasting, and a new stone building in course of construction to accommodate machinery to light the mines and building with the electric light. This comprises all the buildings except the office, a bank, and an assayer's building. These are built of wood, conveniently arranged for comfort and business.

The machinery used in this mine stands far ahead of anything of the kind anywhere else in the world. It was all designed by Mr. E. D. Leavitt, Jr., head engineer and machinist for the company. It is so massive and complicated that a person who is not a practical engineer can only express admiration for the man who had the brains to construct it, and become utterly confused by trying to comprehend it in all its complicated grandeur. At first thought one would believe it had been contracted for by the pound and the parties taking the contract tried to get in all the iron possible. Commencing at the boiler house we find 16 immense boilers, 36 feet in length, 7½ feet in diameter, made of the best steel plate, capable of standing a pressure of 125 pounds to the square inch. Six of these monster boilers are required to furnish steam. These boilers cost \$10,-000 each and consume 35,000 tons of coal annually. There are 16 engines from 300 to 1000 horse power operating at different points about the grounds, setting in motion pulleys, drums and wheels that weigh from 5,000 to 100,000 pounds. The company have an engine on the ground ready to be set up, the maximum power of which is 4,700 horse-power. The weight of the engine alone is 700,000 pounds. There are two cylinders, one of five feet ten inches in diameter, the other three feet six inches. The large one weighs 27 tons, the smaller one 31,616 pounds. The walking beam weighs 40,880 pounds, the shaft and crank 26,900 pounds. These figures will give something of an idea of what it is like. This engine cost \$100,000, and is probably the largest stationary engine in the world. In comparison with the great Corliss engine of centennial notoriety, the great Calumet would rank as much above the Corliss as the Corliss did over the ordinary engine. The Corliss is, I believe, 1,600 horse power; the Calumet 4,700 maximum, 3,500 minimum horse power. This large engine will be used to operate the Calumet mine, and furnish power to work the pump for both mines.

A few rods from the engine house we enter the pumping works. Over \$500,000 worth of machinery is in this building and its connections in the mine. It has single pieces of cast iron weighing from 1,000 to 50,000 pounds, so nicely put together that no friction or jar is perceptible. It is nearly silent in its movements. I ask, why such powerful, costly machinery? Conducting me to a hole in the earth, I see an explanation. A piston rod 2,600 feet in length, and 12 inches square, is constantly pumping to keep the mine free of water. In order to understand fully the manner of pumping, a diagram would be necessary. The water is raised from the bottom of the shaft by a system of valves and dippers attached to the rod. The stream coming from the pump is large enough to furnish power for a

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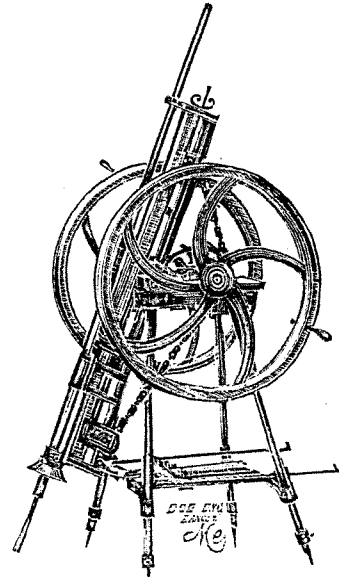
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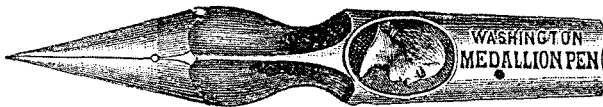
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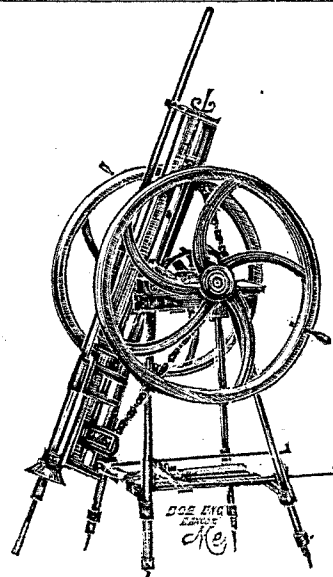
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Maine Mining Journal.

PUBLISHED EVERY FRIDAY AT

28 West Market Square, Bangor, Maine

E. M. BLANDING, } EDITORS.
W. F. BLANDING, }
E. H. DAKIN, BUSINESS MANAGER.

THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

Communications relating to mines, mining, treatment of ores and kindred subjects, from Geologists, Metallurgists, Practical Miners and Scientific Men generally, are earnestly desired.

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THE MAINE MINING JOURNAL, BANGOR, MAINE.

BANGOR, FRIDAY, DECEMBER 9, 1881.

Ingot copper remains at 19 1-2c.

It is stated that a firm in Waterbury, Conn., have recently gone into the manufacture of copper coated telegraph wires, and are now consuming ten tons of copper per day, or about 6,000,000 pounds per year.

The Iron Age, in speaking of the copper market, says: "There is a better demand, and more confidence shown both by manufacturers and dealers. Consumption is going on in this country at an enormous rate for the moment, at the rate of 70,000,000 pounds per annum; hence the increasing production west of the Mississippi is less threatening than it would otherwise appear. It is believed that production in that section of the United States will figure up in 1882 between 20,000,000 and 25,000,000 pounds. This would, however, only be in keeping with our current absorption, if the latter goes on as it has lately done, and there is no reason why it should not, for there are many additional elements of consumption, the result of modern invention, not thought of formerly; especially in the electrical branch. At the same time the falling off in Chilean production is remarkable, the indications being that it will be 10,000 tons less than in 1880; in other words, from being a producer of 45,000 tons annually on an average, Chili declines all of a sudden to 35,000 tons per annum, by reason of a curtailment of hands through the war on the Pacific, of which the end is not yet apparent. As a check on this Chilean deficiency, there is Rio Tinto in Andalusia prospering more than ever as a copper producer, to judge by the splendid dividends it pays, but it is doubtful whether Rio Tinto will turn out an excess to make good the 10,000 tons of Chilean de-

crease. It would indeed be astonishing if it did. On taking, therefore, into consideration all the "pros" and "cons," it seems to us that copper is in a sound condition, so far as we can judge at the present writing. At London there has been an advance of £2 since our last, Chili bars rising to £66, and best selected to £72. This improvement we are slowly following. No futures are obtainable; producers decline to name a price."

THE MARKET.

The mining share market remains in about the same condition as at the time of our last report. The tone is generally healthful, with a tendency toward advancing prices, yet buyers have not been numerous and, with few exceptions the transactions have been light. At the Boston Stock Board the sales of Maine shares during the week ending on Wednesday last were confined to 150 Douglass and 4460 Sullivan; 100 Douglass sold at 2 1-8 (assessment paid) and 2700 Sullivan sold up to 4 1-4.

At the Mining Exchange the reported transactions include 72,100 Milton, 32,350 Deer Isle, 5500 Copperopolis, 6400 Edgemoggin, 1500 Granger, 2400 Hopewell Manganese, 250 Commonwealth Mica, 200 Twin Lead, 300 Sullivan and 200 Douglass. The latest sales of the following stocks were made at the prices given: Copperopolis 2.22; Deer Isle 45c; Edgemoggin 52c regular and 65c buyer 60; Granger 4c; Hopewell 90c; Commonwealth \$1.43; Twin Lead 44c; Milton had advanced to \$1.65 on Wednesday.

Personals.

CAPT. M. K. CHASE, of Blue Hill, has gone to Washington on business.

MESSRS JOHN F. PROCTOR and LORENZO TAYLOR, of Portland, were in this city yesterday.

MESSRS. FRANK H. WILLIAMS and EUGENE M. HERSEY returned to Boston the first of the week.

GEORGE REILLY, of Portland, is said to be with one exception the only survivor of the famous Kane Arctic Expedition.

A. E. BARCLAY, F. C. S., the well known assayer, sails for Europe in a few days and will pass the winter in England visiting the scenes of his early days. Mr. Barclay has a host of friends in this vicinity who wish him *bon voyage*.

SIDNEY DILLON, one of Jay Gould's associates, is to build the costliest and most elaborate mansion in this country on Fifth Avenue and Seventy-sixth street, New York, casting the Vanderbilt palaces into the shade. The house and grounds will cover thirteen full lots, four of which are on Fifth Avenue.

MR. WILKIE DARLING, formerly Supt. of the Revere Mine, Maine, now Supt. of the Manhattan and Brooksville Mines, arrived in Boston on Nov. 21st, and reports that the mine (Manhattan) is producing and looking finely. They are selling the ore to the Portland Smelting Works at \$100 per ton. If any one knows how to develop a mine and bring out the products of the same, it is Mr. Darling, who began work as a pick-boy and rose to a superintendency in California. We wish him all good success.—[Mining Age.

Mr. D. H. McFarland, of Montana, is visiting his brother Mr. Isaac McFarland in Fairfield. He left Waterville, his native town, thirty years ago and has not visited Maine or seen his brother, living here, during that time. He first went to California where he remained until 1867 when he came to Montana. He, in company with another gentleman, are in the hotel business, and have houses at Deer Lodge and Butte City, which are the very centres of mining regions. All kinds of business is good and high prices are paid for skilled labor of any kind.—[Fairfield Journal.]

Among Our Exchanges.

[Mining Age.]

What is needed on the Mining Boards is less washing and more clean linen requiring no lavatory efforts.

[Engineering and Mining Journal.]

The Eastern public to-day are submitting to treatment from the majority of mining superintendents which, if practiced on a Western people, would result in a tree, a rope and a man attached.

[San Francisco Daily Report, Nov. 29.]

There was a movement on Pine Street this morning. A sorrel horse attached to a light business buggy ran past the San Francisco Board Building at 10 o'clock and was stopped near Montgomery street. The fact that the horse went past the building at full speed without injuring anybody is a sad commentary on the condition of the stock market.

[Georgetown (Col.) Courier]

The unassessable plan has wrecked many otherwise good mining companies.—[Georgetown (Col.) Courier.]

Opinions differ on this as on most other subjects. Those fellows interested in the Nevada mines might think otherwise.—[Daily Indicator.]

And the fellows that have been sold out under trust or sheriff's sale in Colorado may think that the Courier is right. The truth of the matter is that small and weak shareholders are much better protected, or, in other words, they can better protect themselves in companies formed on the assessable plan which are represented on stock boards, then in any other kind of an organization. The assessable plan allows companies to keep free of debts and usurers; if a shareholder cannot easily meet an assessment with his surplus revenue, he can sell enough shares to meet it, and in ninety-nine cases in one hundred the remaining shares will be more valuable than the whole would be if the company company was in debt.

[Mining Age and Conservative.]

The changing of Maine mining companies from unassessable to assessable corporations, goes briskly on, and our Maine brethren appear to have found by a bitter experience that, like the so-called co-operative insurance, the voluntary contribution plan is fatally defective; for shareholders, alas, will not pay up unless compelled by fear of confiscation. When, as in a majority of instances, the treasury stock proceeds are exhausted, and the mine is yet far from a self-supporting condition, the difficulty is this—from whence shall come the needful funds? There is only one common sense course, compel the shareholders to contribute pro rata to the development of their properties. When the recent reorganization of the Douglass mine was effected, the most eager man for the assessment of \$1 per share was "Steve" Jennings, who holds more than 20,000 shares. Without assessments the Comstock's Big Bonanza would to-day be securely hidden in the flank of Mt. Davidson, and precious metal mining everywhere would not have received that mighty stimulus which the finding of that great treasure gave to it. When all the Maine Companies are made assessable we shall be more sanguine of great ultimate results down there.

[Chicago Mining Review.]

Our Lake Superior newspapers are quick to copy the faintest glimmer of a discouraging report from any other copper region, and are rather inclined to ignore the fact that there can be any copper deposits worthy of name outside that truly favored territory. It is a most unwise jealousy from the fact that Nature has been most lavish in the distribution of her gifts, and the truth is, that there are large and valuable deposits of copper in many parts of the country, which will be extensively worked as soon as railroad and other facilities are secured. The development of copper mining in Maine, Arizona, Wyoming, New Mexico, or any other part of the country will prove to be a benefit instead of an injury to Michigan, and that State can in no other way do as much for the good of her own copper mines as by a prompt and generous recognition of copper mining wherever it may be inaugurated in the country. As copper is produced in available quantities new uses and new demands will spring up to consume the increasing product. The consumption of copper is already increasing at a rapid rate, more rapidly than many are aware, and it is entering into many new fields of usefulness. The plan adopted by the larger cities, compelling the telegraph companies to lay their wires under ground, has made a marked increase in the demand for copper wire, and it is said that one eastern factory is using 6,000,000 pounds of copper per annum for this purpose alone. Prices for copper show an advance and a firmness which does not seem to be shaken by any fear of over-production.

Dips, Spurs and Angles.

—Many a man rests the lever of hypocrisy upon the fulcrum of religion to help him raise the devil.

—It is discovered that catfish in Kansas have legs. This curious provision of nature is intended to enable them to take to the prairies when the rivers dry up.

—A flirting belle of Akron, Ohio, has caused a social excitement by having all the love letters she has received bound handsomely in a morocco volume for her parlor table, in place of an ordinary autograph album.

—Prof.—"Mention an oxide." Student—"Leather." Prof.—"Oxide of what?" S.—"Oxide of beef, sir." Prof. (looking round for the eraser to throw at him, mutters) —"If I had you alone, you young scion *l'ad*—A deep groan of horror bursts from the class.—[Bowdoin Orient.]

—Substantial progress has been made in the work of boring the tunnel under the English Channel. On the French side a distance of 1800 metres and on the English one of 1600, or 3400 metres in all have been driven, which is something more than one-tenth of the entire distance to be pierced.

—"Your mind is in a twilight state," observed the good man. "You cannot differentiate the grains of mistrust from the molecules of a reasonable confidence. You are traveling the border land—the frontier between the paradise of faith and the Arctic regions of incredulity. You are an agnostic." "Divil a bit," said Pat, with mingled amazement and indignation, "I'm a dimmyerat, ivery inch o' me."

—The oldest stove probably in the United States is the one which warms the hall of Virginia's capitol, in Richmond. It was made in England and sent to Richmond in 1770, and warmed the house of Burgesses for sixty years before it was removed to its present location, where it has remained for thirty years. It has survived three British monarchs; has been contemporaneous with three monarchies, three republics and two imperial governments of France.

—The best ox horns come from the Rio Grande; they are tough, of fine texture, and susceptible of a fine polish. Cattle hoofs sell at from \$12 to \$40 per ton, as to quality. Cattle tails are worth from ten to fifteen cents a piece. The hoofs of horned cattle weigh about two and a half pounds. The horse's hoof is unsuited for buttons, although it is man-

ufactured for other purposes. The horn trade is immense. All vessels arriving from cattle ports bring horns, sometimes as many as 10,000 or 20,000 in a single cargo.

—Silver promises to be very popular with the ladies this season. There are shown silver laces and silver embroideries, silver fringes and silver passementeries, all of which are as effective on white costumes as they are on black. Silver Vandyke ornaments, to be placed upon fans, gloves and slippers, are decided novelties. Monograms or initials are worked in the corners of fine handkerchiefs with silver thread. Large silver hoops are used in looping tunics; the drapery is passed right through them, and they are attached to the skirt by a thick cord.

—A leading upholsterer in town, says the Bodie Free Press, is now at work on something that has no name. It can be used by either gentlemen or ladies while they are learning to skate. It is circular in form, about four inches thick and a foot in diameter. The outside is made of cloth, stuffed and nicely quilted. The upholsterer says it is to be attached to the lower end of the backbone and securely fastened on with straps. Already his orders for these little articles amount to a dozen or more, a portion being engaged by young ladies. Every person who goes on the ice for the first time should have one, as they are extremely useful.

Scenes in a Granite Quarry.

STONE-WORKING AS SEEN BY A TENDERFOOT—HOW THE GRANITE MINES ARE WORKED AT VINALHAVEN.

[Correspondence Rockland Courier.]

About twelve miles east of Rockland, out in the beautiful Penobscot Bay, are the Fox Islands, now so famous throughout our country for the building-granite which is cut there, to be raised into costly edifices in nearly all the large cities of America. The school children of New York, Chicago, St. Louis, New Orleans and the Capital City of the United States, have doubtless often stopped in the street to see large blocks of this granite removed from the cars or drays near the spot where some extensive foundation wall has been sunken deep in the earth, and wondered what kind of a place those far off rocky coasts and islands of Maine could be to yield those massive cubes of smooth-faced stone. As I sit writing this in the office of the chief hotel at the smart little village of Vinalhaven, the largest of the Fox Islands, I look out of the window upon long rows of stonecutters' sheds, and should I step to the door I could easily hear the tinkling of their hammers and drills and frequently the roar of an explosion. One need not think he is on an island in this bustling town, with its fast horses and very pretty rows of stylish dwellings, unless, as it happens to be the case with me at present, he would like very much to get out of town, which is just impossible now, for the wind was out on a frolic last night, and we are besieged on all quarters by a raging, tossing sea that may be seen from every bluff and hilltop, which the little steam packet could not safely venture.

The granite quarries are airy places, not, like beds of limestone, deep in the ground; the layers of granite rise in the hill in terraces some three, some six feet high. The gray rock seems to have been packed away for use, like butter in a jar. Away on the upper tier are men in groups of three, one holding a long drill which the others strike regularly with their heavy sledges, often stopping to scoop out the dust from the deepening hole. A voice comes down to us from one of the shelves, in a long-drawn warning cry—"F-i-re!" and the men draw close to the nearest shelter to await the coming explosion. There's not much flying of stone chips from a blast in the solid bed of granite, but one may expect some lively hail if the fuse leads into a quantity of rotten stone. The mass being loosened by powder is then drilled into with a line of holes but a few inches in depth, into which small iron wedges are forced, and blocks are split off into whatever size may be required at the sheds. An immense derrick, made of a thick upright post, with another stout piece of timber for an arm, and heavy tackling and clamps for fingers, stands in the midst of the quarry, where it is easily turned to lay hold upon any piece of rock which a teamster wants to load upon his stout cart. The clamps are lowered and hooked upon a mass of the solid rock that twenty men with levers could hardly raise a foot in half an hour. A puff of steam issues from an iron pipe that we had not before noticed near a small shanty about a dozen rods from the great derrick; a loud rattling of cogs is heard in the shanty, and the heavy block is lifted into the air as easily as a strong

farmer throws a tumble of hay upon his rack. The heavy, intelligent draft horses settle into their collars and take the load to the sheds.

Another small shanty attracts our attention. Here are a couple of men splitting the refuse blocks, which are too small for any better use, into paving stones. One of these workmen takes a stone about as heavy as a boy sixteen years old could carry on a wheelbarrow, and drills into it two or three inches, at spaces of eight or ten inches, then with little iron wedges driven into the holes he cleaves the granite as a shingle maker cleaves a bolt of cedar; his fellow workman makes a line about the small cubes with a sharp wedge-like sledge in repeated blows; finally with a smarter tap or two he opens the block into a couple of those paving stones which are so much easier to ride on than Rockland mud. I presume there are enough of these solid little blocks piled up here now, to pave Main street from the Courier office half a mile either way. This stone-breaking looks like tedious work, but these men now busy with hammer and drill are whistling as cheerily as if they had the pleastantest job in the yards. But an explosion jars the earth and air, and those warning signals "F-i-re!" come too often to make us comfortable lookers on.

The sheds are several hundred feet long sometimes. One that I visited had a sort of railway over a path in the middle which extended the whole length of the shed. The car on this track contained a windlass by which the rock was raised from the ground a few feet, to be transported to or from any workman in the shed. An inside look at one of these buildings shows a busy place. Some are just commencing on the rough rock fresh from the quarry, striking off large chips in what seems to be a careless manner; but others have their blocks nearly done, and handle the chisel with great care lest an unlucky blow may spoil the work of many hours or even days. Nearly all the work is on plane surfaces, but now and then we find a man cutting a piece of cornice work or monumental, or moulding that tasks his skill and caution not a little. Near by the sheds are the wharves where are usually several transports loading with the prepared stone, which is cased safely in wooden frames and marked and numbered plainly in red paint. Ponderous oxen drag the rock to the derrick by which it is hoisted on board the ship.

Do you think now you could form a picture in your mind of a stone quarry scene? I am afraid there would be many blank places in it where your ideas would not join together as perfectly as would a number of granite blocks which had been fitted to one another in these sheds. But if you live near the Penobscot Bay, or ever visit this part of Maine, you will find it quite easy to visit a granite quarry yourself sometime, and thus learn much more clearly than I can tell you of this important branch of business. They are generally a fine, hearty, open faced class of men, with strong arms and healthful faces, who are shaping the eternal granite for the pride and comfort of our distant fellow citizens. These blocks will grow into some noble structure, and be praised, perhaps, for a thousand years after the name of the humble workman has passed from memory. His noblest aim then is to make his work famous, for then his fame will endure like the hills. So, too, our daily life, made up of trifles as insignificant as the uncounted strokes of the stonecutter's hammer, if controlled by a noble purpose, will part with its meager nature and show forth the divine image as we gain in years and knowledge. B.

Iron Ores of Virginia.

[Correspondence Chicago Mining Review.]

LYNCHBURG, Virginia, Nov. 14. The venerable and distinguished Wm. B. Rogers, now State Geologist of New York, fifty years ago said Virginia had more iron than Pennsylvania and New York. He described the hematites in connection with the Cambrian rocks of the Potsdam group, which extend three hundred miles along the Blue Ridge, from Tennessee to the Potomac, as "the most extensive and valuable known. But few really know how extensive they are, and how valuable they will become when once developed." Splendid limestone is in juxtaposition with many of these grand lenticular deposits along the foot-hills. These veins and great beds are continuous, frequently extending for miles, as at Bufords Gap, and near Buchanan, in Botetourt County, Longdale, in Alleghany County and Front Royal, in Warren in the Shenandoah Valley. The specular ores in enormous veins crop out at or near the same location. Of these Prof. Campbell (Washington-Lee University) says: "The beds of specular ores were probably deposited as limonite, and subsequently heated by igneous and hot metamorphic rocks thrust up beneath them sufficiently to deprive them of their original water, and moreover to induce their present semi-crystalline structure. And the fact that they are real geological beds, and not local deposits, together with their numerous out-

croppings through a distance of several miles each way, indicate both continuity and uniformity."

The steel ore belt extends from near the North Carolina line northeast across the State, under the mountains as far as Louisa and Orange Counties. They can be seen and traced without difficulty, being regular stratified veins. The country being broken, of course, they disappear and crop out again miles away. Some of these ores are equal to the Republic ores of Lake Superior. These lands are now penetrated by railroads, and, in many instances, can be purchased for a less price than their agricultural value. Thousands of Virginia's enterprising sons have deserted their old boyhood homes and gone west to seek their fortunes. The old familiar paths over hill and dale now as then, crossed some of the finest ores in the South; and many a fox and rabbit has been chased to his hiding place, which is now known as a limestone cave, or a fissure in an ore bed. You or others will naturally say, how is this possible? It is easily explained. Virginia was an agricultural State, physically undeveloped, owned by planters and graziers, contented under their own vines and fig-trees. In the tide water region they had the rivers and bays as outlets; and west of the Blue Ridge they were happy with their flocks and herds, which were driven to market on foot. Manufacturing was carried on to a very limited extent. Each farmer owned a hand-saw, broad-ax, square, a couple of planes and a set of augers, and with these tools and the aid of an anvil and vise, and a few pairs of tongs, he carried on his own work in his own way. There were a good many small furnaces and forges, where the finest charcoal, coal, blast iron and elegant blooms were hammered, a few nail works and foundries, where a machine shop was attached, about constituted our stock in trade in the iron interest. The Government had some of the best ordnance ever made cast at Bolona arsenal and at the Trodegar in Richmond; but no works of importance were fostered in Virginia, and but few established or attempted. Fifty years ago Wm. B. Rogers made his report of his geological survey, and the legislature failed to appropriate a sufficient fund to more than print a synopsis; and when that grand old master of the charts of the sea, Matthew F. Maury, compiled his physical survey of Virginia some eight years ago, the legislature had a few hundred copies published, and they are now for sale at retail by the State Librarian for the modest price of \$3.50 per copy. Had the legislature had 100,000 copies printed for gratuitous distribution, it would have turned enough emigration to our State to pay off the whole debt. But I am digressing. We have a new start now, no longer hampered with slavery. The negro in his place, under good influences, will be equal to the expectations of his friends. Naturally imitative, in the South he carries his old master's characteristics. If well raised, he will not forget; if not well raised, but little can be expected of him or his family. The best laborer in the world in the southern climate, secure his confidence and he will earn his pay. They have been tried successfully at the Trodegar Iron Works as rollers and in the Merchant Bar and Rail Mills. They have great physical strength, and can endure the heat. As laborers they have no superiors.

We have fine coke and excellent crude coals from the mines along the N. & W. R. R. and its connections, the R. & A. R. R. and its connections, from the Chesapeake & Ohio and its connections, and from the Virginia Midland and its connections. Upon the lines of these roads iron can be made at from \$10 to \$13 per ton. The finest blooms can be made as cheaply here as anywhere in the United States, and will compare with any iron made in any country.

We have a fine bracing climate, fine water and fruits, first-class public schools, and a generous people to welcome strangers who wish to come among us. Come to our mountains and open our mines; start the anvil and hammers; and when the sparks fly right and left we will weld the West and the South, the North and the East into a solid mass, never to be dissolved.

THOMAS T. MCFORD.

Prescott, Hersey, Hastings & Co.

The well known Boston banking and brokerage firms of Prescott & Hersey and Goff, Hastings & Co. have consolidated under the name of Prescott, Hersey, Hastings & Co. The new firm comprises Joseph D. Prescott, Eugene M. Hersey and Edward H. Hastings with Edward H. Goff and T. Nelson Hastings as special partners. The principal office will be located at 131 Devonshire street, Boston, and the firm will also have an office in New York, the two offices being connected by private wires. Special attention will be given to investment securities and stocks will be bought and sold on the Boston, New York and San Francisco Exchanges. The firm of Prescott, Hersey, Hastings & Co. is destined to take high rank among the important banking and brokerage houses of Boston and a business of very large proportions will be speedily established.

LODES, LEADS AND VEINS.

MASCOT.—Mr. C. W. Hobbs, Treasurer and General Manager of the Mascot Mines, Gorham, N. H., reports that they now have ready for shipment to the New England Smelting Company, East Boston, 4 carloads of ore which will run from fifty to sixty per cent. lead. The bullion also carries from thirty to forty ounces of silver. The developments consist of three adits which have been run into the side of Mt. Hayes. No. 1 is in 130 feet. From this point most of the ore has been taken, as it is nearly all in ore. A winze has been driven forty feet, also in ore. 130 feet below No. 1, another tunnel has been driven which is also expected to cut the ore-body. The buildings are all completed, consisting of ore house and office, large stable, and a hotel with accommodations for 130 men.

MT. MICA.—Mining operations have been suspended at Mt. Mica for the season. The elevated nature of the property will not well admit of work during the winter months. In the early spring mining will be actively resumed and developments will be prosecuted on an extensive scale. President Hamlin is very enthusiastic in regard to the bountiful mineral treasures stored within this justly celebrated mountain.

EDGEMOGGIN.—Supt. Sherman reports good progress being made at the Edgemoggin, and everything about the mine is looking well. The water has been somewhat troublesome but the pump now takes care of it all right. The indications were never more promising than at present. The best showing of ore is on the river side of the shaft, and Mr. Sherman believes that the greatest body of ore lies in that direction under the water. The vein has two perfect walls. They are down 120 feet and taking out good ore which grows better with increasing depth. A box of specimens from the bottom of the shaft, recently sent to the office of the company at Portland, have attracted much attention.

NORTH CASTINE.—The shaft house at the North Castine mine is completed and the hoisting machinery commenced running early during the present week.

SUNBURST.—Sec. Donelan reports Dec. 5th: "This (Monday) morning we struck it immensely rich. From all indications in the shaft, I believe before we are down ten feet more we will have a body of ore in sight second to none in Maine. It shows rich in copper, gold and silver. Our present depth is fifty feet. The following is a recent assay:

REPORT OF ASSAY.

ELLSWORTH ASSAY OFFICE, BOSTON, MASS., DEC. 3, 1881.

Mr. M. Donelan—The sample of ore from the Sunburst C. & S. M. Co., of Surry, County of Hancock, State of Maine, received from you the 2d inst., for examination, contains in the ton of 2,000 pounds, as follows:

Mineral.	Amount.	Value.
Gold.....	.6 dwt, 7 grs.	\$6.51
Silver.....	4 2-10 oz.	4.53
Copper.....	3 6-10 per cent.	12.96

Total value per ton.....\$24.30

Yours respectfully,

WINSTON W. FISKE, B. S., State Assayer.

This assay is from rock of the whole shaft and which appeared in my judgment to carry the least mineral of any. My reason for taking what I thought the worst was to find out the lowest amount of mineral in it. I can now select that which will run twice the amount in gold and silver, and fully 30 per cent. copper. Mr. Fisk writes me he sees a great improvement in the rock."

COPPEROPOLIS.—Good progress has been made in the shaft during the week, and the same good ore continues.—[Bulletin, Dec. 3.

Sullivan.

MILTON.—The Bulletin says the vein in the winze is gradually widening as depth is attained, and the character of the ore is still improving.

PORTLAND-SULLIVAN.—At a meeting of the Directors of the Portland-Sullivan Silver Mining Company, held at Portland on Monday last, it was voted to finish up the shaft-house and timber the shaft at once, preparatory to commencing vigorous work in the mine.

Blue Hill.

DOUGLASS.—The Blue Hill correspondent of the Ellsworth American says the Douglass is now working 85 men, 40 of whom are in the shaft. They are drifting in the vein, 115 feet east, 75 feet west, and are in good ore. Smelters running as usual.

STEWART.—The annual meeting of the stockholders of the Stewart Copper Mining Company was held in this city on Tuesday last. The election of officers resulted in the choice of C. F. Bragg as Secretary and Treasurer and Frederick M. Loughton, F. W. Hill, C. F. Bragg, Thomas White, John S. Jenness and C. E. Hill, of Bangor, and G. B. Putnam, of Boston, as

Directors. At a subsequent meeting of the Directors, Hon. Frederick M. Laughton was re-elected President. The only change in the officers is the addition of John S. Jenness and C. E. Hill to the board of directors to fill vacancies. Hon. S. N. Stockwell, an esteemed member of the board, died during the year. Encouraging reports are being received from Supt. Dunn in regard to developments at the mine. Shaft No. 2 is down 89 feet and shaft No. 3 is 88 feet deep. The lumber has arrived for the shaft house over No. 2. A night shift is being employed in this shaft. Supt. Dunn's annual report will appear in the next issue of the MINING JOURNAL.

BLUE HILL.—Good progress is being made in the winze which is to connect the first and second levels. They are also drifting on both levels, and both drifts and winze are in the same excellent ore which the mine has shown for some time past. The mine and works now employ over 70 men, 44 of whom are underground.

YOUNG HECCLA.—Supt. Ludlow reports the crosscut from the bottom of shaft No. 2 in forty-four feet. The drift on the vein is in about eight feet and looking well.

GRANGER.—A stockholders meeting of the Granger Copper Mining Company will be held at Kittery to-morrow (Saturday) for purposes of reorganization. The proposition is to organize a new company to be known as the Granger Mining Company, whose stock shall be assessable to a limited amount, for the purchase of the property of the old company should they vote to sell.

REVERE.—At the recent auction sale of the Revere, it will be remembered the mining interests in the property were sold to Jacob Stern but that all the buildings and tools were purchased by Wilkie Darling. Mr. Stern has now disposed of the property to Mr. Darling and the mine with its elaborate plant and all appurtenances is accordingly owned by the latter. Wilkie informs us that very soon mining operations will be resumed at the Revere, the crosscut will be extended to the vein and the value of the mine demonstrated.

British Provinces.

A steamer is soon to be put on the route between Boston and Annapolis, Nova Scotia.

Gold specimens valued at \$1200 were recently stolen from the Provincial Museum at Halifax.

The Halifax New Era reports a rich discovery last week of a gold lead at Montague. It is supposed to be part of the vein running through the Symonds mine.

The Credit-Mobilier Franco-Canadien is about to open negotiations with the Government of Nova Scotia with reference to the extension of the railways in that Province and the development of the Cape Breton coal mines.

Hensall, Ontario, is in luck. The salt bed reached at a depth of 1,092 feet, has been penetrated 120 feet without any indications of change in the nature of the deposit. The brine is full strength, and produces a superior sample of salt.

HALL-ANDERSON.—A Halifax dispatch from the Superintendent to the New York office of the Company says: "Shipped gold brick, \$1760. Mill running regularly. Serpent lode better than ever; will raise 30 tons from it next week."

The Canada Iron and Steel Company propose erecting, in Montreal, furnaces for the manufacture of iron and steel direct from the ores by means of crude petroleum, a similar process having been successfully tested in Colorado in connection with the reduction of silver ores.

Montreal's report of the lumber trade for this season, shows a handsome increase over that of 1880. In all, there has been shipped this year 34,764,228 feet, or a gain of over 6,000,000 feet upon last year's figures. Some 21,000,000 feet went to Great Britain, the balance to South America.

The Crane Iron Company of Philadelphia have purchased the mine of micaceous specular iron ore found at Salmon River, Guysboro, N. S. The lode is 25 feet wide. The company intend to take out 5,000 tons this winter. This is supposed to be one of the most valuable iron deposits in America.—[Chignecto Post.

The men at work at the bottom of a shaft 200 feet deep at Victoria Mine recently opened ground which was totally different from anything they had ever met with. Captain Skewes sent specimens to New York to be assayed and the Metallurgist returns 19 ounces of silver and \$2.59 gold per ton. The vein is over two feet wide and resembles very soft trap rock of a clay color.—[Algoma Pioneer.

It is announced in a recent number of the Revue Industrielle that the first cargo of 500 tons of Canadian phosphates, from the mines at Buckingham, Province of Quebec, has been delivered at Bordeaux. Apart from the use of this mineral for agricultural purposes it is proposed to utilize the Canadian

apatites (calcium phosphate) in the purification of coal gas, presumably from ammonia.

The Malagash Copper Mine looks better the more it is prospected. The width of the lead is three feet. Assays show 7 per cent. lead, 19 per cent. copper and 10 1-2 ozs. silver per ton. The mine is bonded for a large sum at 30 days, during which time the outcrop is being prospected. Dr. McLean and Mr. Hillson have many good wishes their venture will result successfully.—[Chignecto Post.

The real estate boom has done much for Winnipeg, but unless we are greatly mistaken the mining and general business boom which must strike Fort William and Thunder Bay next season will do more for it than anything which can now effect Winnipeg or, indeed, any other town or city in Manitoba. Winnipeggers look to Fort William and Thunder Bay as the great Mecca, and unless we are greatly mistaken we shall see a couple of million dollars expended in this neighborhood before the autumn of 1882.—[Fort William Herald.

A correspondent at Renfrew says the Nova Scotia gold mines are looking up; the old mines are doing well and fresh discoveries of very rich lodes are of almost daily occurrence. The McDonald mine in Caribou, Musquodoboit, is looking finely; the last crushing of 30 tons, from the big 4 1-2 foot lode, gave 60 ozs., at the cost of fifty-one days' labor. The lead is improving rapidly with increased depth. The owners are about opening up other lodes on the property which will doubtless prove valuable, as many good detached specimens and boulders have been found.

The coal shipments from the port of Pictou are nearly over for the season. The total is not very large, a very great quantity having been sent from the mines by rail. We are pleased to learn that the mines will be worked to their utmost capacity all winter, and that no man need be idle in our mining districts for a single day. So good is business now with our mines that cash orders are daily refused, and the managers are straining every nerve to increase the output, already the largest in the history of Nova Scotia coal mining. The shipments for the week ending Nov. 28 were as follows: Halifax Company, 1088 tons; Acadia Co., 49 tons; Inter-Colonial Co., 1038 tons; Vale Co., 829 tons; total, 3004 tons.—[New Era.

PHOSPHATES.—The excitement of phosphate mining in the county of Ottawa is on the increase. It is stated that the High Rock mine in Portland is going to employ 500 men this winter if they can get them. The Tommo Lake mines are worked extensively by the French Company and Mr. Haycock. They will employ 200 teams this winter in hauling ore to the railroad, and bringing back supplies. Several of the Templeton mines are opening, and large forces of men are at work. The Canada mine and the McFarland mine have been opened quite recently with good prospects. Mining operations will be conducted on a much more extensive basis next spring when the snow goes, if this winter's work turns out to be profitable.

The Cape Breton Advocate says: For several months past, several American gentlemen have been prospecting for coal on the north side, East Bay, and it is now currently reported that their labors have been successful in finding a very valuable seam of coal. Some years ago a small seam was found in this locality, resembling hard coal, but as the seam was only six inches it was abandoned as unworkable. The present parties have sunk a shaft about sixty feet. It is said the coal found differs very little in appearance from the Pennsylvania anthracite. If this be the case the mine will be worth a mint of money, being situate in close proximity to several rich deposits of iron and copper, and within easy reach of East Bay waters.

FRENCH CAPITAL IN CANADA.—Mr. Legru, the Parisian capitalist, and one of the largest manufacturers of beet sugar in the French Republic, Mr. Obalski, an eminent French Civil and Mining Engineer, and Mr. Leckie, the well-known Quebec copper and iron smelter and manufacturer, are on a visit to Halifax, and intend to examine the coal and iron districts of Nova Scotia; after which they will come to New Brunswick. They represent the Credit Mobilier of France, with a capital of \$20,000,000 (\$5,000,000 of it paid) which is to be invested in Canadian industries. Mr. Legru says the twenty millions "could be doubled, trebled or quadrupled if necessary; that the French people and French capitalists have faith in Canada under the policy of the present Government, and are anxious to invest their money in opening up its resources."—[St. John Sun.

The property of the St. Martin's Manganese Company is located at West Quaco, N. B. about thirty miles east of St. John, and immediately adjoining the Bay of Fundy. Work on the mine has been prosecuted diligently for over a year, all necessary machinery having been first provided, and the property has been brought to a satisfactory paying condition. A large quantity of ore has been developed, all of it averaging a high value. At present, the management devotes its attention strict-

ly to development, its membership including some of the most eminent business men of Boston. The central offices are located in the Herald Building, and the following is a list of officers and directors: Hon. Wm. B. Fowle, President; J. Wesley Kimball, Treasurer; C. Warren Osborne, Oscar F. Howe, Frank B. Dole, John H. Harding; Chas. A. Burgess, Superintendent.

An English firm, Messrs. Pickford & Winkfield, of London, are among the largest operators in the phosphate mines of the Ottawa Valley. Among others they own the High Rock Mine, which is said to have given the largest output in any one year. The senior partner, Mr. W. Pickford, has recently visited the property, and proposes to see other localities where phosphates can be obtained, with a view of making further purchases. The firm referred to are well acquainted with the principal deposits of phosphate in France, Spain, Germany, and the West Indies, and are understood to have sold on consignment nearly two-thirds of the Canadian phosphate which was shipped across the Atlantic last year. A serious obstacle to the transportation of the phosphate from the mines by water in summer is found in the rapids of the Du Lievre, while the cost of hauling in winter is increased by the demand for teams in lumbering operations. An effort is being made to induce the Government to complete the work of improving the navigation of the Du Lievre, thus giving a new impetus to the phosphate industry, and increasing the profitable employment of labor and capital.

Croppings.

[Compiled, Condensed and Condensed from our Exchanges.]

The new Mining Exchange in Philadelphia will be ready for business Dec. 15th.

Twenty-two of the mines at Leadville are said to have netted their owners \$15,000,000.

The anthracite coal trade continues very brisk, the demand greatly exceeding the ability to supply.

Bulwer has come to the front with its first monthly dividend of ten cents per share, aggregating \$10,000.

Michigan stands at the head of the copper producing States; Vermont comes next, while North Carolina is only third in the list.

Messrs. Fraser & Chalmers, the well-known Chicago manufacturers of mining machinery, have opened a branch office in New York City.

Leadville has thirty-six furnaces in blast at present, with a daily capacity of 1000 tons, and ninety-five stamps running, of 200 tons daily capacity.

Any person desiring to obtain scales and balances for assaying at very reasonable prices can hear something of advantage to them by addressing the MINING JOURNAL.

W. A. Rooks reports that the Ontario, one of the Rooks group of mines above Ketchum, is opening up splendidly. The ore averages 144 ounces silver and 73 per cent. lead to the ton, and there is plenty of it in sight.—[Wood River Times.]

The American Copper Mining Company is the name of an organization, a controlling interest in whose stock has recently been purchased in Boston. The property is located at Somerville, Somerset county, New Jersey. The prospect is said to be good.

According to the New York World, the Empire, Railroad, and Metburg Mines, all in Saratoga County, N. Y., yield from croppings, according to well-established assays, from \$6.88 to \$16.90 in gold per ton. In the Beryl Mine the company are down ten feet, where the ore averages over \$26 to the ton.

The underground work already done on the Horn Silver Mine leads us to believe that ere long, a cavern large enough to hold the whole of Frisco, will be made in the bottom of Bonanza mountain. The most costly improvements have been completed under the management of Major Hill, and it is now understood that the company will hereafter pay quarterly dividends of one dollar a share.—[Southern Utah Times.]

The new machinery on the Hite mine is now in full blast. The compressor, hoisting engine, pumps and power drills, all run by compressed air and work splendidly. The Company has put up a large Duplex Air Compressor of one hundred horse power capacity, which is placed on the river just below Weaver-ville. The air is conducted through a four-inch iron pipe over the mountains about one mile to the mouth of the tunnel.

Many of the steel hoisting cables used in the Comstock mines are woven right on the ground, from steel wire imported from the East and Europe. They are superior to the imported cables in strength and safety, as the men who weave them know the lives of themselves and fellow workmen are dependent on them, and they are careful not to leave any defective points in the cable, such as often occur in cables made in large factories in

the East and in England. Two men can weave 60 feet of cable per day.

Chicago is rapidly becoming a prominent centre of the iron trade, and it is predicted by those most competent to judge that it will in a few years become a chief point of the iron industry. The large bodies of valuable hematite ore which at present seem to be exhaustless in the Lake Superior region on the one hand with unusual transportation facilities by rail and water, and the immense bodies of cheap coal on the other hand within easy reach, tend to make its location in many ways desirable and advantageous.—[Mining Review.]

The Harrisburg (Pa.) Telegraph says the Harrison Copper Mining and Smelting Company has recently been organized in that city for the purpose of mining and smelting copper and other ores. The company own the mineral right on about three thousand acres of land in Pennsylvania and Maryland, which is rich in a fine quality of copper and iron, samples of which may be seen at the office of the company in this city. They propose erecting smelting works soon which will probably be located here. George R. Hursh is president of the company and Eugene Snyder treasurer. Judging from the samples of their ores and from the situation and large amount of land under their control, they cannot fail to pay large dividends on their capital stock.

COPPER IN WYOMING TERRITORY.—The immense deposits of copper ore in our territory, near Warm Springs, in the Upper Platte country, and near Hartville, are attracting universal attention. Mr. S. D. Jones, from the former place, is in the city, and from him we learn that the outlook in his section is decidedly encouraging. A claim owned by himself and brother, the "Charter Oak," is developing well, and growing better and better. The vein is eighteen feet wide, the pay streak four feet, and the ore runs all the way from seventeen to fifty per cent. A shaft sixty feet deep has been sunk, steam hoisting works erected, and work will be actively prosecuted all winter. Other claims, among them the "Grand Encampment," are looking well, and that locality bids fair to enjoy a boom next spring.—[Laramie Boomerang.]

Never in the history of the city of Socorro has it been as prosperous as at present. Manzanares' Avenue is being graded, substantial buildings of brick and adobe, mortar laid, are springing up on all sides. The stamp mill is nearly completed; the smelter is preparing to run and the machine for the foundry now on its way. The Fire Clay Manufacturing Company are preparing for work. An Episcopal and Baptist church will soon be erected. Our business men are enjoying capital and steady trade, our mechanics are busy and the mines are booming. New strikes and new districts are the themes of conversation. As the mines deepen, silver increases, and notwithstanding that two misinformed tourists, according to the Albuquerque daily thug journal, turned back, hundreds of good citizens are seeking homes in Socorro.—[Socorro Miner.]

California refined soda is now quoted in the markets of the world among the staples. The most, if not all of it, comes from Nevada. Twenty miles south of Wadsworth lies a supply that is being extensively worked. There are two lakes with a ridge a quarter of a mile between them. The larger one is owned by Doc. of San Francisco, with B. F. Gray for Superintendent. E. Griswold of Wadsworth, owns the little lake. The water is pumped into vats and evaporated and then the soda is scraped up and spread out under a shed for the water to dry out before it is shipped. There are a good many hundred tons piled up there now. England has heretofore had a monopoly of soda, but the discovery of Nevada alkali is interfering with it. In San Francisco large quantities are refined and made into bi-carbonate of soda.—[Reno Gazette.]

J. B. Raadol, Manager of the New Almaden mine, has prepared a careful statement of the product of quicksilver in California, Austria and Spain for the past 31 years, from which interesting facts are gleaned. The New Almaden mine in Santa Clara County is the only California cinnabar deposit that has been worked continuously during this period. There are 25 or 30 mines of this character in the State. The object of the statement is to show the importance of California as a source of the world's supply of this metal. The total yield of the California mines from 1850 to 1880, both years inclusive, compares as follows with the famous Almaden mine of Spain and Indria mine of Austria:

California product, flasks of 75½ lbs.	1,197,995
Spain, flasks of 76.07 lbs.	992,364
Austria	229,534—1,142,198

Excess for California, flasks	54,597
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During recent years the collection of medicinal and other plants has become a large and profitable industry in North Carolina. The trade centres at Statesville, where an enterprising firm have established one of the largest botanical depots in the world. Their stock comprises 1,700 varieties of roots, herbs,

barks, seeds, flowers, and mosses, and all sorts of plants for herbariums, some of them peculiar to the flora of the State, and others found more abundantly there than elsewhere. The quantities now on hand vary from 50 to 35,000 pounds of each kind. They pay the collectors either in cash or goods, and last year they disposed in this way of \$400,000 worth of merchandise. Their warehouses have 270,000 square feet of flooring, which will give an idea of their capacity for storage of the products they are collecting from all quarters. Their shipments last year, as given in the Raleigh News, amounted to 1,800,000 pounds. The collectors are largely Cherokees.

WRANGEL LAND.—Dr. Ross, of Washington, who accompanied the expedition, has a collection of very rare specimens from the Alaskan and Siberian coasts as well as from Herald Island and Wrangel Land. Among these are specimens of the flora, vegetation, soil and mineral of the newly acquired territory, New Columbia. Among the flora may be seen some of the most delicate and beautiful flowers, and while all are void of brilliant colors, the leaves and blossoms, all of delicate tints, are very beautiful and extraordinarily curious as coming from an unexplored land so close to the North Pole. The grasses are also delicate, and resemble both the common bunch and "foxtail" variety of California, and the blue grass of the Eastern States. The rock from Wrangel Land is a coarse, blue sandstone, a fine slate, and some pale drab sandstone, all good building material. The specimens of coal from Cape Lisburne, on the north coast of Alaska, are of a deep black color, soft and bituminous. It is easily ignited, and emits a strong sulphuric odor. From Herald Island the Corwin brings some fine specimens of granite, which is susceptible of a high polish. It is gray in color, and resembles the granite of Lake Superior and the coast of Maine.—[San Francisco Examiner.]

TASMANIAN MINES.—The Mount Bischoff Tin Mine is one of the richest, if not the very richest, tin mine in the world—described as a mountain of metal quarried rather than mined—has now been worked seven or eight years, and is paying such enormous dividends that a mining fever has set in, and the consequent floating of new companies is the infatuation of the hour. The precious metals have also been discovered in various parts of the island, and several gold mines have been worked with great profit to the owners. Until carefully explored, however, by Victorians, the Tasmanians themselves were ignorant of the variegated treasures around them and beneath their feet. It was in the year 1872 that large deposits of tin ore were first discovered at Mount Bischoff, on the northern side of the island, opposite to Victoria. From the outset the mine in its product of tin proved to be what the Burra Burra of South Australia was first as a copper mine, viz., a deposit so vast as to render superfluous the ordinarily tardy and expensive operations of mining. A mining fever set in, and successively were discovered, not merely many more tin deposits, but also gold, silver, bismuth, antimony, iron and coal apparently inexhaustible. From the year 1866 to June 30, 1879, the returns of gold were 48,753 ounces from the alluvial and 72,186 ounces from the quartz. People begin to talk of Tasmanian millionaires, the floating of companies has become a sort of profession, and many speculative and enterprising spirits have already left Victoria to try their luck on the gold and tin fields of North Tasmania.—[Cor. London Times.]

Alaskan Mines.

[Mining and Scientific Press.]

We had a conversation the other day with Col. A. F. Williams, of Oakland, who has recently returned from a prospecting voyage in northern Alaska. From him we learn some interesting facts concerning the mining resources of the region. Col. Williams left here with a party, on a schooner, in May last. They went up through the Aleutian Islands and through the Behring Sea into Norton Sound; but most of the time was spent in Golowin Bay on the north coast of Norton Sound. Here are high rocky mountains, steep and abrupt, though there are large prairies next to the coast.

Col. Williams went with a whale boat 100 miles up the Fish River and sent a party overland. A land party also traversed the region, and quite an extent of country was located. The principal location made was a galena lead or deposit. We have seen assay certificates by Prof. Price, giving the value at \$3 and \$5 per cent. lead and \$121 and \$161 silver. This is almost pure galena, that containing \$6 per cent. lead. Col. Williams says the Esquimaux utilize this by putting a piece in the bullet mould and running lead around it to make bullets. The country all about the region visited by Col. Williams and party is a very difficult one to prospect in, but this is not on account of the heavy timber, as most people suppose. This heavy timber is more prevalent in the southern part of the Territory. But there is a heavy coat of moss covering the whole face of the country, making it very hard to get about. In fact, it is a most

villainous country to get about in. The moss is from 1 to 2 feet thick, and the ground is more or less boggy, so that if one steps off the moss bed, he is apt to get into the bog. Ten or twelve miles is a good day's travel, so it is very hard to prospect. There are belts of timber here and there, but the mountains are generally barren and free from brush and trees. Yet there is timber here and there, and plenty for fuel or mining purposes.

The country rock is mainly a micaceous slate; but no gold was found. The mountains seem to be of a white spar, which some suppose to be lime. There are great dikes of granite extending for miles and miles. No sulphurets of iron were found anywhere. There is plenty of mica in great scales and sheets. The schooner was taken into Golowin Bay and there anchored. The prospecting expedition went out from this point. They were in 64.30° N. and 163° W. overland, and they were not more than 50 miles from Kotzebue Sound, in the Arctic. Col. Williams judges this to be a good mineral region. The Esquimaux talked a good deal of the lead mines they knew of elsewhere. He has no doubt there is a good deal of mineral thereabouts.

The expedition left here on the 5th of May last, and met the ice on June 1st. They coasted around Norton Sound some 200 miles. There are a couple of thousand Esquimaux camping around the shores of the sound. The party found them very generally willing to do anything asked of them. These natives packed the ore down to the vessel from the mine, some 15 tons being taken out for shipment. When they return in the spring, horses will be taken up and sleds will be used for hauling ore. There is plenty of feed and hay along the coast.

They have an average of good weather in the summer, about as they have it in New York. August is wet but not cold. The first frost came on September 15th. In June the sun was out of sight about 2 1-2 hours; it is broad day-light and no stars to be seen for two months. There are five good working months for surface work, and when once underground deep enough, the men can work all winter. There is timber within half a mile of the mine, so there is no difficulty in building houses to make the men comfortable. Col. Williams says the ore can be put down here in San Francisco at a cost not to exceed \$50 per ton. It is unnecessary to reduce it at the mine, as there is over 1,600 lbs. of lead to the ton of ore.

Col. Williams had met some men who had come from 1,500 miles up the Yukon river. Up there they had been making from \$10 to \$15 per day to the hand in placer mines. They can only work about four months in the year. A little stern wheel trading steamer now runs up the Yukon, to about 1,800 miles from the mouth. She only makes two trips a year. Her timber was got out here, and she was put together at St. Michaels.

There are only four white women in the Territory north of Kodiak. One lady is at St. Michaels, and she told Col. Williams that it was no colder there than at her native place, Portland, Maine. There is also a Chicago lady four miles from St. Michaels. There is one at Ounalaska, the port of entry, 2,100 miles from here, and one on the Island of St. Paul.

Col. Williams says there is an abundance of plumbago all through that country. His party is the first that ever visited that region. At the mine they sunk 20 ft., but did not get through the frost—the frozen ground. The heavy coat of moss seems to protect the ice, as ice is protected in sawdust and blankets. The tops of the mountains are free from the moss. The mosquitoes are innumerable and very annoying, fiercely contesting their rights to the country. They seem to breed in the ice.

When the party started away, they stopped with their vessel to get water, and while at anchor a severe gale drove the vessel ashore and wrecked her, she being a total loss. The Esquimaux took the party to St. Michaels in skin canoes, where some of them joined the revenue cutter Corwin, and were brought to this port.

Winter.

[Sam Davis, in Salt Lake Tribune.]

The torch of the frost king has already begun to tamper with the autumn leaves, while he leaves his trade mark on the sugar coated hills. Where is the yellow haze which awhile ago fell across the scarlet bars of the seven o'clock sunset. Where is the liney-woolsey overcoat which we pawned in the spring for three dollars? Sold to a Nevada editor for six dollars and a half and the check N. G. The snow lies heavy in the hills and the roaring avalanche gathers strength in the mountain fastness, pushing the huge boulders into the black oblivious night and crushing the miner's cabin like an egg shell. When the morning breaks, where is the brave miner then? Coppering the duce and playing the queen to win at a fifty dollar limit game right here in Salt Lake, right over—saloon (up two pair of stairs



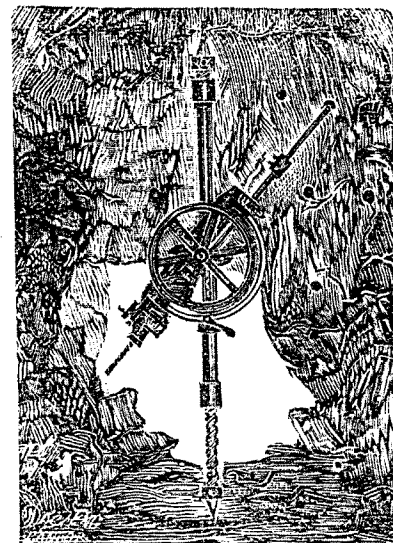
Booth's Champion Rock Drill.

The machine which is the subject of this sketch has been before referred to in our columns as the invention of Mr. John E. Booth, of this city. It is called Booth's Champion Rock Drill; and we are desirous of calling special attention to its many points of merit as we are firmly convinced that it will fully meet the requirements of a want long felt by all engaged in mining and quarrying operations, and that it is destined to come into very general use. It is certainly a most wonderful and valuable invention; and with the aid of the above cuts we will endeavor to give our readers a more intelligent and complete description of this ingenious yet by no means complicated machine than has hitherto been possible.

The most striking features in connection with the Champion Drill are its simplicity of construction; its compactness and light weight; its adaptability to any required position in any kind of ground; the ease and rapidity with which it is operated and the thorough and vigorous manner in which it performs its work. Added to these are its durability—every part of the machine being made of the very best material and constructed in the most thorough manner—and its low price, which brings it within the reach of all.

The Drill proper is provided with two

frames, one for mining purposes and the other for quarrying, prospecting or any kind of surface work. It swings from a bearing into any desired position and is held in place by two slotted arms forming segments of a circle. The main elements of the Drill are—the drill frame with its central bearings; the balance wheels, with adjustable handles; the drill-bar of steel, with its feeding and rotating mechanism, to which any sized drill-point can be attached; the shaft, with its cams which raise the drill bar; and the powerful, spiral steel springs which deliver the blow. When the balance wheels are revolved the double cams come under a tappet on the drill-bar, raising it five inches, at the same time compressing the springs to a pressure of about 160 lbs. (This pressure can be reduced or increased, as desired); this action occurs twice, thus giving two blows, with every revolution of the wheels. As the drill moves back and forth it is rotated by an ingenious yet simple mechanism, thus ensuring a round, smooth hole. The forward motion is regulated by an automatic-feed screw. The regular rotation of the drill ensures the delivery of each blow in such a manner that each wing of the drill-point (star-pointed drills are used) strikes the rock just far enough in advance of the cut of the preceding blow to chip away the rock lying between; the yielding of the chip saves the edge of



the drill-point; and what is cut from the rock at one blow is forced out of the hole in descending for the next, thereby cutting clean rock every time; thus the drill-point can be driven a far greater distance into the rock without sharpening than is possible in hand-drilling, where the hole is formed by crushing and pulverizing the rock.

The large cut (Fig. 2) represents the drill mounted on a tripod for open work. For cutting marble, slate or granite, it is often desirable to avoid blasting; in such cases this machine is invaluable, as holes from one to two inches in diameter can be rapidly drilled in a row, two inches apart, and the connection between them broken out by simply taking off the rotating ratchet and attaching a flat bar of steel in place of the drill-point. The machine can be readily moved from place to place by loosening the set-screws holding the balance-wheels to the shaft, laying it down, and running it upon its own wheels, as shown in the small cut (Fig. 1). For mining purposes the drill is mounted in a frame form by two hollow, parallel bars of iron, united at the ends by cross-bars. For drilling in shafts it is jacked across horizontally, and for drifting, tunnelling, &c., as shown by the cut on the right (Fig. 3). Two men with this machine can easily do the work of eight or ten men drilling by hand.

As will be seen from this brief description the Champion Rock Drill is applicable to any and all kinds of rock work where drilling is required; it will drill holes 1 1/4 inch in diameter in granite at the rate of from 1 1/2 to 2 1/2 inches per minute; it weighs, mounted on the tripod, but 300 pounds, and the selling price will probably not exceed \$200. In view of these many excellent qualifications which the machine possesses, we believe it will be thoroughly appreciated by our mining men and welcomed as a most valuable addition to the mining machinery of the day; and we can see no reason why it is not destined to mark a new era in the attempts to reap wealth and profit from the rocks and ledges of the Pine Tree State.

APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
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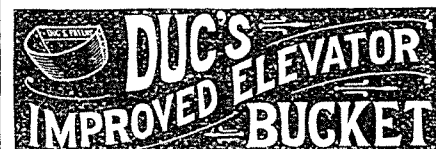
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Arrive Bangor,	6.42	runs in connect- 6.05
Leave Bangor,	7.35	tion with Sanford 7.15
Arrive Bucksport,	8.45	Steamers. 8.25

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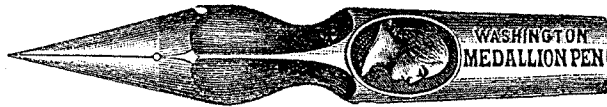
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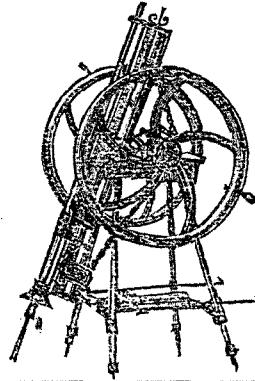
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BANGOR, FRIDAY, DECEMBER 16, 1881.

Ingot copper has advanced to 19 3-4c cash. Chili bars are quoted in London at £70 per ton.

An interesting letter from our Newfoundland correspondent arrived too late for insertion in this issue. It will appear in our next.

The mines throughout the State are showing up finely wherever worked, and many of our leading properties will already compare favorably those of any mining district. About thirty Maine mines are in active operation at present, and this number will soon be augmented by the starting of the Revere and Grauger, at Blue Hill, and others in the Bagaduce district and other portions of Hancock County. Of the thousand and more prospects awaiting development, we can only say that many of them show vastly better at the surface than did other properties which have developed into valuable mines. There is plenty of mineral in the old State of Maine; what she needs now is a little pluck, more capital and a good deal of mining experience.

The Portland Smelting and Reduction Works have been seriously damaged by fire. The early telegraphic advices announced the complete destruction of these valuable Works, but later information is more assuring and the gratifying intelligence is received that the copper smelting department is not seriously injured and that smelting operations have already been resumed. The acid and lead works and also the silver and gold works have been totally destroyed and the loss is accordingly quite heavy, but the management with the pluck and energy characteristic of all their efforts have at once commenced to rebuild and propose erecting buildings of much larger proportions than those destroyed. The

great value of the Portland Smelting and Reduction Works to the rapidly growing mining interests of this section is thoroughly appreciated by every man interested in this great industry and the blow would have been severe indeed if the works had been entirely consumed. It is highly fortunate that the injury is not as disastrous as first appearances indicated and it is with great pleasure that we announce the Works once more in active operation.

It is not pleasant to be looked upon as a Jeremiah, continually indulging in lamentations over the perverse nature of human nature as developed in the mining business, but unless there is a radical change in the way mining companies are organized and their stock disposed of it will soon be impossible for the best company in the country to dispose of its stock. All will come under the same ban of suspicion, if they are not indeed already so. We should dislike to see the time when our new mines will be all worked through private enterprise and unstocked. Mining will be more profitable every year; but there is grave danger ahead for Mining Exchanges, Mining Brokers and Mining Newspapers. Our prejudices are all in favor of the continuance of these, as we believe, useful institutions; and stock companies, when honestly conducted, are a very great benefit to the development of the mining sections, as giving the entire public an opportunity to aid and receive the benefit. The business cannot flourish, however, by the success of those who "steal the livery of heaven to serve the devil in," and reduce the proud and ancient industry of mining to the grade of a mere stock imposture.—[New York Stock Report.

The following from the Las Vegas (New Mexico) Mining World is equally applicable to Eastern mining districts: "Mills are needed badly in many parts of the Territory today, where ore is lying upon the dump, or in sight in the mines, and cannot be realized upon, owing to the great distance from railroad or mills already in operation. Notwithstanding this need, we are slow to urge the erection of smelting works, for the simple reason that we are tired of seeing capitalists send inexperienced men to the mountains with a forty, fifty, sixty or one hundred thousand dollar plant. Their failures are usually accounted for by the alleged poverty of the ore, or the inadequate supply, when in truth the cause is the inability of the experimenting superintendent to discover the proper process or operate the works in order to get out the mineral from the rock brought to him. We want some veteran smelter superintendents in New Mexico and we want them very much. To the right men we can show abundant opportunities for successful operations. We know of capital that is ready to come but it must be sure that it will be invested in the right kind of a mill, and not in a sepulchre of the ideas of some Institute graduate."

There appears to be a feeling on the part of a certain class of journals which live in the atmosphere of the Stock Boards, that when a break comes and the Stock Exchanges are dull and deserted, the foundations of mining are threatened, and that the strong hands in mountain fastness and desert plain, wielding pick and drill, are paralyzed by the wild speculations of one party or the other, in financial centres where the Exchanges exist. Mining for the precious

and useful metals throughout the length and breadth of the land is unconscious of the mimic pandemonium which is daily witnessed, where it would seem that mines were being tossed to and fro like fallen leaves in the autumn wind. The thundering crash of the stamp-mill in the land, like the ponderous foot-steps of a giant, crushing mountains beneath his mighty feet, and the steady stream of bullion, like a molten river of treasure, flowing from the smelter and the flumes from Maine to California, drowns the tiny conflicts of the Exchanges, as the rolling thunder and the hurricane of the tempest hushes the twitter of a sparrow. They have but a faint conception of the grandeur and magnitude even of the mining industry of the present, which is only the seed-time and the harvest, compared with what it will be in the future, who fear that a few brokers, in any or every city, by shouting the price of stock with the names of mines attached, can wake the eternal slumber of the mountains reaching to heaven, and change one particle of the treasure they hold in rocky vaults in their bosoms waiting to be unlocked and given up only to the demand of a world's industries.— [Chicago Mining Review. —

MINING EXCHANGES.

The recent swindles perpetrated on the New York Mining Boards and elsewhere, of which the Robinson Consolidated and State Lines are fair samples, have placed these institutions whose reputations have been none too good in the past in a more disreputable light than ever, and raised a serious discussion of the question whether Mining Exchanges are or are not of any benefit to legitimate operations in mines. In the light of recent transactions, and others not so recent but still fresh in the memory, there can be but one answer to this question—as at present conducted they are intolerable nuisances and a blight upon the entire industry.

It is all very well to assert that mining and stock gambling are two entirely different branches of business; so they are, but they always have been and will ever be intimately connected with each other. So long as mining remains a profitable industry, so long will the business be carried on to a large extent by stock companies—and this is as it should be; there is no earthly reason why the profits from the working of a valuable mine may not be shared by five hundred individuals as well as five. So long as stock companies have an existence, stock gambling will be an attendant evil which can never be entirely suppressed. It should, however, be the mission of Stock Boards to protect the shares in which they deal from the raids of unscrupulous operators and from all swindling and gambling operations and associations as far as possible. Instead of this, however, they seem to consider it a duty to foster and even promote these schemes. Of course these methods work great injury to the cause of legitimate mining, but it does seem strange that the mining brokers who permit and sanction these frauds upon the public cannot or will not see that they themselves must eventually be the greatest sufferers. The occupation of a mining broker should be and may be made a legitimate and honorable one; but never unless they take a firm stand upon higher ground than that which they now occupy. Mining has worked itself up, on its own merits, from small beginnings to a recognized and honorable position among the

foremost industries of the country, and the time has passed when the many outrages perpetrated in its name can be laid at its door. The great public have become educated in a measure; the responsibility for these swindles has been traced to its source and the odium must rest where it belongs—with the mining brokers.

It is the mining brokers who go to make up the Exchanges, and it is to them we look for the reform of these evils. There is no reason why miners, mine owners who are honestly working their properties, and mining brokers should not all work together for the common good of each other and the industry they represent. Should, however, the stock brokers succeed in ruining their own business, as they seem to be trying to do at present, good mining properties are too abundant and the profits to be derived from working them too large for the foundations of the industry to be shaken. Mining will continue to live and flourish, although the profits may be reaped by the few rather than the many.

THE OUTLOOK IN COPPER.

[Engineering and Mining Journal.]

The future of copper is, more than that of any other metal, full of uncertainty. Consumption is large beyond expectation, and much is said in an indefinite way concerning new uses which that metal has found or will find. Prominent among these is its application for electric light purposes, and some extravagant estimates are made. We have received from two of the largest electric light companies a statement concerning the quantities used by them during the current year. According to it, both together require one million pounds of copper. Based upon these figures, the most liberal allowance for all of the consumption from this source would place it at between four or five millions of pounds of copper. This is approximately equal to the quantity exported during the year by the Lake Superior companies; and as that grade of copper is preferred for the purpose to any other, an increase in consumption will simply do away with the necessity of exportation, unless a pressure is exerted by other grades upon the use of Lake copper for brass and bronze. It is true that, according to all expectations, the wants of the electric light companies will be much greater next year than now, Mr. Edison alone estimating that he will require two million pounds. But even if it should be doubled to nine or ten millions, the demand from that source will not keep pace with the growing production of the Western mines, the estimates of close and reliable observers for the output of Arizona in 1882 placing it alone at fifteen millions of pounds. There is little chance for a reduction of output on Lake Superior, and probably little as concerns the smaller districts throughout the country. Consumption, then, will have to cope with a growing production, and as the principal quantities of copper go into brass for innumerable articles of hardware and fittings, the position of the metal will depend upon the continuance of the present active business in the machinery and hardware trades. For the former, the fact that orders for delivery far into the next year are refused speaks sufficiently; and for the latter, the prospects are flattering. A very considerable portion of the brass and bronze consumed goes into the building of rolling stock, which is constructing now at a rate never before witnessed. Every locomotive and every railroad car added to the equipment of our roads represents a steady consumer of copper in various forms; and as all the construction-works are supplied with orders far into the future, their demand for the next year is well assured. On the whole, the outlook for producers and miners is a promising one, and as the general situation is very good, the prospects of a rapid development seem very encouraging.

SILVER.

[Chicago Mining Review.]

Against an unjust, and, in one sense, a double discrimination, the silver interest in this country has within the past few years risen to a marked prominence, and is bestowing its generous favors with a lavish hand upon a people and nation which deny its value, and virtually protest against its development. While the strong arm of the Government protects by tariff the development of every other mineral, and encourages the production of the baser ores, silver is not only compelled to compete with the nations of the world in the market, but is practically shut out from its true place in the currency of the country. However, in the face of these obstacles it is proving itself not only to be an industry of great value and importance, but to be one of the chief elements in extending the borders of civilization, and opening up new fields to be filled with farms, cities, manufactories and other substantial evidences of industrial and financial prosperity. The statement of the Director of the Mint places the value of the annual production of silver for 1880 at \$39,200,000, and this estimate is certainly much less than the actual amount produced. The addition of at least \$40,000,000 of a valuable commodity per annum, with positive assurance of largely increased production, in addition to the other lines of business which follow upon its footsteps and thrive upon its activity, is a fact worthy of more attention than it has received. An industry which adds that amount alone to the channels of commerce deserves at least to be placed upon an equal footing with other productive industries, of not greater value and importance.

Personals.

CYRUS W. FIELD, it is said, wears the finest emerald in the world in his scarf-pin.

T. C. BANKS, business manager of the Forest and Stream, died on Wednesday last.

CAPT. MOYLE, Supt. of the Blue Hill, passed through this city Tuesday evening on his way to Boston.

MR. A. E. BARCLAY sailed from New York for England on Tuesday last on the steamship Wisconsin of the Guion Line.

PROF. W. F. STEWART arrived in Bangor from Boston on Tuesday and will probably make quite a stay in our city. The Professor became disgusted with the liquid food furnished him at the Boston hotels, and declared he would have a drink of pure water if he had to go to the head of Penobscot River after it.

ALEXANDER BOYDEN died at Foxboro, Mass., on Wednesday of last week, at the age of 91 years. He was a brother of Uriah Boyden of Boston, the well-known inventor. Alexander was the inventor of malleable iron when he and his brother were associated at the iron foundry in Foxboro, but never amassed wealth. Of late years he has resided at the almshouse, but Uriah left him a small sum to pay for his board. It is claimed that a grandfather of the brothers cast the first cannon ball in the revolution, although Bridgewater claims the same feat, but the Foxboroites say that Bridgewater people came to the Foxboro foundry to see them cast the ball.

—Considerable surprise and excitement were created in Wall street the other day by a prominent operator appearing on the steps of the treasury building with his hands in his own pockets.—[Elevated Railway Journal.]

Dips, Spurs and Angles.

—The lion is called the king of beasts, but the ox is really the *bos*.

—The Bank of England was founded in 1694. Its capital is £14,533,000.

—Vanderbilt may plant and Jay Gould may water the railway stocks of the country, but it is the credulous ass of a purchaser who giveth the increase.—[Puck.]

—The Suez canal is 100 miles in length. It is seventy-two feet wide at the bottom, about 300 at the surface, and twenty-six feet deep, easily passing the largest vessels.

—Preacher (arriving drenched)—“What shall I do, Mrs. McGregor? I am wet through and through.” Old Scotchwoman—“Get into the pulpit as soon as ye can. Ye’ll be dhry eno’ there.”

—New Jersey is trying to claim Noah because he was a New-ark man.—[Ex.] Yes, but you know he looked out of his Arkansaw land. Give the South a fair show in this thing.—[Little Rock Gazette.]

—The Pitkin (Col.) Mining News says the aesthetic business has struck that camp. A Bostonian who is prospecting there has located a claim which he calls the “Utterly Utter Lode.” It assays too too (22) ozs., silver to the ton, and is located in the lime belt.

—The Aryan languages are Sanskrit, whence Hindoostance; Zend, whence Persian; Greek, whence Romanic; Latin, whence Italian, French, Spanish, Portugese, Wallachian; Celtic, whence Welsh, Irish, Gaelic; Gothic, whence Teutonic, English, Scandinavian; Slavonic, whence Russian and Austro-Polish.

—The San Francisco Daily Report says: Usually it is the Nevada man who captures the New Yorker’s scalp on a mining proposition, but sometimes the New Yorker gets away with the sagebrusher. The people of Cherry Creek, Nevada, are wailing loudly over the failure of the Teacup Mining Co., a New York corporation which ran its mine on jawbone, leaving almost everybody in the place in the lurch with its worthless paper on their hands.

—Among the remarkable novelties of recent discovery is the boot blacking plant, a native of New South Wales. The leaves of this shrub contain a tough substance gifted with all the properties and attributes of the finest boot polish. Squeeze them gently and they will yield some thick, dusky drods of sticky fluid, which must then be spread over the surface of the boot. This done, a polish of dazzling brilliancy may be brought out by a few light touches of the finishing brush.

—The train had run into a snow drift and the engine was butting its head in vain against a six-foot bank. “For once the iron horse appears to be beaten,” remarked a fat woman in a second-class carriage. “You shouldn’t call it an iron horse,” mildly remarked a solemn-faced man. “Why not?” asked the fat woman in some surprise. “Because it’s block tin,” softly murmured the solemn-faced man, as he gazed out of the window and across the wintry waste, with a far-away look in his eye.

—The search for pearls in the mussels of Ohio has been a considerable industry for years. The Nashville American reports an outbreak of pearl hunting in Stone River, Rutherford county, Tennessee. Not less than 500 people are engaged daily in raking the bottom of that stream, delving down in the mud for mussels, which are piled along the banks, opened, and critically examined for the treasures contained in many of them. One pearl is reported for which \$80 was paid in New York. The general range of value, however, is said to be from 50 cents to \$25.

—Another illustration of the amenities of Western journalism is furnished by the Laramie (Wyoming) Boomerang: We have nothing more to say of the editor of the Sweet-water Gazette. Aside from the fact that he is a squint-eyed, consumptive liar, with a breath like a buzzard and a record like a convict, we don't know anything against him. He means well enough, and if he can evade the penitentiary and the vigilance committee for a few more years, there is a chance for him to end his days in a natural way. If he don't tell the truth a little more plenty, however, the Green River people will rise as one man and churn him till there won't be anything left of him but a pair of suspenders and a wart.

—The term 'Badger,' applied to the people and State of Wisconsin, arose in a singular way. In the lead regions, in early times, there were two classes of miners—those who remained at the mines the year round, and those who came up from Illinois to operate only during the summer. The permanent residents were accustomed to dig burrows in the hillside where they cooked and slept, while the Illinois itinerants lived in pits. The residents, therefore, were called 'Badgers' on account of their burrows, and the Illinoisans 'Suckers,' because their migrations coincided in time with those of the suckers in the river, which appeared in the spring and went away in the fall. Both of these names have stuck and are now in general use.

—As pure gold is so very soft—too soft, indeed, for any practical purpose—it is alloyed with copper or silver, the first alloy producing a reddish color, and the second a pale yellow gold. Our gold coin, like that of France, Belgium and Holland, contains one-tenth of both copper and silver, mostly copper. For jewelry, the alloy differs with the quantity, and is estimated by what are called carats. A carat is the 24th part of any given quantity. Thus when gold is called 24 carats, that of every 24 parts, 20 are gold. 18 carats is the most common alloy used by jewelers, and keeps as well as pure gold. 12 carats is only half gold, and is a low alloy, which is apt to tarnish more easily, and lose its luster, requiring more frequent cleaning.

—Nevada is the fourth largest State in the Union, territorially. It has had the biggest mines and hopes to have still bigger. It boasts the finest looking men, the greatest chances for making—and losing—money; less religion and more generosity than in any other of the United States. Its people live high—on the Comstock, at least—and mainly in the future. "Farewell the tranquil mind; farewell content," is the motto of every representative Nevadan. We can drink harder and work less; live more extravagantly; run in debt faster; pay more assessments; receive less dividends; shoot quicker, stab harder and escape without punishment more frequently than any other known people. We here cling desperately to the rocky sides of Mount Davidson like a lot of enfeebled flies, too weak to move and too discouraged to try, waiting for the reviving effects of old-time bonanza sunshine. When the storm breaks and fair weather appears we will bask in prosperity for a brief season, again "go bust" and renew our present lamentations of hard times. —[Virginia Chronicle.

JUST WHAT MINERS WANT.—We are in receipt of a new book by the well known publisher, Henry N. Copp, of Washington, D. C. It is called the American Mining Code, and is the most complete work on the subject extant. In addition to the United States mining laws and regulations, it gives the State and Territorial laws now in force, with an extensive digest of court and land office decisions, lists of 5,000 patented mines, Dr. Raymond's rich Glossary, and many new and improved forms, including location notices, mechanics liens, &c. Copp's Mining Code contains 230 pages, 8vo., and sells for 50 cents in paper, and \$1.25 in cloth. It is the latest, cheapest, and only reliable miners' guide now before the public. It may be procured of Henry N. Copp, Washington, D. C., or at the office of the MAINE MINING JOURNAL.

Unfortunate Conflagration.

THE PORTLAND SMELTING AND REDUCTION WORKS SERIOUSLY DAMAGED BY FIRE.

The Portland Smelting and Reduction Works were the scene on Thursday night of last week of a disastrous conflagration. Fortunately, however, the damage was not as great as might have been and a prominent portion of the works still remains in good condition.

The extent of the damage is the total destruction of the acid acid and lead works, and also the silver and gold works, nearly all the tools, one engine and boiler and large quantities of machinery, shafting, belting, tanks, etc. The lead chambers contained twenty tons of lead and the tanks held five thousand gallons of sulphuric acid of 42 degrees strength. About two hundred tons of ore and seven tons of matte were stored in the buildings burned, but although badly mixed most of this has been recovered. The fire originated from the accidental stoppage of the steam suction pipes leading from the acid chambers, and the flame was thus thrown out upon the wood work. The loss is about \$14,000 and the insurance is \$7,000, all of which will be paid.

On Friday, the morning after the fire, a large force of men were put to work clearing away the rubbish, and work immediately commenced on the foundations for the new buildings. The carpenters began operations on Monday and unless the weather proves bad Professor Bartlett hopes the buildings will be up within two weeks. At the same time workmen are busily employed repairing the furnaces and machinery. The buildings in process of erection will be much larger than the old ones and there will be added one blast furnace and another set of kilns. The dimensions of the large building will be 140 ft. by 40 feet. The acid works will not be rebuilt until spring and then they will probably be greatly enlarged.

The new copper works were not seriously damaged by the fire and smelting operations were resumed on Tuesday. There are now on hand at the Works about seven hundred tons of ore and everything is in readiness to treat all kinds of copper ore sent them.

The Stewart Mine.

ANNUAL REPORT OF SUPERINTENDENT DUNN.

BLUE HILL, Dec. 5, 1881.

To the Directors of the Stewart Copper Mining Company:

GENTLEMEN:—I herewith furnish you some points bearing on the merits of the Stewart Mine, in reference to its value as a mining enterprise:

Your property comprises 1700 linear feet of the mineral veins known to exist in the Blue Hill district, and a width across the range from north to south of almost 1600 feet and occupying such a position that it could not be more favorably placed to combine the many features which contribute to the advantage of a mine were it "surveyed to order."

I personally regard the Stewart a promising mining property. Its local and geological characteristics present the arrangements which are positive indications of leading to beds of workable and valuable ores. The vein on which we are operating is undoubtedly a true bed vein. The gangue or veinstone of the same consists of quartzose and talcose schists, and nothing is more certain than its permanency in depth, coupled with the assurance to increase in size and value as exploitation advances.

In assuming charge of your operations, I deemed it conducive to your interests, in view of the large extent of mineral-bearing property you possessed, to explore the same more thoroughly in length and breadth. The work of exploration presented no difficulty in establishing the continuation of the vein up to our eastern boundary, and fully agrees in the environing rocks and mineral features with the vein exposed in our No. 1 shaft; and the rock exposures, wherever crosscuts were made, point to the existence of a permanent and promising vein.

Directed by the light secured by preliminary work, I could more intelligently determine the sites for other shafts, and in due time located No. 2 shaft some 400 feet east of No. 1. Finding the work of development satisfactory at this point, and receiving clear indications that our mineral ground to the east was worthy of exploitation, we deemed it advisable to open No. 3 shaft 280 feet east of No. 2, leaving still about 700 feet of

vein length between No. 3 and the boundary line. The developments which can proceed from these three shafts will economically combine to operate the greater portion of the vein and readily determine the most valuable portion of the same, besides proving advantageous in other respects in lessening the cost of mining.

Our shafts Nos. 2 and 3 are carried on the inclination of the vein, and have each reached a depth of 90 feet. Both shafts reveal a regular and well defined vein and furnish strong evidence of the generally received theory that veins increase in fertility as they increase in depth. The appearance of No. 3 in penetrating the last fifteen feet shows a marked improvement for ore. Several seams of copper have enriched the vein, which incline from the hanging, and rapidly expand across the shaft. This is full of encouragement to every one interested, and supports the conclusion that the shaft is situated convenient to promising deposits of metal.

No. 2 shaft is let on contract to a party of 8 men who keep the work advancing day and night. We are engaged in building a shaft-house, and will complete the same during the present month. No. 3 shaft is progressing on contract by a party of 6 men who for the present confine themselves to day work. The inclemency of the season will soon necessitate the erection of a shaft-house here. I would recommend to continue the sinking of No. 2 shaft 25 feet deeper, and to bring No. 3 to this grade or horizontal line were we proceed to extend drifts in a longitudinal direction. I am at present working 14 miners, 2 surface hands, 1 blacksmith, besides such carpenters as the erection of our buildings demands.

Our property is traversed by other veins. The one on which the "Favorite" is opened passes our north boundary line, and can be examined by directing cross-drifts from our 1st or 2nd levels. I am not at present able to indicate to you the probable width of our vein. It has all the evidences of a broad deposit wherever we uncovered it on the surface.

In conclusion I can only reiterate my former statements, that your property, if systematically mined, the vein opened to a reasonable depth, and opened by drifts correspondently, cannot fail to prove a paying industry.

Respectfully yours,
DANIEL DUNN, Supt.

The Dodge and Jones Mining Property.

REPORT BY CAPT. THOMAS POLLARD.

ROSIER CON. COPPER MINE,
CAPE ROSIER, Me., Dec. 12, 1881.

E. C. Smart, Esq.

DEAR SIR:—By request of your son, Mr. J. F. Smart, acting as agent for the parties interested, I have made an examination of the Dodge and Jones property, located at West Brooksville, in the town of Brooksville, Hancock County, Maine.

I learned from good authority, when there, that there are 175 acres of land, more or less, in both properties; bounded by land of Geo. Farnham on the S. W., by land of Wesley Jones on the E. N. E. and by the Bagaduce River on the S. W.

I find, on examining this property, the appearance of four large veins running nearly parallel and nearly N. E. and S. W. for a distance of 220 rods through the property, and in a direct line between the Rosier and Hercules Mines. These veins are exposed to view on the shore of the Bagaduce, also at numerous points on the hillside by sinking holes on the outcroppings of the vein; and at every point where the vein was exposed I find mineral.

At a pit sunk on the hill, from 5 to 6 feet deep, I find the vein composed of sulphurets of iron and copper, zinc blende, galena and quartzite. The mineral at this point is closer concentrated and richer than at any other point that came under my notice on the property; the pit sunk, however, was not of sufficient depth to expect a regular, well defined vein. The same vein referred to above also makes its appearance on the shore of the Bagaduce in lower ground and at a distance of about 300 feet N. E. The formation of the vein on the shore is more regular than it is on the hill.

I find a shaft sunk about 1000 feet from the Bagaduce on another well-defined vein 8 feet wide carrying well-defined walls. The vein at this point is vertical and the shaft sunk about 39 feet. The ore taken out of this shaft is strongly charged with sulphurets of iron and copper, known to the miner as copper mundie. This vein shows, from the shaft to and into the Bagaduce, very regular. From the shaft S. W. the vein is covered with soil. There is nothing so regular that came under my notice on the property. It is a vein very easily followed and will, in my opinion, warrant an outlay in order to develop.

The most interesting point of the property to my eye, however, is a point still more westerly, cropping out on the shore

of the Bagaduce in a flat vein form. It has the appearance of a flat vein laying almost on the top of the ground, at a width of about 9 feet. The appearance of the whole width of this vein at a little distance is that of a very rich vein of copper ore, and at a close and careful examination it is all mineralized. It is my opinion that this vein—say within 100 feet E. from its outcropping—will take a regular easterly dip and make a handsome vein in depth.

In conclusion, I consider the property a very interesting one, and by judicious development it can be made a very valuable one. It is my candid opinion that the property will warrant a sufficient outlay to develop it. The locality for a mine could hardly be improved upon, if you had it made to order. There is about 1 1/4 miles of water front on the Bagaduce, just opposite North Castine and but a short distance from Old Castine. The property is well supplied with the best of spring water, and affords every advantage for erecting mining machinery and buildings of any kind necessary for the working of a mine.

Yours truly,
THOMAS POLLARD.

CORRESPONDENCE.

Cape Rosier Heard From.

CAPE ROSIER, Dec. 10, 1881.

To the Editors of the Maine Mining Journal:

The MINING JOURNAL of Nov. 25th, contained an article in regard to the Rosier Copper Mining Co. which gave many facts and a few errors. A Yankee could easily guess from whom your information was derived. There are some persons who like to appear smart and wise and to them is due all honor. In your article you state that certain vague reports reached Mr. Cram, of Portland, in regard to mineral on the Cape.

Those vague reports consisted of facts contained in an article by S. D. Gray, Esq., which appeared in the Eastern Argus and which gave his opinion of the mining prospects of the Cape.

Had this report been so very vague it would not have appeared in that paper. Be that as it may the return mail brought no less than three letters of inquiry to Mr. Gray, one of which was from Thomas Holland, Esq., a practical miner and prospector, who wrote that he would like to visit the place and look at the places spoken of. A favorable reply was made by Mr. Gray, the result of which was that he came and by the assistance of Mr. Gray was enabled free of expense to examine the places where it was supposed valuable mineral could be found. Among the places visited was that which is now famous as the Rosier Mine, and no man but Thomas Holland would have thought of sinking a shaft where he did; but time has proved his wisdom. The men who know so much about it now, never saw the place until the shaft was down several feet.

These are the facts in regard to the discovery of the Rosier Mine, and your candid readers can decide to whom belongs the honor of the same. Had the money which has been spent in prospecting on the Cape been put in the hands of Mr. Holland for that purpose there would have been more than one mine here now.

The impression has gone forth that the Rosier Co. owns all the valuable mining property on Cape Rosier. This however is not the case as there are some very rich mining properties which that company has no claim to, and which business men would do well to look after.

[In relation to the above matter, the MINING JOURNAL has nothing to retract in its allusion to the discovery of the Rosier Mine, and if we were to re-write the article in question there is nothing we would wish to change, with the single exception that Mr. Holland's name should have been written Thomas, instead of John. We are personally acquainted with Mr. Holland and have been for a long time familiar with the circumstances under which the location was made. We also recall the article mentioned as having appeared in the Portland Argus, but had forgotten, if we ever knew, its author. So far as we are aware, no one wishes to dispute the claim of S. D. Gray, Esq., or rob him of the honor of having first called public attention to the mineral wealth of the Cape. With regard to the "vagueness" of the reports which reached Portland, our readers are capable of judging for themselves from the statements contained in the above communication. Notwithstanding the fact that S. D. Gray, Esq., called the attention of Mr. Holland to several localities, the point selected by the expert as most

worthy of exploration was one "where no one but Thomas Holland would ever have thought of sinking a shaft."

If the impression has gone abroad that the Rosier Company own the only mining property on the Cape worth having, it is solely because they are the only parties who have expended a sufficient amount of money to demonstrate to the outside world that they have a mine. It is not at all improbable that there are other properties on the Cape equally and perhaps even more valuable than the Rosier; but it will take time and capital to show up their merit. Meanwhile the residents of that section should render every assistance possible to those striving to develop its mineral wealth, bearing in mind the fact that to the Rosier Company alone are they indebted for the general interest now beginning to be taken in that locality.—ED. MINING JOURNAL.]

Mines of the Black Range, New Mexico.

CHLORIDE, N. M., Dec. 2, 1881.

To the Editors of the Maine Mining Journal:

Thinking a few lines from the Black Range mining district may be of interest to you, I will endeavor to give a brief summary of the situation and present outlook.

This camp was started on the second day of October, 1880, and the number of locations made up to the present time is about two thousand. This has been the prospector's Paradise, as there have been a great many claims sold to both Eastern and Western companies, for good prices, on surface indications. The veins crop out very strong on the surface, and in my experience of twenty years' mining the croppings are the richest I have ever seen.

Development is the principal feature in camp at present, and the properties are showing up finely. Dreadnaught Mine has a pay-streak of 4 1-2 feet, average assays of which give 223 ozs. silver and 22 per cent. copper to the ton; Colossal—pay-streak 3 feet, average assays 325 ozs. silver and 13 per cent. copper; Wall Street No. 2—pay-streak 5 feet, silver 287 ozs., gold 1 1-2 ozs.; White Signal—pay-streak 3 1-2 feet, average assay 132 ozs. silver and 22 per cent. copper; Apache—pay-streak 2 1-2 feet, average 187 ozs. silver and 17 per cent. copper; Hardscrabble—pay-streak 2 feet, average gold 3 1-2 ozs. and 9 per cent. copper; Sailor Boy—averages 82 ozs. silver and 14 per cent. copper. The gold mines we cannot make an average of, as the assays run all the way from \$30 to \$50,000 per ton. The Buckeye and the Ivanhoe are estimated to average, in gold and silver, \$300 per ton.

Our country is well watered and timbered, and the climate cannot be excelled. We work summer and winter, and an overcoat is a curiosity in this camp.

ALAKI.

The Sea Serpent.

THRILLING ADVENTURE OF MESSRS. HALL AND LIBBY—THE ONLY AUTHORITY ACCOUNT.

[St. Croix Courier, Dec. 9th.]

As certain mis-statements concerning the serpent seen by Messrs. Hall and Libby in Nov. last have been going the rounds of the press, Mr. Hall has requested us to publish an authoritative and *bona fide* version of the adventure. He claims that he has been foully misrepresented in the matter, and is not by any means backward in expressing his disgust for those papers whose pages are filled with news obtained at second hand, and published promiscuously on no better authority than that of current report. We have known Mr. Hall for many years and have every confidence in his statements. His story is as follows:

Early in November last, he and Mr. Wm. Libby went up river on a lumbering expedition. Having reached the Upper Chain Lake, on Machias waters, on the 4th of November, they sat down on the shore of the lake to partake of lunch. After finishing their repast, Mr. Libby heard a noise to which he directed Mr. Hall's attention, and, on looking in the direction from which it proceeded, they both observed, about a mile distant, what they at first thought was a skiff with men in it. When it came nearer, however, they saw that it was a serpent of very large size. As nearly as they could judge, its head was carried six feet above the surface of the water, its body was as large around as a barrel and its length about fifty feet. It approached them at the rate of about twelve miles an hour, turning its head from one side to the other, as if looking for something. Mr. Hall's theory is that it had scented the two men and was after them, but preserving their presence of mind, they lay very close and escaped unobserved. If they had

been discovered, there is no doubt that both would have been quickly devoured. Mr. Hall is of the opinion that the serpent subsists on deer, which are numerous in that vicinity.

There can be no doubt of the truth of Mr. Hall's story. That the serpent has existed there for some years is known by the Indians at Peter Dennis' Point, and John Newell, a leading man among them, says that this serpent has been seen many times in Big Lake, above Princeton. Mr. John Williams, twenty-nine years ago, while lumbering near the Upper Lakes, also saw the same or a similar serpent. Mr. Hall proposes to organize a hunting party in the spring and exterminate the creature or die in the attempt.

Emeralds in North Carolina.

BY WM. EARL HIDDEN.

Mineralogists and the public in general are perhaps unaware that systematic mining for emeralds has been going on in Alexander county, North Carolina, for over a year, and their existence over quite an extensive area has been proven beyond question. Thinking that what the impetus was that started the search for emeralds in this region would be of interest to the public, I here give the story, gathered as it is from all the people concerned and by a year's residence on the spot where the emeralds have been found.

Sixteen years ago the site of the mine now being worked was covered with a dense primitive forest. Less than ten years ago this country was, mineralogically, a blank; nothing was known to exist here having any special value or interest. Whatever we know of it to-day is due, directly or indirectly, to the earnest field-work done here in the past 7 years by Mr. J. Adlai Stephenson, a native of the county, now a well-to-do and respected merchant of Statesville, N. C. Under a promise of reward for success, he engaged the farmers for miles around to search carefully over the soil for minerals, Indian relics, etc., and for several years he enjoyed surprising success in thus gathering specimens. While rarely doing any personal work himself, he yet had, in the above desultory manner, many persons working for him, and in giving his attention to their finds he had his hands full, as the saying is. The amount and variety of material he gathered in this way was simply astonishing, and his most sanguine expectations were more than realized. Every species brought to him from this new region seemed like a revelation. In some manner they were more interesting than anything heretofore found of their kind in the South. Certain it is that up to this date, and I write from personal knowledge, this region has furnished some of the most remarkable and beautiful specimens of quartz, rutile, monazite, spodumene, beryl and emerald thus far discovered in the United States.

The farmers now say that they lost much valuable time in searching for "rocks," but as the sequel shows they have been greatly benefited by the increased value of their lands as discoveries were made.

To be brief and to the point, I will state that from a few localities in the county Mr. Stephenson would occasionally procure crystals of beryl, of the ordinary kind, but now and then a semi-transparent prism of beryl having a decided grass-green tint would be brought to him. These got to have the name of "green rock, or bolts," and became the ultimatum of the people's searchings. Mr. S. had told them that a dark green beryl would be valuable if clear and perfect; would in fact be the emerald; and for them to search more carefully than ever to find one. Surely he had informed the people aright and had given them a *rara avis* to look for.

Sufficient it is to say that in a period of about six years there were found on three plantations in this county, loose in the soil, a number, say ten, of veritable emeralds, none of which, however, were dark colored or transparent enough for use as gems. All these specimens went into Mr. Stephenson's collection, with the single exception of one very choice crystal obtained at the locality by the late John T. Humphreys, which crystal is now in the cabinet of Dr. Eddy, of Providence, R. I.

Such is the history of the emeralds found in this county before the writer commenced mining for them. I must acknowledge that it was the sight of two pale emerald crystals from this county in Mr. Stephenson's collection that prompted me to come here and work for them; and further, I owe to him the knowledge concerning the localities which has enabled me to succeed in my explorations.

It must be said of Mr. Stephenson, and greatly to his credit, that his interest in minerals is a purely natural one. I cannot understand why work was not commenced long ago where such favorable signs were so common. That such specimens could have received only a passing notice from collectors is really inexplicable. A very natural conclusion would have been that where these pale emeralds were found in the soil, darker and purer ones would be found by mining for them.

The locality is situated about thirty-five miles, air-line meas-

ure, southeast from the Blue Ridge mountains, sixteen miles N. W. from Statesville. The contour of the country is low rolling. The altitude something over a thousand feet. The soils are mostly red, gravelly clays, of not much fertility. The prevailing rock is gneiss, with more of a felspathic than micaeous nature. The trend of the strata is N. N. W. and S. S. E., with a dip nearly vertical. The gems and crystals occur implanted and not embedded in open pockets or veins of very limited extent, that are cross fractures or fissures in the rock. These fissures (lenticular in shape) are usually situated nearly perpendicular.

There being no glacial drift here, the soils are necessarily the result of decomposition and disintegration on the spot. It is therefore an easy task to find the source of minerals found on the surface. The "frost-drift" theory of Prof. Kerr* is everywhere proven in this region. He well says that "to a foreign geologist, entering the South Atlantic States for the first time, a hundred miles or more from the coast, the most striking and novel feature of the geology is the great depth of earth which everywhere mantels and conceals the rocks. This is readily discovered to be, for the most part, merely the result of the decomposition *in situ* of the exposed edges of the underlying strata. The vertical and highly inclined bedding lines of the strata are distinctly traceable by the eye through this superficial earth covering, and are seen to pass by insensible gradations into the undecayed rock beneath." At this locality the unaltered rock is found at a depth of twenty-six feet and is of unusual hardness, especially where it walls the gem-bearing pockets.

Thus far the gems have been found in a narrow belt running N. E. and S. W., and scattered over a distance of three miles. In this belt signs of cross fissures are very abundant and it is a very common thing to find crystals of quartz, rutile, tourmaline, etc., perfectly preserved, scattered over the surface.

The location of the present mine was obtained in the following manner: A corps of men were engaged to dig a series of deep ditches in directions that would cut the strata at different angles. The site chosen for work was on the spot where at least half a dozen pale emeralds had been found. This location was shown to me by the farmer (Mr. J. W. Warren) who had found the specimens. Not knowing then their manner of occurrence, I hoped in this way to strike a vein bearing them. Five weeks was spent (July—August, 1880) before any success was met with, and then, at a depth of eight feet, a "blind vein" bearing very small emeralds was discovered. In this vein, or pocket as it proved to be later, and outnumbering the emeralds fifty to one, was found the new emerald-green mineral which was such a surprise to the scientific world and which was destined to answer the same purposes as does the gem I sought, and become in all probability the main object of future mining here. I refer to the spodumene-emerald now known as "Hiddenite."

The reader must pardon this digression from my subject, but the search for emeralds here is so interwoven with my discovery of emerald-green spodumene† that I cannot tell the story of one without the other. The two minerals occur intimately associated together and while mining for the one the other is constantly found.‡

This "blind vein" (so-called, because it had no outcrop) yielded very handsomely of the new mineral, but very sparingly of emeralds, and the few found were too small to be useful as gems, through their color was very good. A tunnel two hundred and sixty feet long, mostly through rock, was cut to this vein, and a shaft eight feet square sunk down upon it. At the present writing the vein has been worked down to a depth of thirty-three feet, at which point it has proven its "pocket" nature by showing signs of "pinching out"—closing together. Thus far twelve of these pockets have been found within an area of a forty feet square carrying emeralds, four of which pockets contained also the "Hiddenite." All these veins maintained nearly the same character of dip, thickness, length (horizontally), and associations. Other pockets were found that yielded quartz, rutile, monazite and mica crystals. Others yet whose walls were covered with finely crystallized dolomite, calcite, apatite, rutile, pyrite, quartz and mica. In one instance a small pocket, that contained two beautiful small emeralds, had its walls covered with large crystals of albite (twinned parallel to the basal plane). Another pocket contained only mica and one small pellucid *colorless beryl* that had

both ends terminated with many planes. I mention the above associations so that the reader can learn the diversity in these pockets although they are so near together.

In the rock mining, as also in the soil, the sign of a vein "coming in" is the presence of small streaks of massive quartz or of mica in a contra direction to the strike of the rock, either of which indications leads to open pockets not many feet off. The gems thus far have been found in the bottom of the pockets. Not over nine emeralds have as yet been found at any one time.

So far the pockets have been very crumbly and the crystals obtained only in a detached condition. Mineralogists have a great treat in store for them when deep rock mining is accomplished here; then the emeralds, beryls and "Hiddenites" will be found firmly attached to the matrix. [It is the writer's belief that the latter mineral will be found here with the terminal and prismatic planes brilliant, at a depth of—say—fifty feet, and that their present rounded and pitted appearance is due to exterior alteration.] The largest emerald found here, thus far, was three and one-quarter inches long by three-quarters of an inch in diameter. It was one of five fine crystals contained in one pocket. Their color was excellent and they were transparent though somewhat flawed. A peculiar feature pertains to most of the emeralds and beryls from this region; they appear to have been filed across the prismatic faces. The basal plane is also often pitted with minute depressed hexagonal pyramids that lie with their edges parallel to one another and to the edge of the hexagonal prism. Rarely, though, crystals are found with perfectly smooth and brilliant faces. The emerald color is often focused on the surface and fades gradually to a colorless central core, which feature is of exceeding interest when the cause of color is considered. The emeralds have been found of richer color and less flawed as the mine gets deeper.

This region has a great future as a gem-producing district. Mining skill and capital are the only essentials now needed here to insure success. It may be interesting to note that the entire expense of the last year's work here has been more than repaid by the sales of the gems discovered.

LODES, LEADS AND VEINS.

GARDNER MOUNTAIN.—A majority of stock was not represented at the recent meeting at Winterport of the Gardner Mountain Copper Mining Company and it was accordingly voted to adjourn to Tuesday, Jan. 3, 1882.

HARVEY ELLIOT.—This property has received but few notices at our hands as we did not wish to give any but reliable information to our readers. We are now able to report not only progress, but rapid strides in their operations. They are now constructing what we should term a most desirable "plant." Two weeks ago we reported the arrival and discharge of a vessel loaded with machinery and supplies, for their exclusive use. During the past week they have received additional invoices of machinery from Boston and the word is, "still it comes," as there is another invoice now on its way from New York. Some of the machinery will not be ready until April, among which we may mention a powerful air compressor, now being built for them of an entirely new and novel design furnished by the Ingersoll Rock Drill Company. Three drills made by the above named company have arrived. They will run the drills by steam, until the arrival of the compressor.—[Sullivan Bulletin.

TAPLEY.—The sale of the Tapley mine has been consummated and we are informed that the money was paid and the deeds transferred on Wednesday.

Blue Hill.

DOUGLASS.—The new roast kiln has been fired up and it is understood works very satisfactorily.

YOUNG HECLA.—The latest advices received by President Jenness from the Superintendent are that the drift has been extended westerly twenty feet and some good looking rock has been blasted out. The vertical shaft is 35 feet deep, a crosscut of 44 feet has been run from this and the drift referred to above extends from this crosscut. Superintendent Ludlow is about ready to commence sinking the permanent shaft.

GRANGER.—At the recent meeting of the Granger Copper Mining Co. at Kittery, Maine, a new company called the Granger Mining Company was formed with a capital of 100,000 shares of a par value of \$1 each. The old company sold all their property to the new company, which assumes all the debts of the former. The new stock is subject to an assessment of 5 cents quarterly until the amount levied has reached 50 cents. Albert E. Clary is President of the new company and Dexter H. Follett is Treasurer.

*See American Journal of Science, vol. xxi., pages 345—358.

†Dr. J. Lawrence Smith was the first to discover its true nature and was pleased to give it the above name. See American Journal of Science, vol. xxi., page 125.

‡Perhaps I should say that a few *pale yellowish* crystals of what was considered to be diopside had been found on this same property (and spot), which specimens went into the collection of Mr. Stephenson, in whose possession I saw them. Neither he nor I looked forward to finding the mineral of such a beautiful rich green color, as was so unexpectedly done in the vein above mentioned, or of even finding it again. We did not in fact give it much attention. "Emeralds" was the only goal head.

British Provinces.

It is reported that important oil discoveries have been made in the vicinity of Pictou, Nova Scotia.

Mr. E. F. Couch, of Dorchester Copper Mine fame, and his bride, are stopping at the Halifax Hotel.

E. F. DeCamp, Esq., has recently returned to Halifax from New York where, it is stated, he has sold another Nova Scotia gold mine.

The Montreal Gazette estimates the present year's product of the phosphate mines in the townships of Hull, Wakefield and Templeton, at 20,000 tons.

A correspondent of the Engineering and Mining Journal gives the yield of the Sherbrooke gold mines for November as 188 ozs. 3 dwts. from 374 tons of quartz.

The Cape Breton Advocate says thirty casks of ore from the galena deposits at Salmon River were shipped per steamer Shattuck for the United States via Halifax last week.

Work is progressing very favorably at the Copper mine, at Coxheath. A building is under erection which will accommodate the employees. A proposed road is now being surveyed from the mines to the west side of the river.—[Sydney (C. B.) Advocate.

It is reported that 1700 acres of phosphate lands in Ottawa have recently been sold to an American company, who propose carrying on active operations next season. The mineral is to be shipped to Philadelphia, where it will be converted into superphosphates.

The Mount Uniacke gold mines, according to the Halifax New Era, produced as a result of last year's working 1161 ozs. of fine gold. The village has a population of about five hundred, and possesses four stamp mills, which are continually in operation day and night.

James Crossland, Esq., an English mining engineer, who during a former residence in Nova Scotia made many friends, is on his way to Halifax by the English mail steamer now due. He is said to represent a strong company of English capitalists who are about to invest in the gold mines of Nova Scotia under his direction.

A dispatch from St. John's, Newfoundland, dated Dec. 13, announces the total loss of the brig H. B. Jones, en route for Notre Dame Bay. She had a cargo valued at \$40,000, destined for the miners at Bett's Cove, comprising their winter supplies of breadstuffs and provisions, which is all lost. It is feared the miners there will suffer from starvation as the ice will prevent any further supplies reaching them this winter.

The local Government of Nova Scotia have accepted a tender of English capitalists—who are organizing under the corporate name of "The Nova Scotia Railway Company"—for the transfer of all existing lines of public railway in the Province—except the Intercolonial Railway—and also for the building of certain new lines required to connect and complete the railway system of the country. The particulars of the contract have not yet been given to the public by the Government and will now probably be withheld until the scheme is laid before the next meeting of the local Legislature for ratification.

M. Legru, President of the Credit Mobilier, accompanied by Messrs. Obalski and Leckie, arrived in Halifax from Quebec a few days since for the purpose of interviewing the Nova Scotia Government regarding the railways and other matters, and also en route for Cape Breton to examine the International Coal Company's mine there, which is about being transferred to the Credit Mobilier as a part of the assets of La Banque Jacques Cartier, of Montreal, which, it is understood, has been purchased by that organization. These gentlemen propose visiting several of the mining localities and other industries of the Province before their return.

Copper is still active. Late on Monday evening Mr. Edward F. Couch, at Moncton, was informed by a telegram from Halifax that his interests in the Malagash mine were critically endangered through the machinations of hostile operators. Couch at once hired a special train and at midnight came tearing into Dorchester at a furious rate. Barely taking time to distribute a basket of champagne in honor of his recent marriage, he snatched Wells from the arms of Morpheus and was off up the Dorchester grade like a tornado. He took Wells along to supply him with law at Halifax.—[Sackville Post.

Trouble is brewing over the ownership of the newly discovered bonanza in Nova Scotia known as the Malagash Copper Mine. From newspaper accounts it would appear that Mr. E. F. Couch having, as he supposed, purchased the property and believing himself securely in possession, suddenly ascertained

that another man, Mr. Lewis Carvell, of Hampton, N. B., also claimed ownership and had procured from the Chief Justice, at Halifax, an order for an injunction preventing the transfer to Couch from being recorded. Mr. Couch hired a special train and proceeded to Halifax to fight the matter and, if possible, have the injunction dissolved. The result we have not learned.

A dispatch from Whycoomah, Cape Breton, says that Capt. J. A. Loughhead, the General Manager of the Inverness Oil and Land Company, has just returned from a five weeks' absence in the South, and great activity has commenced in the Cape Breton Oil District. Three wells of Capt. Loughhead's company have been completed, and while but little positive information can be procured from any of the company's agents as to the results attained in these, yet from the manner in which preparations for pumping are being pushed forward, the people in the oil settlements have renewed confidence that the successful development of the oil interests of Cape Breton as a commercial enterprise will soon be realized.

The Kingston Chronicle and News, in mentioning the recent visit of Messrs. Legru and Obalski to Quebec, where the first named gentleman has started the beet root sugar industry, says: About a year ago M. Legru was induced to visit Canada by the Hon. J. A. Chapleau, and so much was he impressed with the advantages offered by this country as a field for investment that he established three sugar factories in the province of Quebec with a capital of several hundred thousand dollars. He also organized the Credit Foncier Franco-Canadien with a capital of several millions for investment in real estate, and now he comes again representing the Credit Mobilier of Paris with a capital of \$20,000,000 for investment in Canadian manufacturing and mining industries.

Messrs. Jno. McGillivray and Geo. W. Stuart, who some few months ago discovered a rich iron mine near Guysboro, N. S., have succeeded in disposing of it to the Crane Iron Company, of Philadelphia, Pa., for a very large sum. We prophesied on its first discovery that this mine would prove a rich one. The company contracted to have mined this winter 5,000 tons of ore and have it hauled to Guysboro, whence it will be shipped to their works at Philadelphia, and in spring a railway, probably, will be constructed from the mine to the most suitable point of shipping—the mouth of Milford River, running into Chedabucto Bay—8 miles in all. A careful assay of the ore shows it to be 69 pure out of a possible 70. The company expect to do a very large business at this newest of our mines, and to rival Londonderry in a short time. The quality of ore is not common and commands a much better price than the others, while the demand is also steady.—[New Era.

Croppings.

[Compiled, Condensed and Confiscated from our Exchanges.]

Work on the Empire mine, of Tombstone, will be resumed within a few days.

There is great excitement over recent silver "fuds" at the zinc mines in Tazewell, Tennessee.

The Moulton mine, adjoining the famous Alice, at Butte, Montana, has struck the vein and is now extracting quantities of rich ore. The San Francisco Daily Report says: The Moulton is the only case on record of the success of a mining company that built a mill before it was dead sure it had a mine.

Some genius has been figuring, and finds that if all the coal in Wyoming could be sold for one-fourth of a cent a ton, it would pay the national debt. Converted into power, even with the wastage in our common engines, it would do more work than could be done by the entire race, beginning at Adam's wedding and working ten hours a day through all the centuries to the present time, and right on into the future at the same rate for the next 600,000 years.—[Laramie Boomerang.

A recent Washington dispatch announces that the old Whitehall gold mine in Spottsylvania County, Virginia, has been bought by a company, among the members of which are Senator Call, of Florida; Senator Jonas, of Louisiana; Congressmen Springer and Berry; Delegate Luna, of New Mexico, and H. B. Clifford, a mining expert of Arizona. Gold was first found there in 1809. The mine was worked by Commodore Stockton from 1848 until just before the war. It has since been owned by Gilbert R. Fox, of Pennsylvania. Nearly \$2,000,000 worth of gold has been taken from the mine.

The Pottsville (Pa.) Miners' Journal says the demand of the Anthracite coal trade is sufficient to tax the resources of the producers to the fullest extent, and this assures steady operations at the mines until the holiday season, which will terminate the business for the year. The year has been one of the most remarkable in the history of the trade, from the fact that

APPLETON MINING AND SMELTING CO.,
 Appleton, Me. Incorporated, Feb. 1880.
 Capital, \$500,000; Shares, \$5 each; Treasury Fund 36,400 shares.
 President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
 CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
 East Blue Hill, Me. Incorporated, Dec. 1879.
 Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
 President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
 GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
 Exeter, Me.
 Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
 President, D. N. Estabrooks; Vice President, J. Y. Richardson; Secretary and Treasurer, J. A. Blanchard. Directors—D. N. Estabrooks, J. Y. Richardson, James Weymouth, Daniel McCulloch and Ernest Lane, of Oldtown; — Sargent, of Brewer, and Charles Greenwood, of Cornua.
 Office at Oldtown, Me.

FAVORITE MINING COMPANY.
 Bluehill, Me. Incorporated July 1, 1881.
 Capital, 500,000 Shares, \$5 each; assessable.
 President, A. E. Herrick, Bluehill, Vice-President, H. A. Tripp, Bluehill; Treasurer, H. B. Darling, Bluehill; Secretary, H. A. Tripp, Bluehill; Directors—A. E. Herrick, H. A. Tripp, Wm. H. Darling, Wm. D. Swazey, Chas. A. Barrett, M. K. Chase, Henry J. Billings.

FANEUIL HALL & SULLIVAN MINING CO.
 Incorporated Feb. 1880.
 Capital, \$500,000, divided into 100,000 shares, forever unassessable.
 Company's office at the Mine, West Sullivan.
 President, Charles H. North, Somerville, Mass.; Treasurer, F. W. Morrill, Boston; Secretary, L. A. Emery, Ellsworth, Me. Directors—C. H. North, Morris B. Boynton, Henry Farum, F. W. Morrill and F. S. Tuttle, Boston; A. A. Hayward, Bar Harbor, Me.
 A. A. HAYWARD, Supt.

GARDNER MOUNTAIN COPPER MINING CO.
 Littleton, N. H. Incorporated under laws of Maine, Dec., 1879.
 Capital, \$500,000; Shares, \$5 each; Treasury Fund, 25,000 Shares.
 President, Samuel Atwood, Winterport, Me.; Treasurer, Henry T. Sanborn, Winterport, Me.; Secretary, S. W. Coffren, Winterport, Me.; Directors, Samuel Atwood, Hanson Gregory, Jr., E. C. Arey, David H. Smith, Henry T. Sanborn, John Atwood, G. B. Putnam.

LADY ELGIN COPPER MINING COMPANY
 Blue Hill, Me.
 Capital, \$500,000; Shares \$5 each; Treasury Fund 50,000 Shares.
 President, Wm. T. Pearson, Bangor; Treasurer, Porter Nealey, Bangor; Secretary, E. C. Pearson, Bangor; Directors—Wm. T. Pearson, Porter Nealey, Edgar C. Pearson, Emery G. Ingalls, of Bangor; Alvin Roddick, of Boston; Arthur S. Newman, of Portland; Rederick H. Candage, of Blue Hill.

MINERAL HILL MINING COMPANY.
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 President, D. H. Smith, Winterport; Treasurer, A. E. Fernald, Winterport; Secretary, Walter Haley, Winterport; Directors—D. H. Smith, Winterport; E. C. Arey, Winterport; John Pierce, Frankfort; W. G. Frye, Belfast; John Atwood, Boston; Walter Haley, Winterport; vacancy.

MCFARLAND SILVER MINING COMPANY
 Hancock, Me.
 Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
 President, Henry Whiting, Ellsworth; Treasurer, I. S. Johnson, Bangor; Secretary, A. W. Cushman, Ellsworth; Directors—Henry Whiting, I. S. Johnson, S. N. McFarland, F. A. McLaughlin, A. W. Cushman. F. A. McLAUGHLIN, Supt.

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 Treasurer's and Transfer Office, 386 Washington St., Boston.

ROBERT EMMETT SILVER MINING CO.
 Egypt Bay, Hancock, Me. Incorp. July, 1879
 Capital, \$400,000; Shares, \$10 each.
 President, H. Whiting, Ellsworth. Treasurer, A. A. Bartlett, Ellsworth. Secretary, George A. Parcher, Ellsworth. Directors—Henry Whiting, Marcus Mullan, James F. Davis, Guy Mullan, A. A. Bartlett.
 P. MULLAN, Supt.

SNOW SILVER MINING COMPANY,
 Bucksport, Me. Incorporated, Feb., 1880.
 Capital, \$500,000; Shares \$5 each; Treasury Fund 40,000 shares.
 President, Capt. J. H. Hill; Vice-President, James Emery; Treasurer, A. H. Genn; Secretary, C. J. Cobb, all of Bucksport; Directors—J. H. Hill, James Emery, Richard Snow, Howard Swazey, Geo. F. Woods, E. P. Hill, Alfred L. Smith.
 RICHARD SNOW, Supt.

SUNBURST COPPER AND SILVER MINING CO.
 Of Surry, Me. Incorporated, February, 1881.
 Capital, \$500,000; Shares \$1.00, unassessable; Treasury Fund, 368,500 Shares.
 President, Jas. W. Davis; Treasurer and Secretary, M. Donelan; Directors—Jas. W. Davis, M. Donelan, Roscoe Holmes, Guy Mullan, H. B. Mason, L. W. Hodgkins, P. Mullan.
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[ESTABLISHED 1848.]

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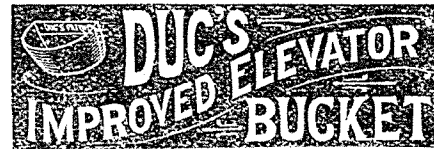
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	A.M.	P.M.
Leave Bucksport,	5.30	A special train 5.00
Arrive Bangor,	6.42	runs in connect- 6.05
Leave Bangor,	7.35	tion with Sanford 7.15
Arrive Bucksport,	8.45	Steamers. 8.25

The 5.30 A. M., and 5.00 P. M., trains from Bucksport arrive in Bangor to connect with trains east and west. The 7.35 A. M., and 7.15 P. M., trains from Bangor await arrival of trains from the west.
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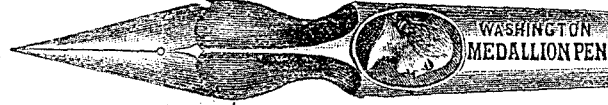
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1880 1882
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1882.

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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

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Reports of mineral discoveries, of whatever nature and wherever made, are solicited, and should, when possible, be accompanied by specimens. All samples sent by mail or express must be prepaid.

Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

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BANGOR, FRIDAY, DECEMBER 23, 1881.

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It is humiliating beyond measure for a newspaper which is striving to draw attention to the mineral resources of the country and the profits to be realized from investing in measures for their development to bring to light and keep before the public the numerous frauds committed in the name of mining. But it must be done.

During the past year the amount of gold and silver money manufactured by the mints was as follows: The gold coinage for the year amounted to \$78,733,864, of which \$15,345,520 was in double eagles and the balance in coin of lesser denominations. The coinage of silver was confined to the minimum value of silver bullion required to be coined by the law authorizing the coinage of standard silver dollars, \$27,637,955 of which were struck, or an average of about \$2,300,000 a month. Of subsidiary coin only \$1,207,175 were coined, and of base metal or minor coins \$405,109.95. In addition to the coinage, the mints and assay offices manufactured from standard sterling and imported base coin to the amount of \$100,750,640 in gold and \$6,542,282.35 in silver.

Maine produces 6000 tons of pig iron annually—.075 per cent. of the total product of the United States. This all comes from one furnace—the Katahdin Iron Works. With the facilities for transportation afforded by the completion of the Bangor & Katahdin Iron Works R. R., the capacity of the Works will be increased and the annual output from this locality largely augmented. A company is also about being organized in Portland to work what is claimed to be an extensive and valuable deposit of magnetic

iron, in the town of Casco, Cumberland county. Promising veins of magnetite and other iron ores have been discovered in many localities throughout the State, and the existence of immense beds of hematite in Aroostook county has long been known. There seems to be no plausible reason why the iron industry of Maine should not become an important one in the near future.

The immense slate beds of Piscataquis and other counties in Maine, which furnish the finest roofing slates in the world, will become a most important and an inexhaustible source of wealth to the people of this section whenever cheap transportation facilities are afforded and the quarries operated upon a scale commensurate with the extent and value of the deposits. Already the Piscataquis slate industry is one of no inconsiderable magnitude and importance. But it seems not improbable that the greatest value of slate as a commercial product lies in a direction which has been until recently overlooked. The great demand of the present is for a building material which shall combine beauty and durability with cheapness. It is now asserted that slate will fulfill these requirements and that it is a good substitute for marble and granite in public buildings. Builders assert that slate is more lasting than either marble or granite, and is impervious to heat. Slate, it is said, will absorb the rays of the sun, can be planed, sawed or ground like wood, grows harder by exposure to the weather, and is a building stone that will last for ages. There are four colors—green, red, variegated and purple, and it is proposed by parties interested in the development of the use of slate, to erect a building as a specimen, to be inspected by all whom it may concern.

With regard to the actual condition of the Robinson Mine, no reliable information can be gathered. The reports are most conflicting, some stating the mine to be exhausted while others assert that it is looking as well as ever and that the collapse in the stock was brought about by the management for the purpose of buying in again at low figures. But whatever the facts in regard to the mine, it is none the less true that one of the most contemptible swindles has been perpetrated upon the public by men holding responsible positions of trust and who were supposed to be the soul of honor itself. Verily, it would seem that the Apostle Paul himself were he on earth and connected with a mining company, should be trusted no further than his every motion could be watched. It is a most humiliating fact that men who have gained enviable reputations for integrity and true manliness through a lifetime of honorable business associations no sooner enter the mining business than they no longer hesitate to lie, steal and possibly cut throats, if necessary, for the sake of a few paltry dollars. It is such transactions as this Robinson business and others of a similar character but less magnitude nearer home which are utterly destroying the mining stock business and sapping the very life of the mining industry itself. It is high time that its true friends should rise in their might and shake off these miserable excrescences and if there are any laws by which they can be made to suffer in purse—the only vulnerable spot in their constitutions—let their aid be invoked.

A correspondent, writing from Manchester, N. H., asks for further information concerning the Canadian phosphates, the mining and sale of which has become an important industry with our neighbors across the border, as our readers have been informed through brief items which have appeared from time to time in these columns. The commercial article known as "phosphate" consists principally of the mineral "apatite," or phosphate of lime—a combination of lime with phosphoric acid; it also contains a small proportion of fluoride of calcium. These constituents are contained in the bones and ligaments of animals, and the mineral is undoubtedly in most cases of fossil origin. Apatite occurs sparingly throughout New England in gneiss and in veins of feldspar and quartz, in the Montalban series of rocks; but the chief sources of the supply are the crystalline limestone beds of the Laurentian system, the most ancient rocks known to the geologist. This system comprises the Laurentide Hills of Canada, the Adirondacks of northern New York and the Highlands of the Hudson. The White Hills of New Hampshire and the western portion of the State of Maine are included in the Montalban series, supposed to be of more recent origin. Whether or not the Laurentian formation crops out anywhere within the limits of this State is yet to be determined, as the geology of this section is but little understood. The phosphate mines are mainly confined to the districts in the vicinity of the Ottawa River, and the business is yet in its infancy. The commercial value of the mineral is about \$17 per ton. Its chief use is for the manufacture of superphosphate, an ingredient of several artificial fertilizers, for which there is a great and rapidly increasing demand. We shall refer to this subject at greater length in a future issue.

THE EFFECT OF THE ROBINSON SWINDLE.

[New York Stock Report.]

The Robinson Co. have dealt the mining stock business in this city the most stunning blow it has ever received. Disgust and indignation are so nearly equalized in the public feeling that it is difficult to say which preponderates. The New York Stock Exchange has under consideration the subject of refusing to list any more mining stocks, and will probably amend their constitution to that effect. Previous to the Robinson swindle it looked as though all the better class of mining stocks would seek the more elevated society of the Stock Exchange, the fact of their being enabled to get admission there being in itself considered somewhat of a certificate of character. It looks now as though the Mining Exchanges will be allowed to monopolize all the business in mining stocks, as the Stock Exchange feels that it cannot afford to injure its reputation by listing them. This is rather severe, but nevertheless deserved, for while the Robinson fiasco may be the immediate cause, the long list of previous similar swindles has tended to bring about a contemptuous feeling regarding mining stocks. The Stock Exchange is only emphasizing the general feeling of the community.

Fraud is the gangrene that is eating up the mining stock business, and unless there is some method devised to cut it out it will be considered a reflection on the credit of any business man to be known as having anything to do with mining stocks, as it was in 1876, when it was absolutely dangerous to mention them in a mercantile office. Our Mining Exchanges must apply some remedy or lose their business. Did the Boards have less imbecile Governing Committees there might be some hope in that quarter. The

Trustees of mining companies could be compelled, under penalty of having their stocks stricken from the list, to give sworn statements as to their condition at any time, or the Board could appoint some competent and unpurchasable mining engineer, on a yearly salary, to examine properties represented on the lists. The expense of doing this would be a mere bagatelle to the losses inflicted by a lack of knowledge of the worth of properties, as in State Lines and Robinson. With a railroad, everybody can go over the road and judge for himself as to its future; but a mine is frequently, especially when fraud is intended, kept as closely guarded from inspection as though it were a private enterprise that the public had nothing to do with. When a railroad stock rises in price to many times its real value, people realize that there is a pool in it, and are aware that the rise is solely due to manipulation, but in a mining stock the rise is usually brought about by false pretences of value and prospective product; the public have no means of getting at the facts of the case, and swindles are the natural sequence.

All this must be changed. Mines must be open to inspection, and where such is refused let it be considered a *prima facie* evidence of fraud, and the stock stricken from the list. No one credits our mining brokers with an exuberance of mental acumen, but when the road is pointed out to them they should know enough to take it.

Among Our Exchanges.

[San Francisco Daily Report.]

There is howling in New York over the bursting of the Robinson Consolidated mine bubble. This swindle cannot be charged to the adventurer from the mining regions, as it was engineered by some of the best known and wealthiest capitalists of Wall street. A portion of the Eastern mining press, which a short time ago was puffing the stock, is now vigorously engaged in denouncing the swindle, which was managed by means of lying telegrams from the mine and paid puffs in several of the mining papers.

[San Francisco Daily Report.]

Some time ago the Daily Report had an article favoring the establishment of a National Mining Department. As the present Administration does not look upon mining as an important industry, it is doubtful if the founding of such an institution could be readily secured. It is proposed, however, to establish a National Department of Industry, embracing in its scope all the interests of production, and if the representatives of the mining States would move in the matter, they might at least secure representation for the mining industry in the new department, which will doubtless be created, as the scheme has strong influence in the East to back it.

[Rocky Mountain Mining Review.]

It takes money to make a mine, and the great prizes are drawn by those who have the capital with which to convert undeveloped property into ore-producing, paying mines. Men of large means have made and are to-day making immense sums of money by selecting good prospects, putting their money into them and developing them into mines. But this road to fortune has practically been closed to those persons who have sums of from \$100 to \$1,000 which they wish to invest in mining. The sum is too small to accomplish the result by itself, and if these persons purchase shares in a mining company as usually organized, with a capitalization of from five hundred thousand to five million dollars, the interest they acquire is small and often by no means worth the money they pay for it; further, the amount of shares retained as consideration for the property is generally excessively large. The valuation placed on undeveloped unproductive property is too often all it would be worth were it actually a paying mine with large reserves of pay ore in sight. There is a pressing need of reliable mining companies, managed by practical business men, in which

investors will have a fair, reasonable chance of realizing the immense percentage of profit which accrues when a rich mine is opened up and made productive.

[Salt Lake Tribune.]

The tinkers are in force again, and there threatens to be a new war inaugurated upon the silver dollar as soon as Congress gets well to work. The bugbear which Burchard threw out in his recent report that there was a possibility that the \$650,000,000 in silver now in circulation in Europe, might be transferred to this country, was intended as the first shot in the war against silver. The silver men should be prepared for this fight. The arguments increase with the days, in favor of silver. Resumption was only made possible because of the silver bill, and the prosperity which has succeeded since is directly due to the change in values which the silver bill wrought. In our judgment the answer to the fear that Europe will unload her silver upon us is: "Let her unload, if she can stand it." The attempt would bankrupt every country of Europe except Great Britain and would make even Great Britain sick financially. The Treasurer of the United States can hold silver enough to be equal to six or seven dollars per capita for the people, and when, as is now the case, almost all the internal commerce of the country is carried on by paper money and silver coins, what does it matter, whether the guarantee which is behind the paper is in gold or silver? A distinguished writer on political economy recently called attention to the fact that the purchasing power of gold had fallen off eight per cent. within three years, and from it he reasoned that speculation was rife, that there was a dangerous inflation in business. The truth is that the remonetization of silver took the inflation out of gold, and by lifting up silver to the place from which it had been wrongfully thrown down, every article of commerce was lifted at the same time, or rather gold was made again to seek its real level. Of the two metals silver is the sovereign and the nation which forgets this fact always suffers. Silver is more naturally the money of the poor, it is steadier in value and more steady in its supply, and what is the sovereign argument, the business of the United States demands all of both metals that can possibly be obtained.

Personals.

CAPT. J. H. MOYLE, Supt. of the Blue Hill, returned home yesterday from Boston.

JOHN W. MACKAY, accompanied by Harry Rosener, sailed for Europe on Wednesday last.

SUPT. DUFF, of Blue Hill, was in the city Monday on return from a brief trip to Boston.

H. H. EMERSON, Supt. of the Hercules Mine, was in the city on Tuesday, returning from a trip to Portland.

PROF. W. F. STEWART, JOHN S. JENNESS and CHAS. E. HILL returned on Wednesday evening from a trip to Blue Hill.

SALMO FRANCIS, Governor of the Passamaquoddy tribe of Indians, died at Pleasant Point on Friday, Dec. 9, aged 86 years.

THOMAS CAHILL, the well known assayer, has arrived at Socorro, New Mexico, where he thinks of establishing an assay office.

HON. F. M. LAUGHTON, of this city, leaves in a few days for a brief visit to Boston, New York, and Philadelphia, on legal business.

MR. CURTIS STEVENS, of Castine, has recently accepted the position of Manager of the Hibbard Coal Mine, Cumberland county, Nova Scotia.

A. E. HERRICK, President of the Favorite Mining Company, is visiting Blue Hill. He was for some time principal of the academy in that village.

SIRO DELMONICO, the last of the Delmonicos who came to New York from Switzerland, died in that city on Monday last. He was 58 years of age and unmarried.

DR. ISAAC I. HAYES, the Arctic Explorer, and a member of Dr. Kane's second Polar expedition, died in New York on Saturday morning last, in his fiftieth year.

CAPT. ISAAC N. MERRILL, Town Treasurer of Blue Hill, died on Sunday last. The deceased was a much respected citizen and was considerably interested in the mines of that active camp.

LIEUT. GOV. TABOR, the Colorado mining millionaire, and PROF. J. ALDEN SMITH, State Geologist of Colorado, were both formerly stonecutters at Lewiston and worked together cutting the guard locks of the canal.

ISAAC P. GRAGG, of Boston, General Manager for the Cape Breton Coal and Oil Company, in which Gen. B. F. Butler is largely interested, passed through the city early in the week on his return from a visit to the Sullivan mining district.

EDWARD S. STOKES, the murderer of Jim Fisk, having been successful in his mining ventures on the Pacific Coast, is said to be living in extravagant style in New York City. Josie Mansfield is also living in New York, quietly and comfortably.

D. F. LEAVITT, Esq., of this city, has returned from a trip to the Bagaduce and is very enthusiastic in regard to mining prospects in that promising district. He predicts exciting times and extensive developments in that section during the coming spring and summer.

MAJOR SELOVER, one of the managers of the State Line Mine, Gold Mountain, Nevada, is on his way to visit that property. During the boom in that stock last summer he was known to Selover five thousand shares at the top figure. He can afford to look at the mine now.—[San Francisco Report.]

A. R. SAVAGE, of Lewiston, recently returned from the San Andres, New Mexico, mining district, gives a highly favorable report upon the properties owned by the Lewiston companies, which he was sent out to examine. The report, which is quite lengthy, appeared in a recent issue of the Lewiston Journal.

GEN. EWING is on his way to California. The General was one of the principal managers of the late Robinson Mine. It is believed by his medical advisers that the atmosphere of San Francisco is better adapted to his health than that of New York or Boston would be during the winter. None of the Robinson Con. stockholders live in San Francisco.—[San Francisco Report.]

GEORGE M. PULLMAN, the palace car man, got his start financially in mining in Colorado. He was worth less than \$100,000 when he began his sleeping-car business, and now has a \$400,000 home at Chicago, besides elegant summer places on the St. Lawrence and at Long Branch. The Pullman Palace Car Company now have over 1200 cars running in this country which cost over \$15,000,000.

JUDGE J. B. VAN HAGAN, of New York City, formerly of Silver Reef and previously a member of the Nevada Legislature from Lincoln county, in which body he was a very conspicuous figure in the free fight with spittoons, ink-stands, etc., that the assembly indulged themselves in the last night of the session, has, we learn, struck it rich. He has for several months been East on mining business, and a few days since was made the delighted father of twins—a boy and a girl. Who says mining don't pay?—[Eureka Sentinel.

GEN. CHAS. HAMLIN, of this city, has been mentioned prominently for the position of Judge of the U. S. District Court to fill the vacancy caused by the recent death of Judge Fox. Gen. Hamlin is a gentleman of high legal attainments, possesses a judicial mind and has many valuable qualifications for the honorable and responsible office. The legal fraternity of this vicinity are unanimous in his advocacy and there could be no selection so satisfactory to Eastern Maine as this. We trust that President Arthur will exercise his usual good judgment and appoint Gen. Hamlin.

FRANK HATTON, son of Joseph Hattou, an English novelist and journalist, is probably the youngest man in the world who has attained scientific celebrity. Frank, though but twenty years old, is the leading British authority upon the action of gases on bacteria, and has carried off the Frankland prize for the first original investigation involving gas analysis. This talented youngster has been sent out to North Borneo and the Malay Archipelago on a scientific and mineral exploration, this probably being the first instance on record where so important an enterprise was entrusted to a stripling.

PROF. J. ALDEN SMITH, formerly a resident of Maine and now State Geologist of Colorado, is at present visiting Lewiston, where he has been interviewed by a Journal reporter. He alludes to Lieutenant Governor Tabor, Simon Foss and other Maine men who have become millionaires in Colorado; says that the ores of New Mexico are mostly in pockets or deposits which are unreliable (and here's where the Prof. is a little off) while in Colorado they are found largely in true fissure veins (how about the Carbonate Camp?); and thinks that Colorado leads all the States in the amount of its mineral resources, with the single exception of Missouri.

Dips, Spurs and Angles.

—Financial doctrine is often sounder than financial institutions founded upon it.

—A good laugh is worth a hundred groans in any state of the market.—[Charles Lamb.

—The bank that is not conducted with the regularity of clock work frequently has to wind up its affairs.

—The Bodie (Cal.) Free Press speaks with commendable pride of the manufacturing interests of Bodie. They consist of five breweries, a rectifying establishment and a coffin factory.

—The production of copper in this country is estimated at about nine million dollars annually. Judging from the number of brass watch chains worn by our young men it looks even more.—[Miners' Journal.

—Up in Mono County, California, they have a Crab Mining District. It is not stated whether it was so named because of there being deposits of crabs in that vicinity, or for the reason that the district is always going backwards.—[Tucson Citizen.

—The friends of decency and morality in the United States and out of it are much pleased with the firm tones of that portion of President Arthur's message in which the subject of Mormonism is dealt with. It has long been felt as an utter disgrace to the United States and a reproach to Anglo-Saxon civilization, that a large portion of the United States territory should be an abiding place for such a pollution as Mormonism.—[Halifax Chronicle.

—"Six-Shooter" Smith, the former terror of the Rio Mimbres siuk, and the gally-west young man who sailed smoothly over the shoals of Las Vegas justice, ran up against a judiciary snag at Durango, the hell-hole of the Mountains, and when the last reports came he was studying geology on the highways—pounding rock, we believe they call it in Colorado. S. S. S. is a good fellow (in irons) and we are glad to see his advancement in the world.—[Personal notice in Las Vegas (N. M.) Optic.

—It is said that the people of Northern Mexico have an unpleasant habit of forming themselves into bands of robbers and "assessing" the foreign mining companies just whatever cash the latter may have on hand. This reminds one of the early days in California, especially in Sacramento, where, if a man were taken sick and employed a physician, and the patient died, which he generally did, the physician's bill was usually the amount of dust which was found in the deceased's effects. This saved trouble and amounted to the same thing in the end, for, if the doctor had not taken it all, the Public Administrator would, and that would have been the last of it, in any event. Northern Mexico, in one sense, may be said to be a new country, and the people of all new countries have their little eccentricities.—[San Francisco Examiner.

New Minerals.

[Manufacturer and Builder.]

Prof. George A. Koenig, of the University of Pennsylvania, describes under the name of *Alaskaito*, a new mineral belonging to the series of bismuth sulpho-salts. The new mineral is found in the Alaska vein, in Ponghekepsic Gulch—one of the head forks of the Uncompahgre river in Southwestern Colorado. The Alaskaito occurs in the vein associated with gray copper, in a gangue of quartz and barite. The new mineral occurs in small foliated particles, with smooth cleavage planes occasionally observable. Its color is whitish lead-gray, approaching bismuthinite; its luster is strongly metallic, opaque; color of the fine powder, bluish-gray. Its hardness could not be determined, but the mineral is easily friable in the mortar; specific gravity was found to be 6.878. Before the blow-pipe the mineral gave evidence of the presence of lead, silver, bismuth and sulphur. It dissolves completely and rapidly in hot concentrated hydrochloric acid. Analysis of the mineral gave the following percentages:

Bismuth.....	56.9	per cent.
Antimony.....	0.62	" "
Lead.....	11.79	" "
Silver.....	8.74	" "
Copper.....	3.46	" "
Zinc.....	0.79	" "
Sulphur.....	17.63	" "
	100.00	" "

Other samples showed on analysis that the silver was in greater part replaced by lead.

Prof. Benjamin Silliman reports the recent discovery by himself of *Vanadinite*, and other crystalline salts of lead, of great beauty of color and perfection of form, in Arizona. Some of these minerals, for example *Crocoite*, a chromate of lead, and *Fauquelinite*, a variety containing copper, are affirmed to have been discovered for the first time in North America. *Vanadinite*—chloride of lead and vanadium—hitherto a rare mineral, appears, from these discoveries, to be quite abundant in the silver districts in Yuma county and other localities. It occurs in veins of quartz, lying between footwalls of granite and hanging walls of porphyry, and occurs associated with argen-

tiferous galena and other lead minerals. In this way it has been found in the Hamburg, Red Cloud, and the Princess Mines. The crystals are small, but highly lustrous, and vary in color from a deep orange to a reddish-yellow and brown.

In the Collateral mine there was noticed a mineral which is suspected to be *Descloizite*, but the specimens found were not sufficient to determine its identity accurately. In the same mine, also, the presence of *Volborthuite* was strongly suspected; and in this mine, and also in the Chromate, a mineral like Doneyko's *Chileite* was observed. What may prove to be *Mottramite* has been found at the Frenchman's mine; and *Wulfenite*—molybdate of lead—which does not contain vanadic acid, has been found in crystals of rare beauty at the Red Cloud.

Three of four species of the *Crocoite* group—that is, chromic acid with oxide of lead—occur in the Collateral and Chromate veins, but the quantities found were not sufficient to identify them.

F. W. Clark and M. E. Owens have analyzed a mineral from an unknown locality in Nevada, and announce it to be a new variety of *Tetrahedrite*, containing a much larger percentage of lead than the usual mineral.

H. B. Corunel has made examinations of the well known dense gray blende of Friedensville, Pa., and of the yellowish-brown blende of Phoenixville, Pa., and has found distinct evidences of the presence of gallium in each. Specimens of blende from Joplin, Mo., Warren, N. H., and Ellenville, N. Y., also showed evidences of the presence of this rare metal by spectroscopic examination.

Peter Collier has examined a mineral resembling *Thorite*, probably from the Champlain iron region. In color, hardness, specific gravity, etc., it is identical with thorite or orangite. The analysis showed a high percentage of uranium, on account of which he proposes for it the name of *Uranothorite*.

Eureka, Nevada, Mining District.

STILL AT THE FRONT—ITS RICH MINES—THEIR PRESENT CONDITION AND FUTURE OUTLOOK.

[Eureka Leader.]

The time is fast approaching when the great Base Range mineral belt will receive that recognition from capitalists it so thoroughly deserves. During the present year Eastern and English capitalists have invested in some eighteen or twenty of our most promising mines, and negotiations are now pending for the sale of as many more. A number of properties have also been incorporated by home enterprise, and, taking everything into consideration, the mining outlook in Eureka District was never before so promising.

THE MINES OF RUBY HILL

Still retain their prestige as the most prolific bullion producers on the coast. It is true Eureka Con. has temporarily suspended dividends, but the vast improvements being made at its new shaft rendered this course necessary, and the step was not taken because of a diminished ore-supply. Active operations are still being pursued in every portion of the mine, and a sufficient quantity of ore is extracted to meet the current expenses.

The Richmond still retains its reputation as the greatest mine in the world, and, after the thorough repair its furnaces received last summer, the immense yield of the mine goes on uninterrupted. The late development proves that ore exists in every portion of the property, and when the right localities are reached on the fourteenth level it will be shown that the great ledge is as strong and valuable at that depth as it has proved above.

The developments made in the Albion during the year have drawn favorable notice to the whole district, and made true the theory that the lode extends west to and around Adams' Hill, the mines of which locality have been benefited to the extent of receiving a fair portion of the capital coming to us.

PROSPECT MOUNTAIN.

At no distant period old Prospect will be dotted with massive hoisting works containing powerful machinery. The various tunnels will be utilized as highways for the transportation of ores from adjoining mines, and will furnish air for the working of the mines at greater depth than has ever been known on this continent. Combination shafts will be sunk and the mines developed and worked at less expense than now, in their primitive state. Water will be conducted to the apex of the huge mound, and contrivances will be erected that will make the transportation of all supplies simple. Then can the millions of tons of what is now considered low-grade ore be profitably worked. The present waste dumps will be converted into the money of the world, and capital will reap the reward it merits.

All this we predict with confidence. Down in the bowels of Prospect must dwell a mother for all these juvenile ledges en-

countered near the surface. At reasonable depth they must concentrate, or the most accurate theory in the world is false. Consolidated Virginia's ore body was found by following a smaller feeder than any on the mountain, which fact was the case with nearly all the bonanzas discovered on the Comstock.

SECRET CANYON

Will play an important part in the future of Eureka District. Capital has secured a foothold there, and the result is the development of a bonanza in the Geddes and Bertrand, a mine that one year ago could have been purchased for a song. Upon the completion of the large reduction works the Geddes and Bertrand will do more towards introducing the district to the world than all that could be written in a lifetime. It will do solid advertising in the shape of heavy bullion shipments, and this must draw the attention of capitalists to its neighbors, many of whom would prove as valuable as any in the district were they properly developed.

In conclusion, this district has enjoyed prosperity during the past twelve months second to none. It will commence 1882 with more miners at work than ever before known at one time, with unlimited capital seeking investment, and with a prospect of obtaining better transportation facilities, and in time receiving a portion of the reduction business now monopolized by Salt Lake.

LODES, LEADS AND VEINS.

Blue Hill.

A member of the MINING JOURNAL staff has visited Blue Hill during the present week and the detailed report of his examinations of the mines will appear in our next issue. The Blue Hill mines have never been making a more creditable showing of ore than at the present time.

DOUGLASS.—Fine ore is being taken out of the mine and is being sorted and cobbled in the ore houses. The smelting furnaces are not now running. The new roast kiln has been fired up and run a part of the time. It is proposed to make some changes in the internal construction of the kiln.

STEWART.—Shafts Nos. 2 and 3 are between 90 and 100 feet in depth. No. 3 shaft is showing very superior ore. The shaft-house over No. 2 shaft is nearing completion.

MAMMOTH.—Good progress is being made on the elaborate shaft house. In blasting for the foundation of the engine house one hundred feet from the shore of the Douglass pond, a body of very fine copper has been discovered.

ECLIPSE.—Very satisfactory prospect work has been done. A well defined vein about 25 feet in width has been encountered which is mineralized somewhat with iron, copper, silver and lead. At the discovery point of the Eclipse, the south shore of Douglass Pond is flanked by a narrow ridge or zone of hornblende granite, which rests in contact with a belt of metamorphic micaceous quartz rock. The quartz vein here traverses the channel of contact between the granite and quartz rock; but as these obdurate rocks are only a few rods in lateral diameter, the east and west extensions of the lode evidently rest in the schistose and slaty formations of the district.

BLUE HILL.—Mining operations are being pushed in every department of the mine. The second level of No. 2 shaft is being extended on the vein and work has been resumed in No. 1 shaft. Magnificent ore is being taken out of the mine in large quantities.

YOUNG HECLA.—The permanent shaft has reached a depth of 25 feet. The vein was cut through by the crosscut from the prospecting shaft and proved 20 feet in width, all heavily mineralized and carrying some very good copper ore.

TWIN LEAD.—Water has occasioned temporary suspension in winze. The incline shaft is being pushed downward and as soon as this drains the winze, work will be resumed in the latter and sinking will be prosecuted in both winze and shaft. Some very good ore has been taken out.

Sullivan.

FANEUIL HALL AND SULLIVAN.—Under date of Dec. 19, Supt. Hayward reports as follows: "The crosscut from 160-ft. level is now in 184 feet, and in excellent ground. We are now making ten feet per week. The formation is more regular than at any time since we began crosscutting, and it is in this formation that we expect to encounter the vein. Everything at the mine is in first-class working order."

MILTON.—Are still making fair progress in the south level from shaft No. 2 to meet the crosscut from level of shaft No. 1, to connect the underground work. Are also cutting a pump station in the vein at the bottom of No. 1 winze. All other un-

derground work is being carried forward with the usual steadiness.—[Bulletin.]

COPPEROPOLIS.—Uninterrupted operations have been carried along at these works during the week; good progress has been made in sinking, in consequence of the more favorable condition of the rock, and the same character of good ore is being raised from the bottom of the shaft.—[Sullivan Bulletin, Dec. 17.]

HARVEY ELLIOT.—The machinery has been put in place by competent engineers from New York, and on Thursday last was started up and moved to the satisfaction of all interested. Operations will now be carried along with perseverance and vigor, which must result in developing what is evidently a good mining property.—[Bulletin.]

Bagaduce.

TAPLEY.—Work has been commenced at the Tapley Mine under the superintendence of Wilkie Darling. Blasting was commenced on Monday and magnificent ore was thrown out by the first shots. Contracts have been made for repairing the wharf and shipping the large quantity of the ore on the dump immediately. One hundred tons will at once be shipped to the Portland Smelting Works, and the remainder will be sold to the highest bidders. The chances are that the Portland Works will take the whole dump.

MANHATTAN.—The water is pumped out of the shaft and underground work is being pushed. The new buildings and machinery are thoroughly adapted to their purpose and give excellent satisfaction.

HERCULES.—Work is progressing favorably at the Hercules, and the shaft is 14 feet into the ledge, in excellent ore. The cofferdam is perfectly tight, although some water finds its way into the shaft through the seams of the ledge; no serious trouble is anticipated, however, from this source. A small but substantial and comfortable shafthouse has been erected and everything put in readiness for the winter's work. Horse-power will be used for hoisting for the present.

NORTH CASTINE.—The North Castine Mine is now thoroughly equipped with an excellent plant. The new buildings are commodious and the machinery works perfectly. Vigorous developments are now being prosecuted in the shaft with excellent prospects. Some very good ore is being encountered.

British Provinces.

The discovery of anthracite coal at East Bay, Cape Breton, has caused a rush of speculators to that section, all anxious to take up claims.

The St. John Sun says the first shipment of copper ore—one car load—was received from the Dorchester copper mines on Wednesday last on its way to Boston to be smelted.

A large and enthusiastic meeting was held at Amherst, Nova Scotia, on Monday evening last, in favor of the proposed Marine Railway across the isthmus of Chignecto, to connect the Bay of Fundy with the Bay of St. Lawrence.

The latest rumor in railway circles is to the effect that the Hon. Mr. Chapleau has received liberal offers from Mr. Vanderbilt for the North Shore; that the Premier's recent visit to New York was in connection with the sale.

The Coxheath Mining Company have shipped a trial lot of ten tons of ore from their copper mine near Sydney, Cape Breton. The ore arrived in Halifax last Friday, and will be shipped to Boston on the 24th instant per steamer Carroll.

There was an increase of imports at Montreal in November last of \$700,000 over the corresponding month of 1880. During the eleven months expired of the present year the increase of imports exceeds five million and a quarter dollars.

The nail works belonging to the Montreal Rolling Mills were destroyed by fire on the night of Saturday last. The loss was heavy but is fully covered by insurance in English companies. 250 men are thrown out of employment and an enormous amount of machinery destroyed.

At the Londonderry, N. S., Iron Works over five hundred men are employed; seventy thousand tons of coal are consumed and \$650,000 are annually disbursed for wages and materials, and \$100,000 paid to the Intercolonial Railway for freight on their products. This is probably the largest manufacturing concern in Canada.—[New Era.]

Mr. George W. Stuart, a gentleman well and favorably known in mining circles, has, we learn, purchased a large interest in the Cogswell gold mining property at Chezzetcook. The fact that a gentleman of Mr. Stuart's experience and knowledge should invest largely in this claim, proves, to

our mind, that the lead is a rich one, and only requires development.—[New Era.]

HANTSPOURT.—A seam of bituminous coal was lately discovered at Hantsport, on the line of the W. & A. Railway, and prospectors have sunk a shaft to a depth of 40 feet with fair results. There are excellent facilities for shipping at Hantsport, should this develop into a rich mine, as the W. & A. Railway runs within 300 yards of the lead, and it is washed by the waters of the Avon River.—[New Era.]

The Boston office of the Victoria Oil & Mining Company has received a despatch from James Baird, Superintendent of the Little River Colliery, at Habitants Bay, Cape Breton, to the effect that the hoisting machinery is now completed and they have commenced raising coal. Habitants Bay is situated near the Straits of Canso, and is open all the year round, so that the products of this colliery can easily be placed on a winter market to advantage.

The Nova Scotia Government are about completing negotiations with a powerful syndicate to take over the provincial railways and work them. The chief feature in the arrangement is that the syndicate is to complete the column of the railway system through Cape Breton to Louisburg, and westward to Yarmouth. This is a most important work for the Province, and is certain to result in the increased development of the mining interests of Cape Breton especially.—[Montreal Gazette.]

MONTAGUE.—The Rose Mine at Montague, which at one time did not pan out as rich as it might, has recently improved. The main shaft has now reached a depth of two hundred feet, and the quartz grows richer as the depth becomes greater. A new lead, which will yield, it is estimated, some ten or eleven ounces to the ton, was discovered last Friday at a depth of 120 feet in the east of the third shaft. The quartz has a fine appearance and promises as rich a yield as any yet encountered.—[New Era.]

NIGADOO SILVER MINES.—Mr. Leckie, Mining Engineer, of Quebec, and Count Obalaski, of Paris, connected with the Credit Mobilier, visited the Silver Mines at Nigadoo on Thursday last, accompanied by Mr. Burns, President of the Nigadoo, and Mr. Sivewright, Secretary of the Gloucester Silver Mining Company. It is said that these gentlemen were most favorably impressed with the indications and expressed themselves as never having seen richer silver ore. Mr. Leckie intends paying another visit to the mines soon.—[Newcastle Advocate.]

FIFTEEN MILE STREAM.—The mines at 15-Mile Stream are all doing well, the ore being rich in quality and quantity. The Old Group, a mine but recently opened some fifty feet south of the famous Free Claim mine, owned by Messrs. Grant Bros., of Pictou, shows particularly fine quartz. A company of gentlemen at Hopewell, Pictou Co., have engaged Mr. Halliday to open up and develop a few leads recently discovered. Messrs. Grant, who purchased the Old Free Claim mine from Messrs. Hall Bros., a short time ago, are buying extensively. They now own some sixty acres in that district. Mr. Alex. McDonald is working what is said to be a very valuable property.—[New Era.]

HIBBARD COAL MINE.—This mine, for a long time closed down, has lately been stimulated by the progress of other mines and has been re-opened. The mine is situated at River Herbert, a post village in Cumberland Co., some eight miles from Maccan Station. Mr. Curtis Stevens, of Castine, Me., has been secured as manager. The company is composed of Messrs. R. Young, G. Hibbard, and A. Seaman & Co. Preparations are now going on for work in the early spring by completing the slope, striking off levels, building miners' houses and engine house, and procuring sleepers for a tramway to the river, about 800 yards distant. Expenses are based on an output of 100 tons a day, with a force of 75 men. The coal is excellent for house purposes, for which it has been mined for local consumption every year.—[New Era.]

CHEZZETCOOK GOLD FIELDS.—This new district has been proclaimed a gold field, and areas have been surveyed and numbered by the Government. Messrs. Anderson and Dr. Cogswell, with associates, have bonded their valuable properties. Messrs. Gladwin and Stewart have recently purchased an interest in areas east of J. Anderson's with every prospect of finding some rich leads as have been cut on Mr. Anderson's property, only a few hundred feet from the line. South of these properties, on block five, Messrs. Fidler, McKay and Stevens have been prospecting with good success. Shafts have been sunk and rich leads discovered. Other leads quite near the surface have been opened up on Stevens' property, all looking well and showing good paying properties. North again of McLeod's property, in block 2, on property owned by Vaughan and Cogswell, a good lead has been discovered, showing gold;

and by another year, after further developments, other properties will show equally as good indications. What is required now is a good road to the district, which a little money from the Government would not only enable parties to get their goods and machinery to the mines readily, but would be the means of opening up the new district so as to make it as valuable as other mines; and the more gold mined the more royalty to the Government. The inducement to miners to erect a crusher in this district, being ten miles from any other, with a lease of ten mining areas for 21 years, and free royalty on all gold raised from said areas, will no doubt cause some little competition, as parties now are about arranging to erect a ten-stamp mill, which will be so desirable; and in all probability the mill will be up and in working order before the middle of July. Many are anxiously waiting for the crusher, and while it may be got to the grounds in the winter and erected, it is to be hoped during the next year money may be granted to make the road from Chezzetcook to the mines at least passable for teams and wagons. There is already an old sled road, which could, at a little expense, be made to answer all purposes. No doubt the interests of all parties would be greatly enhanced were this road made as soon as possible. No doubt if the Hon. Commissioner of Mines recommended the granting of a sum of money for the purpose, the road could be completed next year, and thus open up what in all probability will yet be one of the richest gold fields of Nova Scotia.—[New Era.

Newfoundland Mineral Lands.

ST. JOHN'S, N. F., Dec. 1, 1881.

To the Editors of the Maine Mining Journal:

I read with much interest your article in a recent issue of the MAINE MINING JOURNAL on "Newfoundland Mineral Lands," in which you announce the formation of a strong exploration company, with a view of searching for minerals on what is commonly called the "French Shore" of this island—a name happily no longer appropriate, as our Government have now control of our entire territory, and make land and mineral grants on any part of the coast. I am acquainted with the facts to which you refer in this article, and can state that it is accurate in all particulars. The extensive mineral lands of which this exploration company have obtained the control are among the most promising in the island; and from all I have heard of them I should be sanguine of the triumphant success of the company. The method adopted is undoubtedly the one best calculated to secure satisfactory results,—namely to provide sufficient capital for a thorough exploration by competent persons, and to despatch prospecting parties, thoroughly equipped, to search for minerals during the summer and autumn months.

In confirmation of your statement that the "French Shore" is specially rich in minerals, I wish to inform your readers of an apparently very valuable discovery made on that part of the coast, and of which full particulars have been only recently received. Messrs. J. Browning and John Steer, the same gentlemen who hold forty mining licenses on the French Shore and who have negotiated with the American exploration company, sent out last summer a small prospecting party in charge of Captain Maynard, an experienced mining captain, who had been for many years employed at Tilt Cove Copper Mine. They were not sent to examine any claims already held under license by these gentlemen, but to explore in an entirely new field. At Bay Verte, situated between Notre Dame Bay and White Bay, and on the "French Shore," Captain Maynard's attention was arrested by the appearance of copper ore at a spot where some trees had recently been blown down, the upturned roots having disclosed the existence of a mineral deposit which otherwise would have remained hidden. The party at once set to work to make a thorough examination of the locality and spent several weeks "costeaning," sinking pits, etc., for the purpose of tracing the various lodes which were found. Of course blasting was carried out as far as practicable. Captain Maynard has lately returned to St. John's, bringing his samples of ore with him. From his report I have gathered the following particulars, as the result of his examination:

About 120 yards from the water side he found a lode of copper ore thirty feet in width, and he was able to trace it between one and two miles. It contains chloritic slate of the kind usually associated with copper ore in this island, and of the sort regarded as the most favorable, with numerous copper veins of large size interspersed. Forty yards in the rear and running parallel with it, a second lode was found, still larger and presenting even a more promising appearance. One hundred yards from the second a third was found, of immense size, showing iron and copper pyrites. Finally a fourth lode, but comparatively small, was found between No. 1 and the water side. A section of the locality, over half a mile in width, presents a highly mineralized appearance, with alternate developments of dyke rock and chloritic slate. Captain Maynard further states that no more favorable locality for carrying on mining opera-

tions could be desired. There is a fine land-locked harbour with deep water almost to the shore, where the largest vessels could load in perfect safety. Timber fit for mining purposes is abundant; a large stream, sufficient to give ample water power, falls into the harbour. The land around is good and fit for agricultural purposes, and the scenery of Bay Verte beautiful. Captain Maynard is a man of high character, not at all of an over-sanguine, enthusiastic turn of mind—noted rather for the reverse—being a man of cool judgment; but regarding this discovery he speaks in glowing terms, and declares that as far as present appearances go, it surpasses both Tilt Cove and Little Bay mines. So satisfactory have his representations been to Messrs. Browning and Steer that they have despatched a pretty strong party of miners to carry on operations during the winter. They are so satisfied of the value of the discovery that they are prepared to spend a considerable sum of money in testing and developing it before offering it for sale or negotiating with a company for working it.

Now if a prospecting party, in such a short time, have made a valuable discovery of this kind, what may not a thorough examination of 229 square miles of the mineral lands on the French Shore be expected to develop? No man knows our mineral lands better than Mr. Ellershausen, to whom we are deeply indebted for proving to the world that our island possesses immense mineral treasures, by the energetic and skillful manner in which he has worked Bett's Cove and Little Bay Mines. I am told, on excellent authority, that he has the highest opinion of the French Shore as a mining region, and believes that it will yield more mineral than all the rest of the island. As yet it is almost virgin ground.

I may mention that an English expert of the highest character lately visited Bett's Cove and Little Bay Mines and reported on them, on behalf of the company by whom operations in both places are now being carried on with great energy. As a matter of course his report on Little Bay Mine, one of the finest in the world, was highly favorable. But his opinion of Bett's Cove Mine has surprised those who were acquainted with it; and were inclined to believe that its best days were over and that but an inconsiderable quantity of ore remained. The English expert, after a laborious examination, has declared that there is ore enough there to furnish large employment to miners for twenty years to come, and that only a beginning has yet been made in extracting its treasures. This information I have on most reliable authority.

M. HARVEY.

P. S. I may mention that I have quite recently heard of the discovery of a large mineral band, half a mile in length, about six miles inland from Little Bay. This will probably prove to be a very valuable deposit. In Cairn Island and Indian Island, in Notre Dame Bay, very large mineral deposits have also been found, and American capital is to be expended in developing them. In Indian Island a large lead vein has been discovered, yielding on analysis 48 ozs. of pure silver to the ton. I may give you further particulars regarding these in my next letter.

—The Union Compound Company has recently been organized in Portland for the manufacture of lubricating cups and all kinds of lubricating compounds for heavy axles and gears. A substantial building has been erected near the foot of Franklin street, and the company will commence active operations very soon. The new industry promises to become an important one. The officers are as follows: President, J. B. Coyle, Jr.; Secretary and Treasurer, John F. Liscomb; General Manager, Thomas B. Merrill; Directors, J. B. Coyle, Jr., J. F. Liscomb, Thomas B. Merrill.

—During the flush times of the Comstock, Empire City, on the banks of the Carson river, was a thriving village, made so by quartz milling and wood booming down the river, the wood being taken out at Empire and transferred to the cars for shipment to the Comstock. Many of the residents built expensive and handsome houses, and neat cottages and homes, surrounded by trees and shrubbery, replaced the sagebrush landscape on which the site is located. Now the place is all but dead, and it is stated that those who own property there would be glad to realize ten per cent. of their original outlay.

—"SPARKS FROM A GEOLOGIST'S HAMMER," by Prof. Alexander Winchell, has been received from the publishers, S. C. Griggs & Co., of Chicago. This is a finely illustrated work of 400 pages consisting of descriptions and essays on Geological subjects and written in a pleasing, untechnical style to suit the general reader. The chapters on "The Age of Continents," "Obliterated Continents"—A Grasp of Geologic Time—Geological Seasons—The Climate of the Lake Regions—Mammoths and Mastodons—The Salt Enterprise in Michigan—are especially interesting and instructive. The price of this book is only two dollars and it will be sent post paid on receipt of price by the publishers.

Croppings.

[Compiled, Condensed and Confiscated from our Exchanges.]

Denver is troubled with dense fogs.

Leadville has now on hand thirty-five thousand tons of ore waiting to be smelted.

The Leadville Chronicle predicts that there will be large investments in Colorado mines by London capitalists during the next year.

Dora, Custer county, Colorado, claims to have a deposit of antimony ore a mile square and averaging seventy per cent. pure antimony.

The Hailey (Idaho) Times gives the approximate yield of the mines on Wood River for the seven months ending Dec. 1 as over \$1,000,000, in ore and bullion.

The Humboldt Sulphur Company, Nevada, continue to ship an average of 160 tons of refined sulphur monthly. The mine is said to be looking as well as at any time in its history.

By an explosion in the Orrell Colliery at Bolton, England, on Monday last, forty lives were lost. In the Arley Mine, adjoining, 150 miners were imprisoned, but were subsequently rescued.

On the retirement of W. F. Robinson from the Leadville Democrat, where he had been business manager since the paper was started, the employes of the office gave him a banquet and a fifty-two-ounce silver brick.

The wire cable over the old Con. Virginia shaft has been sold to a man who intends to split it up and sell it to the ranchers in Mason Valley for making fences. Thus it is that the mining interest tends to build up the industry of agriculture.

The Pueblo Smelting company, who are now running six blast furnaces and treating from 100 to 150 tons of ore per day, are taking steps toward refining base bullion and making sheet lead pipe and shot for the trade of the Centennial State.

John A. Ingram, a miner at Mount Union, Pa., previous to going to his work on Monday last placed a can of dynamite on his cook-stove to dry. Ingram, his wife and four children, and his shanty are missing—supposed to have removed to the next county.

The San Francisco Daily Report says the Stock Board is no longer one of the sights to which visitors are taken as they are shown to the Park and the Cliff House. "Gentlemen coming via New York and Chicago have already seen rather livelier bull-and-bear matinees than we can show them."

We venture the prophecy, says the Helena (M. T.) Herald, that within the next five years there will be employed in the silver and gold mining operations of Helena's tributary district 1,000 men for every 100 or so employed in this or any other district of the Territory now, and that the products of bullion and ore from this locality will exceed the present product in like ratio. The greatest mining boom for Montana is yet to come.

The iron business is booming down in Tennessee, so it is said, and there is an overwhelming demand in that section for ore. Competent judges state that there is at present a demand for one million tons of ore from East Tennessee, North Alabama and North Georgia. The chief cause for the great demand is the desire of the furnace companies to stock heavily with surface ore in fear that the supply will become limited, and in this event tunneled ore will have to be purchased. The price of pig iron will correspondingly advance on account of the increased cost of mining the latter. There is also a very great demand for coal for the many industries in that section, and the mines are sorely taxed to supply it.

Three years ago Mr. Dunkin located at Leadville the mine which still bears his name. He was poor but he worked faithfully and hard in hopes that he would strike mineral, but his money gave out and he sold his interest for \$2,300. The purchasers after expending quite a large sum in sinking another shaft on the property which failed to disclose mineral, returned to that in which Mr. Dunkin had buried his hopes, and in sinking seven feet farther struck pay ore. The mine was sold a year later for \$375,000. Incidents of this kind have also transpired in the Tin Cup district. We know of a miner who sold a good-looking prospect for a burro, and in less than three months after \$5,000 was refused for a half interest. Our own self was once offered a fourth in a claim for \$25—the owner being "busted"—and for which claim \$400,000 was tendered and refused last summer. We could cite other instances.—[Tin Cup (Col.) Record.]

Nuggets.

—There are 946 postoffices in Maine.

—A black fox has recently been seen in the vicinity of Blue Hill.

—The Pendleton House, Blue Hill, is again open for the accommodation of guests.

—Messrs. Smith and Abbott are wintering about 3000 sheep at their rancho on Petit Menan Point.

—A valuable Christmas gift to a friend would be a subscription to the MAINE MINING JOURNAL for 1882.

—A vessel is loading at the Rosier mine with four hundred tons of zinc ore for Bergen Point, New Jersey.

—There is great need of snow in the lumbering regions. Operations are greatly retarded by the inability to haul.

—The Penobscot is free of ice and our port is still open to navigation. The season is proving a very remarkable one.

—We are indebted to the well known publisher, Moses King, of Cambridge, Mass., for a neat Sketch Book of the Mechanics' Fair.

—Mr. Arad Thompson of this city has just purchased a \$600 Chickering piano at A. M. Devereux's establishment on Main street.

—The family of Capt. Dunn at Blue Hill had a very narrow escape from asphyxiation by coal gas during Saturday night last.

—Ellis M. Smith recently shot a white deer at Hemlock Hill, in Whitneyville. Deer are reported as abundant this season in that vicinity.

—The annual meeting of the McFarland Silver Mining Company will be held at the office of A. W. Cushman, in Ellsworth, on Jan. 11, 1882.

—A couple of fine deer were shot in the eastern part of Blue Hill during the present week by George W. Darling, a son of Col. Wm. H. Darling.

—The report was current in St. Stephen last week that Jay Gould had purchased the Grand Southern Railway, but it has thus far lacked confirmation.

—Fish Commissioner Stillwell has arranged for the hatching of between three and four hundred thousand salmon eggs at Enfield during the present winter.

—The Collins Granite Company have secured the contract to furnish the granite for the magnificent block which D. O. Mills, the millionaire, is building in New York.

—Landlord Moses, of the Robinson House, Bucksport, sets a very superior table and travellers to and from the mining regions always rejoice when they reach the Robinson House.

—Between \$60,000 and \$70,000 have been expended on the iron mines at Pittsford, Vt., and a large force is now employed in putting up buildings for the manufacture of iron in the spring.

—Aroostook County extends westerly 102 miles; and north from Mattawamkeag 132 miles. It embraces 132 townships, 6480 square miles and 4,247,000 acres. Its area is more than one-fifth that of the whole State.

—Mr. Fred H. Moses, the florist and artist, has erected at his home in Bucksport an office and studio of novel and striking design. It is an object of much curiosity to visitors to the town. The architecture is of the most pronounced aesthetic style.

—The Times says: "The Bath Iron Works is one of our growing industries, and under the management of Hon. T. W. Hyde will increase in prominence. A specialty is made of ship machinery, for which work this establishment received the highest praise from shipmasters."

—Four lumbermen started to slide down the Mt. Washington Railway, recently, on the boards which the workmen use in the summer for that purpose, but one of them lost control of his board, was thrown from the track and received injuries which will probably prove fatal.

—The new hoisting apparatus at the Kineo Slate Quarry, Monson, is in operation. The Hebron Pond Company are putting in the engine formerly used at the Kineo. They have recently discharged a number of workmen on account of lack of steam to run the whole number of drills.

—Schooner "Ann," from Boston for Franklin, Me., loaded

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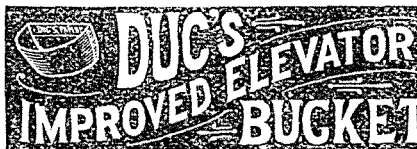
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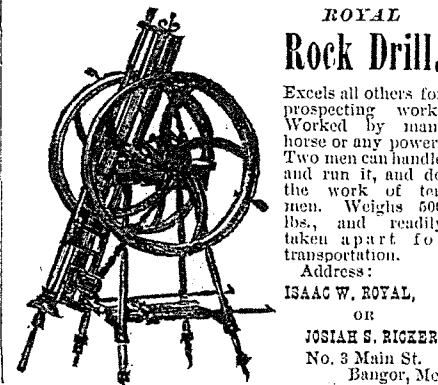
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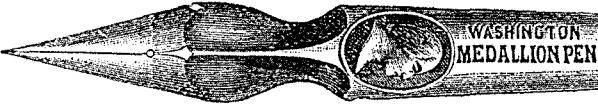
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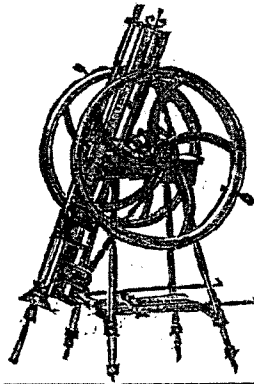
SPECIAL MEETING

Of the Stockholders of the

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A special meeting of the Stockholders of the Hercules Mining Company will be held at the office of the President, No. 559 Congress Street, in Portland, Me., on Tuesday, January 17th, 1882, at 10 A. M., to act upon the following propositions:

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Any stock upon which the assessment shall remain unpaid on the 13th day of February, 1882, will be delinquent and will be advertised for sale at public auction, and unless payment be previously made, a number of shares of said stock sufficient to pay the delinquent assessment, together with costs of advertising and expenses of sale, will be sold as above.

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THE MAINE MINING JOURNAL is published in the interest of all who desire to see the mineral resources of Maine and adjacent States and Provinces become a source of profit and wealth to the residents of this entire section. There is no more legitimate or useful branch of business than utilizing, by means of scientific and approved methods, the products of the soil and the treasures hidden in the rocks. Our Eastern territory is sadly in need of such an industry as mining for the precious and useful minerals may become, if carried on in the light of reason and common sense. To aid in promoting this grandest and noblest of all industries is the object of this JOURNAL. It will look to all who have the truest interests of State and Nation at heart, to support it in its purpose.

The JOURNAL is entirely independent of any and all influences which might tend to detract from its reliability, and while attempting to arouse the public mind to the full importance of giving proper attention to this too-long neglected subject, it will also pursue a conservative course and endeavor so far as its influence may extend to guard the friends of the industry against any undue excitement.

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Information relating to mining properties or mineral lands which may be sent in by parties interested will cheerfully be given a place in these columns, *over the writer's signature*, whenever space will permit. The JOURNAL cannot and will not endorse any opinions thus expressed, except after a personal examination of the mine or property in question by some member of its staff.

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BANGOR, FRIDAY, DECEMBER 30, 1881.

THE MINING JOURNAL FOR 1882.

Another year has drawn to a close, and with the next issue the MAINE MINING JOURNAL enters upon its fifth volume and the third year of its existence. The opening of a new year very naturally gives rise to reflections on the past and observations with regard to the future, and it is most fitting that these matters should be given consideration at such times.

Two years have now passed since the MINING JOURNAL was launched upon the sea of journalism, that vast and remorseless deep which has swallowed up many a goodly craft and where so many of the fondest hopes have perished. These years have not been without their lessons and experiences. The establishment of a successful newspaper is by no means a trifling matter. Time, labor and capital to a large extent are all necessary to the building up of a remunerative journalistic enterprise. There have been many trying occasions during the past two years, and we have found much to contend with in our efforts; but our courage has never wavered and we have already witnessed the fulfillment of many of our brightest expectations.

The MINING JOURNAL has acquired a large circulation throughout the New England States and British Provinces, and in the cities of Boston and New York we have a list of subscribers in which we take much pride. The MINING JOURNAL circulates from Newfoundland on the East to California on the West, and from Canada on the North to Mexico on the South, and finds readers in nearly all the intervening States and Territories. The JOURNAL also journeys across the Atlantic, and is received by regular subscribers in England, France and Germany. Our advertising patronage is tolerably large and cheering, and with a steadily

increasing circulation the prospects of the MINING JOURNAL have never been more encouraging than at the present time.

The MINING JOURNAL has been a sincere believer in the mines of Maine and has devoted itself zealously to their advocacy. We have the most deep-seated faith that in reasonable time, with good business management, a goodly number of mines along the North Atlantic Seaboard will come prominently to the front and pour a stream of treasure into the marts of commerce. We have labored with what ability we possessed to disseminate reliable mining intelligence and have attempted to educate the great public in regard to the golden possibilities of these rich mineral fields, which will be reached sooner or later by those persevering individuals who have devoted their capital and labor to the advancement of the cause.

The MINING JOURNAL will endeavor in the future to be more interesting and valuable than in the past, and no labor will be spared to make it a more representative journal than ever before. We propose to add new features from time to time and increase largely its field of usefulness. Prominent attention will as heretofore be given to the mining interests and all mining information which we can gather from reliable sources will be placed before the public in a fresh and readable form. Deserved attention will also be given to all those great industries which tend to develop the manifold resources of this section. We watch with deep interest the progress made in the various industrial enterprises and shall chronicle from time to time information in regard to them. We look with hearty favor upon every enterprise which has a tendency to advance the business interests of our people and shall do all in our power to foster and encourage the men engaged in promoting them.

The MINING JOURNAL expresses its thanks to the many friends who have given it their patronage in the past, and asks of them a continuance of the same assistance, offering in return to devote itself most assiduously to the advancement of the mining and general interests of this section. We also desire the active support of many who have not heretofore been regular patrons but who, we are sure, would find it for their interests to have their names enrolled on our subscription books. We are desirous of making the JOURNAL instrumental in advancing the interests of all classes of people. The resources of this eastern section are many and varied, and of unlimited extent. If the friends of industrial enterprise will co-operate with us in our efforts to induce capital to assist in measures looking to the development of our vast natural resources, they may make our work largely a labor of love and be themselves greatly benefitted.

A HAPPY NEW YEAR to its friends and patrons is the best wish of THE MAINE MINING JOURNAL.

We have repeatedly assured our readers that quotations of mining shares as manufactured by the Mining Exchanges are of very little value as indicating the condition of a mine or the actual value of a property. More than ever is this proved to be true in the light of recent transactions; and, believing that their publication is productive of more harm than good, our readers need not be surprised if we refrain from alluding to them for the present. Any subscriber to the

JOURNAL desirous of ascertaining the market value of a certain stock can do so at any time by addressing us by postal card or otherwise.

Few people, even among those interested in mining investments, have any adequate idea of the time, labor, skill and expense required to properly develop a mining property and bring it into a paying condition. Practical mining is a business entirely foreign to the vast majority of Eastern people; and while the mining industry has had to contend with many and serious difficulties in attempting to secure proper recognition, it is this lack of knowledge which more than all else has prevented it from becoming what it rightfully should be—the first in importance among the nation's industries.

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THE MAINE MINES.

[Boston Traveller.]

While there is nothing especially exciting at the present time, in the development of the Maine mineral resources, still it does not follow, on this account, as many of the doubtful ones are inclined to argue, that mining in that State is dead. On the other hand, the lack of anything like a "boom," which always proves in the end a bane to any mining camp, is the strongest possible argument in favor of the solidity of the basis of the industry in the district referred to. The mining men of Maine have had their "booms," and have, by experience, discovered the evil effects thereof. The many prospect claims, that eighteen months ago were dubbed as "mines," have been thoroughly "weeded out;" the mistakes of poor management and poor policy have been discovered; reorganizations in many instances have been effected, and a quiet, steady and systematic development work is now in progress. This will tell more in the end than all the loud talk, the brilliant promises and the detailed accounts of the work, the assays and the small shipments. The establishment of a mine on a dividend-paying basis is not the work of a week nor of a month; the real value of a property cannot be determined in a comparatively limited time, nor can handsome returns be had without right management and well-directed labor. Evidence, undeniable, has long since been given that there is ore in Maine, and that it exists in paying quantities, and with the policy now being pursued and which is likely to characterize all the future developments in that district, it will certainly be taken out; and the many anxious stockholders who have long been patiently waiting for the promised returns on their capital invested are bound to see something accomplished soon, and best of all the doubting public will be convinced of that which it has long scoffed at, that rich paying mines can exist as well near home as a thousand or two miles distant. Honest and vigorous labor and not talk alone is what is going to accomplish this, and with another season, under the present careful and economical management, something handsome is sure to be shown as a result, and something of which New England mining men may well feel proud.

—A fertile soil, a kindly climate, mineral resources, navigable waters, are among the material parts of a country's wealth. But the people who should be satisfied with this, and make no effort to cultivate their own skill, energy and power to act upon Nature's gifts, would be the derision of world. It is only by her non-material wealth that a country's natural resources can be made of any avail. The two together, acting in harmony, insure national prosperity. As to which of them is the larger factor, all history shows us that it is not the material, but the non-material.

Three Fissures.

Three fissures went opening out to the east,
Past the east wall, as the shaft went down,
And as they opened the ore increased,
And the news went spreading all over the town;
For men must work while the world's asleep,
And the bullion yield must increase to keep
The stock at the Bay a-booming.

Three bankers sat in Nevada block,
And they told their wealth as the sun went down—
Their wealth in bullion and wealth in stock—
And read the news from Virginia town.
For miners work while the world's asleep,
And the bullion yield must increase to keep
The stock at the Bay a-booming.

Three brokers stood in the noisy street,
And they cursed their luck as the stock went down,
Each hour their ruin was more complete,
And nothing came from Virginia town;
For miners must work while the world's asleep,
And men must starve, and women must weep,
And stock is seldom booming.

—[Exchange.]

Personals.

SEPT. DUFF arrived from Blue Hill on Monday and made a short stay in the city.

MESSRS. JOHN S. JENNESS and FRANK H. WILLIAMS have visited Blue Hill this week.

ISAIAH S. EMERY has arrived from New York and is passing the holidays in this city.

MR. A. E. BARCLAY arrived in Liverpool on the 22nd after a short passage of eight days.

SENATOR B. F. JONES, of Louisiana, is one of the owners of a rich gold mine in the Blue Ridge.

HON. F. M. LAUGHTON has gone to Philadelphia on legal business. He will return home next week.

MESSRS. EUGENE M. HERSEY and FRANK H. WILLIAMS came from Boston on Saturday and passed Christmas at their homes in this city.

MR. R. F. STRAINE, of the Boston Economist, arrived in Bangor on Sunday morning and remained till Tuesday evening. While in the city he was the guest of E. M. Hersey, Esq.

JACOB W. BOWDEN, formerly of Burnham, died at Bonanza City, Idaho, on the 2nd inst. Deceased for a number of years worked as tool sharpener at the granite quarries in this State. He was a native of Blue Hill.

MR. JOHN ORVILLE EVANS, President of the Mutual Union Telegraph Company, died suddenly at the Gilsey House, New York, on Sunday. Mr. Evans resided in Washington, D. C., and his estate is valued at several millions.

MRS. JOAN HASKELL, of Auburn, says the Lewiston Journal, is one of the best educated women in Maine. She is well versed in conchology, geology, ornithology, astronomy, botany, the classics, mythologies, etc., and has accumulated a library of 1000 volumes, including many rare and valuable works. Mrs. Haskell is about 50 years old, and has acquired her education since her marriage, without the aid of teachers.

PROF. W. FRANK STEWART leaves in a few days for the city of Washington. It was the intention of the Professor to make a protracted stay in our city but pressing business

engagements demand his presence at the National Capital and it is quite probable that he may be called from there to California. If not obliged to visit the Pacific Slope he will soon return to Maine. The best wishes of his many friends in this vicinity will follow him in his journeyings.

TRUE MARDEN, of Stockton, Me., who was quite seriously injured at Antelope, Nevada, some weeks ago, is on the road to recovery, although at the time of the accident his life was despaired of. The ladder in the main shaft broke, precipitating him fifty feet upon the ledge below, breaking his leg in two places and bruising his head fearfully; his escape from death was miraculous. The Antelope Gold Mine is located 30 miles from Reno and is largely owned and operated by former citizens of Stockton, among them being Capt. Andrew Griffin, Amos Dicky and his two sons, Dorendo and Clarence, and the Black brothers, Albion and Andrew. Thirty men are constantly employed and the ore is said to be very rich.—[Belfast Age.

HON. WM. C. HENDRICKS, of California, came from New York on Saturday and passed Christmas with Prof. W. FRANK STEWART at the Bangor House. Mr. Hendricks has been a resident of the Golden State for thirty years, has represented his section in the State Senate and is a gentleman of prominence in mining circles, having large interests in the hydraulic mines of Butte County. Professor Stewart and Mr. Hendricks have been close friends during long years, the two having been born and brought up in Madison, Indiana. Subsequently both wedged their footsteps to the Pacific Slope and since that time they have been much together. While in the city Mr. Hendricks examined the cabinet of ores in the MINING JOURNAL office and expressed much astonishment at the richness and variety of our ores. On Sunday evening he departed for Washington.

Eastern Mining.

HOW IT LOOKS AT THE CLOSE OF 1881.

To say that the progress of Eastern mining during the year now closing has given entire satisfaction to the friends of the industry would be untrue; to assert that it is now, generally speaking, in a healthful and vigorous condition would also be overstating the facts; but it can be truthfully said that, after having survived more than one extremely critical period, it not only still exists but is firmly established upon a foundation which cannot be shaken, and is growing and will continue to grow with each succeeding day, in spite of all obstacles.

The same causes which have retarded development in the past may again operate to produce discouragements and consequent vexatious delays in the future; but the mining developments of the Eastern States and British Provinces have reached such magnitude and extend over so much territory that the mismanagement of any one mine or disastrous stock-jobbing operations in commercial centres cannot cause permanent injury, while they have already been productive of results which leave no room for doubt that mining for the precious metals is destined, and at no distant day, to become one of the most important and remunerative industries of this section. While the general public seem yet unwilling to recognize this fact, the parties engaged in conducting present mining operations are strong in the faith and know they are on the high road to success and prosperity. The first dividend paid from actual earnings will prove a most convincing argument, and as dividends are already in sight in more than one of these eastern mines, we can

but feel that the new year is full of promise to all who are interested in the development of our vast mineral resources.

The Maine mines are to-day, generally speaking, showing fine bodies of ore and are well equipped with buildings and machinery for future work. A great deal of hard work has been done and considerable progress made in the right direction during the past year. It is only when we consider what might have been accomplished had no mistakes been made that the growth of the industry seems slow and unsatisfactory. But that serious errors of judgment should occur was to be expected under the circumstances; it is a matter for congratulation that they have not resulted even more disastrously, and the experiences of the past, although dearly bought, will be well worth the cost, if the lessons be heeded. Consequently let us accept the situation as it is, feeling that it might have been far worse, and while mindful of the past take renewed courage of the present and continue hopeful of the future.

THE BLUE HILL DISTRICT

Is still at the front, inasmuch as the promising condition of the older mines and the brilliant showing of ore made by properties upon which little work has yet been done show beyond controversy that the camp is destined ere long to become an important copper producing district. The work of the past year has nearly all been of a preliminary character and the older mines are but just getting into readiness for solid and substantial work. All the companies operating in Blue Hill have within the past twelve months undergone the severe process of reorganization upon an assessable basis. This as a matter of course has caused suspensions and delays which, although unavoidable, were nevertheless vexatious. It is gratifying to know that they have all taken a new lease of life and are now in a sound financial condition.

The Douglass has been a fruitful source of disappointment, through no fault, however, of the mine itself; but it has shipped a large amount of ingot copper and shown to the outside world a measure of what the district is capable of producing. At the recent reorganization of the Company an important change was made in the executive department and a new Manager has been engaged to take charge of the mine and works. The Executive Committee held a meeting in Boston on Wednesday to shape their policy and mature their plans, and with the advent of the new Superintendent, on Jan. 1st., a new regime will be inaugurated which will, it is hoped and expected, regain for the old Douglass the ground it has lost through mismanagement. The Stewart is being vigorously developed by two shafts, both of which have reached a depth of 100 feet. Both are looking well and one is now in a good body of ore. The Blue Hill is looking remarkably well, showing large bodies of high grade ore. The underground developments are quite extensive, in fact more so than any other mine in the district. Work is being energetically pushed in two shafts, and a large amount of excellent ore is raised to the surface daily. The deepest workings of the mine are 190 feet from the surface. Several shipments of high grade matte have been made, but the precise quantity we are unable to ascertain. The Twin Lead, having struck a good body of ore in their winze and also a strong flow of water where the pump is unable to reach it, have gone back into their shaft and will push the incline down as rapidly as possible. The Young Hecla has been lying idle for some time but has recently started up, and having by a system of prospecting determined upon the location for their permanent shaft are driving it down as rapidly as the nature of the ground will permit. The present depth is about 30 feet. The Mammoth, a comparatively recent discovery, having exposed an enormous body of rich ore by a crosscut 30 feet from the surface and also discovered another massive ore channel a short distance to the south, have suspended underground work until the large shaft-house now being built is completed. The shaft will then be sunk to a depth of 100 feet when both ledges will be tapped by crosscutting. Fifty tons of ore have been

shipped to Portland as a sample lot. Above five tons of matte, from Mammoth ore worked by the Twin Lead smelter, were also shipped to Boston, and averaged 25 9-10 per cent. copper. The Eclipse, situated a short distance east from the Mammoth, shows an immense quartz vein heavily mineralized, and is unquestionably a valuable property. Nothing but prospecting work has yet been done. It is owned by a Bangor company, who propose to commence active mining operations ere long. The Granger is at present idle. The working fund became exhausted, necessitating a reorganization of the company. This has been effected and an assessment will probably soon be levied and work resumed. The principal owners have not lost faith in their property.

THE BAGADUCE DISTRICT

Is second in importance to none, and before the close of another year will astonish the country by the output of ore from its rich mines. The Rosier still leads the van, shipping to New York and Portland large quantities of ore each week, but other properties are destined shortly to come to the front. The Tapley, which has recently fallen into the hands of a strong company and which has made the most astonishing surface-showing of ore yet uncovered in the State, is about to be opened up in a vigorous and systematic manner, and the large ore dump is being sorted, cobbled and hauled to the company's wharf for shipment. The Manhattan, an adjoining property which has already shown four solid feet of high grade copper sulphurets, will continue to be worked more energetically than ever. The shaft at the Brooksville is steadily gaining in depth. The Hercules is being worked again with renewed energy and is showing an immense vein and some wonderfully rich ore. The Colton, Mermaid, and Dodge and Jones have equally as good prospects, and although idle at present, will, not long remain so. The North Castine have recently built a shafthouse and put in steam machinery, and intend to sink another 100 feet. It is at present showing some very good ore. The Castine mine, at Dice's Head, is being worked by a tunnel into the bluff from the water's edge, with excellent prospects. Other prospects there are which show well at the surface and which will be worked the coming year. Some of these will with intelligent management, develop into remunerative mines.

EGYPT DISTRICT

Is also in a flourishing condition and has already become quite an active mining locality. The Copperopolis, Cumberland and Harvey Elliot are operating upon an extensive scale and employ a large number of miners and other workmen. The Franklin has recently been reorganized and it is the intention of the company to resume work upon their valuable property immediately. The Franklin Extension has been worked night and day continually during the past year and is at present finding some rich ore.

SULLIVAN DISTRICT.

Little has been heard of late with regard to the old Sullivan mine, but although operations have been conducted in a quiet manner some excellent work has been accomplished and a great deal of it. It has been the policy of the company during the past year to develop the underground workings without paying special attention to the extraction of ore, taking out only such ore as was necessary to the progress of the work. The result is that an immense amount of ore is left exposed in the various drifts on the several levels, and when the management shall decide to commence raising ore the Sullivan will make a showing that will astonish the natives. The Milton has kept steadily at work with a persistency worthy of emulation, and has been rewarded by striking a promising quartz vein which has shown some handsome ore. Systematic work in both drifts and winze still progresses, with most encouraging prospects. The Faneuil Hall and Sullivan have also shown commendable pluck and perseverance and have steadily pushed forward their crosscut on the 100-ft level for the purpose of in-

tersecting the Sullivan lode. It has now penetrated, through hard rock, about 190 feet and is progressing at the rate of ten feet per week. At the Pine Tree, which adjoins the Sullivan property, the buildings and wharf have recently been undergoing improvements and repairs, preparatory to resuming active work in the mine.

OTHER DISTRICTS,

Notably the Acton, Gouldsboro, Cherryfield and others still further east, of which little is heard at present, will come into prominence during the ensuing year. Numerous properties in these districts are every way worthy of confidence and will well repay the expense of development. Other mines throughout the State are being worked with good results. The Edgemoggin is finding good ore and will compare favorably with any mine in the State, and the Deer Isle, with its immense ore bodies whose values have been fully tested, requires no eulogies from us.

Glancing, then, over the entire field of Maine mining operations, we do not feel like complaining. All that is required to ensure the success of the industry is for these properties to be legitimately worked under the direction of some one familiar with at least the first principles of mining. The mines will then stand upon their own merit, and we shall have no fears as to the result. With upwards of forty mines in full operation at the present time and a prospect of the number being largely increased within the next few months, and with the practical results already attained, the old State has every reason to be proud of the mineral contained in what were formerly considered her barren rocks, and her future prosperity is assured.

LODES, LEADS AND VEINS.

MOUNT MICA.—We learn that the Mt. Mica Co. decline to accept orders for minerals or gems until after Sept., 1882, and it is proposed to invite at that time the mineralogists of the America Association which meets at Montreal in August to make an excursion to that locality. At this time there will be a display of the rare treasures of Mt. Mica of past and present explorations, and as many of the rare specimens will then be dispersed over the world never to be collected together again the opportunity will call together the naturalists and lovers of nature's wondrous works from all parts of the country.

FRANKLIN EXTENSION.—The Franklin Extension Silver Mining Company have reached their main vein by a crosscut of 27 feet, where it was found to be six feet wide and mineralized throughout. Drifting is in progress and we are told that as the work advances the ore is becoming more concentrated and rapidly improving in character. A drift was also started from the bottom of the shaft in a northerly direction which Supt. McDonald reports has encountered a vein over two feet wide, showing good ore consisting of galena, copper and zinc. Work continues night and day and the future outlook is highly encouraging.

MILTON.—The pump station at the bottom of the winze on the vein, has been completed and are now timbering the winze for continuous work, in the same substantial manner as all other work on the mine has been done; shall be ready to commence sinking again in a few days. Have made good progress in the level of shaft No. 2, as well as in No. 2 winze; all the machinery is moving along smooth and with usual satisfactory results.— [Bulletin, Dec. 24.]

Blue Hill.

DOUGLASS.—The Douglass mine is making as fine an exhibit of copper ore as ever in its past history. From the drifts very excellent ore is being raised and conveyed in cars to the ore dressing sheds where a large force of men and boys are busily employed in dressing and sorting. The smelting furnaces are not now in operation. The new roast kiln has not yet given satisfactory results and some alterations will probably be made in its construction. The new year will probably witness many changes and it is to be hoped the Douglass will be operated with that ability and wisdom which its great merit as a mining property deserves. Mr. Geo. Thompson has been engaged as Manager of the company's affairs above and below ground. He will be under the control of the Executive Committee but will practically decide all matters relating to the working of the mine. It is understood he will at once institute re-

forms which will effect a great saving. The expenses of the various departments will be cut down and their efficiency increased. It is not the intention at present to make refined copper but sell matte. Mr. Thompson has secured an experienced smelter and has telegraphed for a mining captain of great skill who will act as Superintendent. Mr. Henry L. Gregory has resigned to take effect Dec. 31st. It is understood Mr. Maliphant will be retained. Mr. Thompson brings to the position the highest recommendations and the securing of his valuable services augurs well for the future of the Douglass mine.

STEWART.—The Stewart mine is making a far more promising showing than ever before in its history. Under the energetic superintendence of Capt. Daniel Dunn the work of development has been prosecuted with a vigor and ability which is surely destined to bring this valuable mining property very prominently before the public in the near future. The Stewart property is of exceedingly large size in the heart of the great mineral zone of Blue Hill and it is but reasonable to expect that when the proper depth is reached large and remunerative ore bodies will be encountered. The recent developments on this property comprise two shafts which are being sunk on the elevated ground to the north of the road. These shafts have been extended downward on an incline following the dip of the vein. A depth of 100 feet has been reached in each of these shafts and the result has been very satisfactory. No. 2, or the middle shaft, made from the surface a very good exhibit of copper sulphurets. No. 3 shaft, or the most eastern one, did not at first show much ore but gave excellent indications of a good vein. As the work of development proceeded, No. 2 shaft continued to make the same handsome ore showing exhibited at first, and No. 3 commenced to show improvement. Within the past few weeks No. 3 has improved rapidly and it now makes a showing superior to that of No. 2. A characteristic of No. 3 shaft has been a large amount of quartz very fairly mineralized with copper, but within the last month the mineral has been growing much more abundant and on the occasion of our visit the shaft showed a large amount of splendid copper. Over No. 2 a shaft-house has been building and is now about completed. This structure is 20 ft. by 40 ft. in size with 16 ft. posts and will be a neat and commodious building. A shaft-house will probably be erected soon over No. 3.

BLUE HILL.—The Blue Hill Mine is being worked more vigorously than ever before. Capt. Moyle, the capable superintendent, ably seconded by Foreman Merrill, has brought the developments to an advanced stage. No. 2 shaft is the main shaft. On the 110 ft. level a drift has been run eastward on the vein a distance of 200 ft. and a winze on this drift about 100 ft. east from the shaft is down 45 ft. On the second level at the depth of about 190 ft. from the surface, a crosscut has been run 40 ft. Miners are now drifting west on the vein from this crosscut and sinking in the bottom of the shaft will be speedily resumed. In the drift on the 1st level an immense body of very superior ore was encountered and large quantities of ore were raised to the surface. The winze from this shaft also shows the same excellent ore. On the second level the ore body presents similar characteristics and is of fine grade. Work has been resumed in No. 1 shaft and the two will be ere long connected underground. In this shaft on the first level a crosscut of 65 ft. was driven. A winze is now being sunk about 20 ft. east of the crosscut and this winze will be connected with No. 2 shaft on the several levels by drifts on the vein east from No. 1 and west from No. 2. A large amount of as fine ore as is found in the district is daily raised to the surface and is sorted and dressed. The smelter is not at present in operation. A temporary shaft-house will probably be erected over No. 1 shaft soon. The Blue Hill Mine has a fine future before it as it has very large bodies of splendid copper ore in sight and is under excellent management. The assessment of twenty-five cents per share is delinquent Dec. 31st.

TWIN LEAD.—The directors of the Twin Lead at a meeting in the office of the President, E. M. Hersey, on Monday last voted to levy an assessment of five cents per share, payable Jan. 14th. Everything around the mine moves smoothly and under the superintendence of Col. Duff good work is being accomplished. There has been considerable trouble with water in the winze and work has accordingly been abandoned for the time in that portion of the mine and concentrated upon the incline which as greater depth is reached will drain the winze, and then sinking will be pushed in both incline and winze. Some fine ore has been taken out of the mine and a good display greets the visitor.

YOUNG HECLA.—The Young Hecla lies between the Blue Hill and Twin Lead and the great value of the property is universally acknowledged. Mining operations were resumed at the mine quite recently and the work of development is pro-

gressing satisfactorily. Capt. Wm. Ludlow, of Lake Superior, is superintendent, and he is a gentleman of intelligence and capacity. Under his charge considerable prospect work has been carried on. A prospect shaft was commenced on the south side of the road and sunk to a depth of 35 ft. and a crosscut 44 ft. in length was run, cutting the vein which proved 20 ft. in width, heavily mineralized and carrying some very fair ore. A drift was then driven 20 ft. on the vein. With the knowledge thus gained by prospecting, the location of the permanent shaft was determined upon and this shaft has now reached a depth of about 30 ft. The shaft during the present week has been timbered and a hoisting engine and pump will at once be procured and developments can then be prosecuted energetically and good progress will be made.

MAMMOTH.—The Mammoth mine is situated directly across the pond from the Douglass and the elaborate mining buildings in process of erection loom up prominently. The Mammoth is a property which has made a wonderful showing of copper ore on the surface and the future developments will be watched with much interest. The buildings now being reared are modeled after those of the Twin Lead. The shaft house is 30 feet by 45 feet in size and the distance from the basement to the peak is 52 feet. An engine house will be built in the rear which will be 25 feet by 45 feet. In blasting for the foundation of this latter structure a new ore body has been encountered nearly 100 feet south of the first discovery on the property. The buildings are well underway and will be completed in a comparatively short time. Mining operations will then be resumed, and the shaft which is now 30 feet deep will be continued downward to a depth of 100 feet and crosscuts will then be driven north and south to open the two ore bodies discovered. Col. Chas. Duff is in charge as Superintendent and is doing excellent work.

Bagaduce.

ROSIER CONSOLIDATED COPPER CO.—In No. 1 shaft drifting still continues on a vein fully twelve feet wide of good copper ore. Supt. Pollard is also cutting down the shaft to a regular incline below the present level of 100 feet, with the intention of sinking for another level. The ore in the shaft continues remarkably good. A slight accident occurred recently in No. 2 shaft. About fifty tons of rock became detached and fell, breaking down the timbering in one of the chambers of the shaft. Two men were very slightly injured. The damage has all been repaired and the rock, which turned out to be good zinc ore, has been raised to the surface. They are now both stopping and sinking in this shaft and taking out excellent ore. The schooner "Commerce" sailed on Wednesday of last week with a cargo of copper ore for the Portland Smelting Works. Schooner "Cora Etta" (440 tons), of Rockland, sailed for New York early in the present week with a full cargo of zinc ore. The buildings of the Company are now fully completed; the men can all work under shelter and everything is in readiness for the winter, so that no delays will be experienced on account of cold or stormy weather.

NORTH CASTINE. A letter from Superintendent Dunton states that a two-foot streak of fine looking ore has been struck in the bottom of the shaft. The clay seam still continues, and as the gangue rock consists of a mixture of quartz and talcose slate and the vein is enclosed between walls of heavily mineralized quartzite it would seem that the prospect for opening up a valuable mine was highly encouraging. Timbering has commenced, which will necessitate a suspension of work in the bottom of the shaft for a week or more.

CASTINE.—The Castine copper and Silver Mining Company, operating at Dice's Head, have driven their tunnel over forty feet into the bluff and have cut fine stringers of ore at every few feet. Work is being pushed night and day, with good indications of being very near a large body of ore. The sample lot of ore (50 tons) sent to Portland for treatment some time since netted a neat little sum over expense of mining and shipment.

British Provinces.

Dr. Rae recently brought into Halifax two bars of gold from the Renfrew Mine, valued at about \$10,000.

The St. John Sun says the St. John & Maine Railway transportation teams have been engaged lately hauling Woodstock pig iron over to the I. C. R. Station for shipment to Londonderry, taking as return loads, manganese brought down the Inter-Colonial from Sussex.

SATEMO.—A letter from Superintendent of Satemo dated December 18 says: "In sinking in main shaft of Nugget vein yesterday another very rich chimney of very heavy gold was encountered. This vein steadily improves as we sink. Have

built shaft house over "Kent" shaft and otherwise prepared for extensive working of the lode."

A special dispatch from Bathurst, N. B., to the St. John Sun announces the discovery of another promising silver mine at Gloucester. Hon. Mr. Adams and R. R. Call, Esq., have visited the property and returned with a sled load of splendid ore, which is to be forwarded at once to New York to be assayed and smelted. The new mine will be located under the mining license purchased last summer for five square miles, three in Gloucester and two in Restigouche. The mine will be owned by R. R. Call, John J. Adams (New York), William Muirhead, Jr., John Sadler and Samuel Adams.

CAPE BRETON.—A company was formed in New Glasgow last summer called "The Nova Scotia and Cape Breton Prospecting Company," of which Mr. John Greener, manager of the Vale Coal Company, is President. The object of the company, as the name implies, is to prospect the various localities supposed to contain minerals of any kind in the eastern part of the Province, the island of Cape Breton included. Many valuable discoveries have already been made through the exertions of this company. Messrs. McBain and McPherson, practical men in the company's employ, in addition to discoveries in iron, marble, etc., have made a discovery of very valuable galena deposits in Arichat, Cape Breton, on the property of one Mr. Langtree. Two seams, twenty-five ft. apart, have been discovered—one of them one foot and the other two feet and a half in thickness. Leases covering a mile and a half along the seam were secured by the said company the other day. A quantity of an average quality from each of these two seams were sent to J. Burwash, Dominion Assayer, a short time ago, and after a careful analysis by him, he finds in a ton of 2 000 lbs. of the smaller seam sample, 784 lbs. or 39 per cent. of pure lead, together with 3 pounds and five ounces of silver; and of samples from the larger seam, he discovers 1726 lbs. out of the ton, or 86 per cent. of pure lead—and six ounces of silver. Samples of the same have been sent to an analyst in the United States, with the same satisfactory results. It is astonishing also that the sands of washings taken from the trial pits made for prospecting contained a large percentage of silver. Nuggets of pure galena weighing from one pound to one ton have been found in several places on the same property. It is allowed by parties who have seen the place, to be one of the most extraordinary discoveries of minerals made in the Province. The knowing ones say that the ore is worth £20 to £30 sterling per ton. It is known that Mr. Couch, an American gentleman, now in this Province, is about visiting the locality and the public will likely hear something striking in a few days about the discovery of galena in Arichat, Cape Breton.—Hali-fax Herald.

The Chaudiere Gold Region.

MONTREAL, Dec. 22, 1881.

To the Editors of the Maine Mining Journal:

SIR:—It is just about 30 years ago since Sir Wm. Logan, the head of the Geological Survey of Canada, first visited the St. Francis and Chaudiere regions in the Province of Quebec, and made his report to the Government of the alluvial gold to be found in both sections, but especially in the gravel which formed the ancient beds of the Chaudiere river and its tributaries.

The Chaudiere flows from Lake Megantic, (which is within four miles of Franklin County, Maine) in a northerly direction to the junction with the Du Loup, trending from that north-west, until it discharges into the St. Lawrence, a few miles above Pt. Levi. The distance from Pt. Levi to the height of land separating the State of Maine from the Province of Quebec is about 100 miles, and the same from Lake Megantic. The valley of the Chaudiere is from one to two miles wide; and beyond that, on each side, in the neighborhood of St. Francois, the *chef lieu*, the banks rise more or less abruptly into a series of elevated plateaux (more especially on the east side), down which the tributaries flow in a succession of falls of from 75 to 10 feet in height. Beyond that the country is much broken up, and the very undulating land through which the St. Francis flows, and which is seen by the passenger on the Grand Trunk Railway, going north from Island Pond, is considered as an extension of the Green Mountains of Vermont.

When Sir Wm. Logan visited the Chaudiere valley, he took the only route then open, and went by the main road from Pt. Levi, which in summer is fair enough, but which in the spring is next to impassable for mud. The valley was settled very early by French Canadians, and probably if General Montgomery had passed through it a few years ago, as he did in his venturesome attack on Quebec in 1775, he would not have found much change in the manners of the inhabitants; but within the last few years, the Quebec Central Railway intersects the

country, running from Sherbrooke, a thriving manufacturing town on the Grand Trunk Railway, to the Chaudiere near the Des Plantes River, and from there to Pt. Levi.

For the last twenty years, independent miners have been engaged in a small way, panning out gold, especially on the Gilbert River, flowing from the east, a little below the Du Loup. In some instances they were well rewarded, some farmers having taken out as much as \$1200 worth in a day, and in 1869 a nugget weighing 51 ounces was unearthed in the Gilbert diggings. Nuggets of that size downwards have been repeatedly taken out since.

One of the first regular companies in the field began with quartz crushing, a little above St. Francois. The stone mill is still standing, but the company and the stamps have gone. Of the companies working the placer diggings on the Gilbert river, the oldest, probably, is the Canada Gold Mining Co., with English capital, and headquarters in London, but having an office in Quebec. This with all the other companies on the Gilbert, work by shaft and adit. In most cases, the shafts are about 90 feet to bed rock, timbered from top to bottom. The adits are timbered in the same thorough way. They have steam pumping gear, working night and day all the year round. Among the other companies working on that river may be mentioned the Clarence, the New York and the St. Francis Gold Mining Companies—all American—the latter although chiefly owned by Boston capitalists, having head offices in Sherbrooke; also McArthur & Co., with head office at Quebec, and about six others.

About three years ago, Mr. Alex. McKenzie, C. E., formerly in the Geological Survey, introduced the hydraulic process in working on the high banks of the Des Plantes River, which enters the Chaudiere from the east, nine miles below the Gilbert. The falls on this river being from 75 feet, perpendicular, downwards, a great water power is obtained, which is brought by flume, at any desired height, and furnishes hydraulic power far beyond anything required. Mr. McKenzie's flume is 2000 feet in length, 1 foot deep and 30 inches wide. The water is conducted from that through an eight-inch hose, with 2 1-2 inch nozzle, and is directed against the gravel banks of the river, which are about 150 feet high. Another company—La Compagnie Canadienne—has since then purchased mining rights on the same river, and works by hydraulic power.

On the Du Loup River, near the site of the Goldring fizzle, a large English Company—the Gold Mining Association of Canada—started operations, last year, on the hydraulic plan. They have a capital of £250,000 stg., with headquarters in London, and have expended up to this time between \$60,000 and \$70,000. They bring their power from twelve miles back, using 4 1-2 miles of spiral iron pipes, 16 inches in diameter with 6 inch "Little Giant" nozzles, imported from California. Their manager, Mr. A. A. Humphrey, was formerly engaged in phosphate mining on the Ottawa.

This general account may give you some idea of what is being done in gold mining in the Chaudiere region, where there are about nine hundred or one thousand men employed, but which number will be increased many fold within the next few years, as access to that country is made easier, and the profitable results of the present mining operations become better known. I hope to give you in a future communication more particulars as to the results of the past year's work.

R. H. G.

Mining Matters in Portland.

PORTLAND, Me., Dec. 28th, 1881.

To the Editors of the Maine Mining Journal:

Christmas week has been dull, both as to weather and the sale of mining stocks. Edgemoggin had a good run and is now settling back for—probably—another boom. This is a favorite stock with a good many about here. Men who make a few good points on a certain stock, are very apt to tie their fortunes to it and make it their favorite. Deer Isle still stands well in popular estimation. A large amount of this stock, which a couple of months ago went to Boston, is back here again at lower prices than it sold for. The general impression seems to be, that it may—any day—suddenly bounce up again.

Franklin Extension is really getting to be a popular stock. Reports from the mine are most encouraging. Supt. McDonald writes that the south drift is in a wide body of solid ore, of an excellent grade. Two veins have been uncovered and the converging point is upon the Company's property. This juncture—or ore chimney, as it is called—is thought by experts to be very rich in ore and the drift is rapidly approaching it. It is reported that Supt. Johnson, of the Mascot, has made a rich strike, the header in tunnel No. 1 having encountered over two feet of solid galena, specimens of which are on exhibition here. It is stated that one blast threw out several tons of solid ore.

The Bakeman Mining Co., of Cape Rosier, have refused a cash

ffer of \$15,000 for their property. By the way, this is the company that is composed almost entirely of ladies, only one director being a gentleman. As the names of the officers have never been correctly given by the newspapers, I have taken the pains to get them. They are as follows: President, Mrs. Hannah M. Mayo; Treasurer, Miss Sarah M. Bakeman; Secretary, Mrs. Alice R. Johnson; Directors, Hannah M. Mayo, Sarah M. Bakeman, Alice R. Johnson, Addie A. Bakeman, Lavinia Eaton, W. R. Johnson, Mrs. A. Smith. The property comprises over 500 acres, immediately adjoining the celebrated Rosier Mine, and is offered for sale to whoever wishes to purchase, the price being \$40,000. Geo. H. Blake, of Portland, No. 93 Exchange street, is the sole agent having charge of this valuable property, to whom all communications may be addressed.

The Smelting Works here are being rapidly rebuilt and it is understood have all the ore offered that they can handle. Portland people most heartily wish for their success.

HARRY.

Copper.

[Boston Herald.]

There has recently been an enormously increased production of copper from the mines of the United States, and it is believed that the amount turned out this year will reach the large figure of 70,000,000 pounds, or twice the production of five years ago. In the meantime the price has also risen materially, instead of falling as was prophesied. The reason for this increase in price is said to be not entirely owing to the increased demand, which is very large, but to the lessening of the stock on hand abroad. This had accumulated greatly in Great Britain and other European countries until recently, owing to the dulness of business; but the sudden briskness of all kinds of trade has caused a demand to spring up everywhere, making heavy drafts on the stock on hand, and corresponding increase in price. The outlook for the owners of copper mines, therefore, bids fair to be good for some time to come, for the old uses for copper are extending, while new uses are springing up, and it seems likely, according to the general rule in such matters, that with the greatly increased production, the metal will be more generally utilized than ever.

Copper is one of the most ancient of metals, and the copper age preceded the iron age. Primitive people made use of implements of copper before the use of iron became known to them. From the combination of such excellent qualities as toughness, malleability, ductility and resistance to oxidation, and also from its great power of conducting both heat and electricity, copper is one of the most useful of metals, and the enumeration of the many purposes for which it is used would require a long catalogue. Next to silver, copper is the best metallic conductor of electricity, and this property alone, with the wonderfully increasing applications of electricity for lighting, motive-power, and other purposes, promises to create a great demand for copper. Although it is hardly possible to get at the figures, yet it is said that the demand for copper wire for use in telegraphy, telephony and electric lighting is already enormous, and far beyond expectation.

Copper is produced nearly all over the world in great quantities. Chili and the United States are the greatest producers. The census bulletin No. 264 shows the production in the United States east of the 100th meridian in the census year 1880. The total amount of ingot copper was 50,655,140 pounds, and of this the Lake Superior region of the State of Michigan produced 45,830,262 pounds, or 90.48 per cent. of the entire product. This entire production would make a cube of pure copper with an edge of 45½ feet, or, spread out in a sheet one inch thick, would cover 25.75 acres. Next to Michigan in production come the mines of Orange county in Vermont, with 2,647,894 pounds, then Ashe county in North Carolina, with 1,646,000 pounds. The new mines of Hancock county, Me., from which much is expected, produced only 83,080 pounds.

All the ratios between production, wages, capital, number of mines, etc., are so controlled by the figures from the Calumet and Hecla Mine in Houghton county, Mich., that no general results could be drawn from the tables given in the census bulletin, which would be greatly changed, and, in some cases, reversed, if that mine were excluded from the consideration. Under the various conditions, the average price realized by the mines was 17.46 cents a pound. The net income of the copper mines of the eastern district of the United States is calculated at nearly \$2,750,000. Assuming this to be paid annually, and taking 5 per cent. as the ruling rate of interest, the value of the real estate as reported, \$24,517,146, would indicate an average expectation of a productive life of 12 years for the copper mines on it, an expectation which it is believed that their average condition justifies. The tables show that it requires 62½ cents capital to produce a pound of copper a year. Of this, 77.4 per cent. represents the land (though the original outlay may have

been much less,) 18.39 per cent of it invested in the "plant," and 4.21 per cent of it is required for wages advanced and supplies carried in the ordinary course of business. These averages apply to the industry as a whole, and, of course, vary greatly for different mines. Labor obtains about one-third of the value of the product, and nearly one-sixth is expended in the necessary mine supplies. The value of the yearly product is nearly 28 per cent. of the total capital. The production of the extreme western states and territories (Colorado, Arizona, Idaho and California) is not included in the table, but, as far as received, the production for the census year is 6,244,702 pounds, or 12.32 per cent. of the production of the eastern district. Eleven new mines in Maine, Maryland and New Hampshire report the employment of 462 men, the payment of \$31,995 for wages, and \$7,650 for material consumed. They have spent \$658,470 for machinery, dead-work, etc., but have produced no ingot copper. It is likely that the production of next year will be largely increased by the copper from the rich new mines in New Mexico and Arizona, which have just begun to be developed.

Christmas Frolics at the Stock Exchanges.

HOW THE JOLLY NEW YORK BROKERS AMUSED THEMSELVES FOR A TIME ON SATURDAY.

[Graphic.]

The bulls and the bears of the Stock Exchange fraternized for half an hour to-day for the first time within a year, and, as might be expected under such an extraordinary condition of affairs, the *entente cordiale* was signalized by uproarious sport such only as these frolicsome animals are capable of perpetrating. The fun began shortly after the first call by the blare of countless tin horns, the grating of rattles and an onslaught on hats in general by bulls and bears with inflated bladders. At that hour the stock room was packed with brokers and the galleries were black with spectators, among whom were a few "lamps" and many ladies. Old bulls and young bulls, short bulls and tall bulls, and bears of almost every species caught the infection, and five minutes after the first tin horn had sounded the signal the great crowd was in motion, and then the air was filled with hats of every description, the detonation of bursted bladders, the sound of heavy thumps on unprotected heads, administered by the same toy in the hands of frolicsome brokers, and the yells and groans of the victims. A bull would get to the windward of an unsuspecting bear, and before he realized the situation he received a heavy whack on the head and his hat was sailing in space. Once in the air, every man was in duty bound to keep his neighbor's headgear afloat, and twenty Derbys and beavers were doing duty for the crowd at the same moment. As the bulls and bears warmed to their work they became more hilarious, and the Board room presented a scene of wild disorder, such probably as was never before witnessed, even on panicky days.

"It may be fun for the boys," said a white-haired lamb mournfully; "they can afford it, but its death to us outsiders." At the height of the frolic J. White Davis, the champion dancer of the Board, was set upon by a legion of bulls who formed a circle around him and attempted to bulldoze him into a jig. After repeated efforts to escape he at last got out of the bull ring and fled from the building minus his hat. At twelve o'clock, exhausted by their efforts, the bulls and bears closed their funny business, and stock operations were resumed as before.

The members of the New York Mining Board also enjoyed themselves hugely during the forenoon, and scores of hats were demolished. No business was transacted after noon, and the younger brokers, in the words of an old member, "raised Cain from then until three o'clock." Every man who had a good hat on his head when entering the Board room was set upon by the mob of brokers and rushed around the room at lightning speed. Then the victim was hustled into the Chairman's seat and compelled to make a speech. He was afterwards released and allowed to gather up the fragments of his wardrobe from different parts of the floor.

The Newfoundland Railway.

[Boston Traveller.]

The New York Syndicate are making rapid progress in constructing the railroad which it has undertaken to make across the island of Newfoundland. By late dates we learn that a locomotive has been received at St. John's, the first iron horse that was ever seen in this conservative community, which is England's oldest possession in America. Abundance of the finest timber has been found along the line of four hundred miles over which the road is to be built, and contracts have been made for the cutting and supply of 700,000 railway ties from these virgin forests. About sixty miles of steel rails of

the most approved pattern have been landed at St. John's, with vast amounts of railroad appurtenances. The company employ at present about 1200 men between St. John's and Harbor Grace, the line being already completed to the village of Topsail and beyond, one hundred miles of the road being graded and made ready for the sleepers. The number of operatives employed will be increased in the spring to 10,000 on the various sections between Hall's Bay and St. John's. The screech of the locomotive will soon charm the ears of the inhabitants of this "ancient and loyal dependency," it being the intention of the company to run daily trains between the Capital and Topsail at once. Rails on but a few miles of the road had been laid when a splendid mass of the finest granite was struck, easily accessible and cheaply worked. This stone is the sole property of the syndicate, being located on one of the eight mile blocks appropriated by them under the terms of their contract with the Newfoundland government. Efforts will be made by the government to turn a portion of the tide of emigration towards the virgin soil of Newfoundland, which experts engaged upon surveying work of the road say possesses some of the best qualities for successful agricultural operations. Several fine veins of copper have been discovered within a few months, and altogether the year closes with a bright outlook for the colony.

Croppings.

[Compiled, Condensed and Condensed from our Exchanges.]

The Cotton-Tail mine in the Jack-Rabbit district (Nev.) is developing handsomely.

The shafthouse and one of the boarding houses at the Silver Islet Mine, Lake Superior, were destroyed by fire on the night of the 3d inst. This will necessitate closing the works until repairs are effected.

Socorro will soon have water works. An old cynic said he did not see why, as the people never wash, and their regular drink is not water. But he was evidently jealous of the progress of the city.—[Santa Fe Democrat.

Elaborate zinc smelting works are being erected in Rich Hill, Missouri. The works will occupy thirteen acres of ground and the first buildings, which are now in process of erection, will cost \$50,000. One hundred and fifty men will be employed when the works start up.

Pennsylvania and Michigan are the two leading States in the production of iron ore. The total product of the former for 1880 being 2,185,675 tons, valued at \$5,517,089, and of the latter, 1,834,712 tons, valued at \$6,034,648. New York comes next, her quota being 1,262,127 tons, valued at \$3,634,422.

Hon. Jerry Schooling, of Reno, ex-Treasurer of Nevada, has been appointed Statistical Correspondent of the National Agricultural Bureau. He has already notified the Department that the soil of Nevada is adapted to the growth of tea and asks for an appropriation to experiment on tea-culture in that State. He also reports the yield of pine nuts for the year 1881 at 63,000 flour sacks.

The Eureka (Nev.) Sentinel says that Colonel U. P. Monroe has just completed the sale of three valuable mines to a wealthy New York company, called the Columbia Con. Gold and Silver Mining Company. The property is situated in Secret Canyon District, in this county, about half a mile southwest of the celebrated Geddes & Bertrand Mine. The names of the mines sold are the Water Jacket No. 2, Harrison and Palmer. We were unable to learn the price paid for the properties. Colonel Monroe has been appointed Superintendent and is instructed to commence active operations at once, and carry on systematic mining in the future.

Professor Hidden had a lot of splendid quartz crystals, which he had taken from the Hidden mine, in Alexander county, carefully laid out in a room to themselves, when going into the room on the morning of the 25th of November, there presented itself to his view a scene which made him grieve. The fine crystals were broken all to pieces. They lay all over the floor, and the appearance of the room would have led one of the uninitiated to the conclusion that some one had been in it and broken the crystals with a hammer. In a moment, however, Professor Hidden reached a solution of the mystery. Each of these crystals had in it a cavity and in this cavity a bubble of water. The night of the 24th of November was the coldest we have had this season, and on that night the water in these crystals froze and broke the crystals to pieces. The loss amounted to about \$50.—[Statesville Landmark.

So far this year, the Ontario and Horn Silver, of Utah, have produced more than any other two mines in the United States. From January 1st to September 30th the Ontario produced

\$1,862,007, and the Horn Silver \$1,261,129, a total for the two of \$3,123,136. The only mine, except the Ontario, which has exceeded the Horn Silver is the Standard, of California, which produced in the same time \$1,323,663, or \$59,534 in excess. There were only four others that ran a million for the same period—the Eureka Consolidated, of Nevada, \$1,212,242; the Tombstone, of Arizona, \$1,149,225; the Western, of Arizona, \$1,079,212 and the Northern Belle, of Nevada, \$1,032,026. Aside from the fact that both mines were at considerable extra expense in purchasing and erecting new and enlarged machinery during the past summer, up to the 1st of October for the present year the Horn Silver had paid \$300,000 and the Ontario \$725,000 in dividends. Though the mining industry of Utah is but in its infancy, and been less favored by capital than its sister States and Territories, it has shown that when its mines are developed they come to the front as leaders.—[Silver Reef Miner.

GOLD IN CONNECTICUT.—Professor Silliman, of New Haven, once said that there was "just gold enough in Connecticut to ruin any man who attempted to work it." His estimate has been verified a score of times within twenty-five years, yet there is perhaps foundation for the belief that a vein of gold has been opened at last that will pay for working. The mine is in the country town of Ashford, Windham county, not far from the Massachusetts line. Gold was discovered in the neighborhood not many months ago, and the owner of the scrappy land sold a tract including the location of the mine to Charles F. Huntley and Stephen Lewis, the latter a wealthy commercial traveller of New York City. Together these gentlemen have patiently and quietly pushed their mining operations. A short time ago they took several New Yorkers into partnership. Tunneling was begun in November to cut the vein 100 feet below the croppings. At the surface the ore, as assayed by New York chemists, was worth 15.57 a ton. It grew rapidly more valuable at a short distance from the surface, the ore taken at four feet depth assaying \$27. A gang of men has been set to work under direction of "Uncle Billy Chollar," a man well known in Western mines, and operations are to be vigorously pushed. It is now announced that a mining company has been formed in New York to work the mine. The inhabitants of Ashford are patiently waiting for an incursion of miners that will outdo the gold rushes of the Western Territories.

A well-known German manufacturer of mica wares, Herr Raphael of Breslau, now makes mica masks for the face, which are quite transparent, very light, and affected neither by heat nor by acids. They afford good protection to all workmen who are liable to be injured by heat, dust or noxious vapors, all workers with fire, metal and glass melters, stone-masons, etc. In all kinds of grinding and polishing work the flying fragments rebound from the arched mica plates of the mask without injuring them. These plates are fixed in a metallic frame, which is well isolated by means of asbestos, so as not to be attacked by heat or acid. These masks allow the turning of the eyes in any direction, and, as against mica spectacles, they afford the advantage of protection to the whole face. In certain cases the neck and shoulders may also be guarded by a sheet of cloth impregnated with fire-proof material, or by asbestos sheets attached to the mask. The interval between the mica and the eyes allows of workmen who have poor eyesight wearing spectacles, and of workers with fire or in melting operations wearing colored glass spectacles under the mask without fear of breakage of the glass, mica being such a bad conductor of heat. Where the mask has to be worn long, it is found desirable to add a caoutchouc tube with mouth-piece for admission of fresh air; the tube passes out to the shoulders, where its funnel-shaped end (sometimes holding a moistened sponge) is supported. The mask has a sort of cap attached to it for fixture on the head.—[London Times.

Nuggets.

—Local hunters shot eight caribou at Rangely Lake, on Friday of last week.

—The American House, Ellsworth, will be reopened to the public the first of January.

—It is understood that Mr. R. B. Dunn is to build a large cotton mill at West Waterville.

—By a recent fall of earth in Merrill's Slate Quarry, at Brownville, W. M. Jones was seriously injured and Anasa Stanhope had one of his feet crushed.

—Mr. Wm. E. Brown, the popular steamship agent in this city, sells tickets to Europe by all the favorite lines, issues bills of exchange and attends to the forwarding of packages to foreign countries by express.

—The ice men are happy along the Penobscot and Kennebec.

The open winter promises a short crop outside of Maine and it is consequently expected that high prices will prevail for this necessary article during the coming summer.

—The Twin Lead Mining and Smelting Company have levied an assessment of five cents per share payable, at the office of the Treasurer, John R. Mason, at 4 Main street, Jan. 14th. Stock on which assessment is unpaid, will be delinquent Feb. 13th.

—We learn with regret of the recent destruction of the Rockland Courier establishment by fire. Brother Fuller has our most sincere sympathy over his unfortunate loss. We rejoice to see that the Courier has already risen from its ashes and is as bright and readable as in the past. The Courier is widely and favorably known, and fills an important place in Maine journalism. It could not well be spared.

—We have received from H. H. Tammen & Co., of Denver, Col., the Mineral Inkstand. This is a fine work of art, and makes a very handsome parlor ornament. The stand is about three inches square and on the sides are cemented fine specimens of the different gold, silver and copper ores, petrified woods, moss agates, etc., found in Colorado. The specimens alone are well worth the price of the stand while in this form their value is surely increased.

—Among the interesting statistics prepared under the direction of the Superintendent of the Census is a report compiled by T. C. Purdy on steam navigation. The number of craft running in Maine Waters is 112, valued at \$1,135,700. During the season of 1880 between Boston and the ports of Maine, the movement amounted to 113,500 passengers, and along the coast of Maine from Portland, Rockland and Mount Desert, eastward as far as Calais, it amounted to 51,537 passengers.

—The January number of "The Century Magazine" is replete with interest for its many readers. It opens with an entertaining article on "A Provincial Capital of Mexico," written and illustrated by Mary Hallock Foote. Among the notable articles is an illustrative one by W. J. Linton, entitled "Who were the Chartists?" The Serials, "Through One Administration," by Francis Hodgson Burnett, and a "Modern Instance," by W. D. Howells, add their increasing interest to the number. The balance is made up of poems, readable essays, reviews, etc., by T. H. Robertson, Celia Thaxter, Ernest Ingersoll, Lucy M. Mitchell, Col. A. P. Rockwell, Elihu B. Washburne and others.

—The American Electric Light Company of Massachusetts, a corporation recently organized and in which Boston capital is becoming largely interested, includes among its founders Gen. Grant's sons and ex-Secretary Windom. The patents owned by this company have passed a critical examination by Gen. B. F. Butler, and are pronounced incontestable as well as possessing advantages superior to any other light now in use. Arrangements are being completed for establishing the plant for a large central station. Warehouses and offices are engaged and business operations will be commenced in a few days. The capital of the company is \$1,000,000 in 10,000 shares of \$100 each. Mr. Eugene M. Hersey, of this city, has applied for the right for the State of Maine.

The Flowers Sleeping Car Company.

The Flowers Sleeping Car Company has recently been organized in this city with a capital of \$500,000, divided into 5,000 shares of a par value of \$100 each. The officers of the corporation are, President, Capt. Wm. Flowers; Treasurer, W. J. Webb, Esq.; Secretary, Hon. F. M. Laughton; and the Board of Directors include nine well known business men about equally divided between residents of Bangor and Massachusetts.

This Company has purchased the patent known as Flowers' Improvement in Railway Sleeping Car, and will engage in the manufacture of sleeping cars under the patent and will run cars and also lease and sell them to railroad companies. The patent was obtained in 1874 by Capt. William Flowers, one of the best known and most esteemed citizens of Bangor. Owing to the desirability of some improvements and modifications, Capt. Flowers decided to postpone the time of bringing his invention prominently before the public and accordingly until now no definite and systematic efforts have been made to introduce this sleeping car on the railroads of the country.

A brief description of the patent will be found interesting. The car is made in the ordinary form, except that the seats are placed in the middle instead of at the sides thus leaving an aisle on each side of good width instead of one in the centre. The seats are of desirable length and arranged like those in any sleeping car in sections facing each other. Lengthwise of the car runs a partition as high as the back of the seats, so dividing them that each section has room for four persons. Every 6 feet in the car at a corner of seat and partition a grooved post runs from the floor to the top of the monitor in which

the partition slides. This partition, when it is desired to make up berths, is drawn up, and folding leaves upholstered as beds, or the cushions on the backs of seats and on the seats, are so arranged as to form a mattress for the lower berths. Another partition which during the day is drawn up into the monitor roof of the car, is lowered at night, and folding leaves form the mattress for the upper berths and are let down upon short partitions drawn up from between the backs of the seats while other leaves, hung like doors, swing out to close the ends from the next section. Thus each berth for two persons is securely closed at the side and ends and leaving a space of more than four feet between the upper and lower berths and leaving open only the side next the aisle and this is protected by curtains.

The inventor, who is an experienced railroad man, and has long studied the subject, claims that this system secures more privacy than that now in use, for no inquisitive passengers on the opposite side can look at their neighbors; that better ventilation is secured because the roof of the car and a large space under the lower berths afford a free circulation of air, while the windows can be opened without producing a draft on the sleepers; that better and more equable heating can be secured for the same reasons; that there is no danger from broken glass in case of accident; that there is no danger of the berth shutting the occupant in at the time of an accident; that the car can be made much lighter than the ordinary sleeping car while the posts in the centre add to its strength; and the ease with which it can be applied to any passenger car renders it far cheaper and within the reach of any railroad company.

The Flowers Sleeping Car Company is organized with a large amount of stock in the treasury and the balance is already paid in. It is proposed to build immediately two sleeping cars and have them equipped as speedily as possible. An agent of the company is now negotiating with railroad companies and there is excellent promise of this system being quite generally introduced. The Flowers Sleeping Car has already received the endorsement of many leading railroad men.

Perley Putnam, Esq., the Superintendent of the Laconia Car Company's Works, has written to Capt. Flowers, as follows:

LACONIA, N. H., Nov. 8, 1881.

Mr. William Flowers:—

Dear Sir—I have thoroughly examined your model of day and night sleeping car, and think it is just what the travelling public needs, as it combines moderate cost, good ventilation and strength with lightness; also it can be made as exclusive as the staterooms of a steamer; and I have no hesitation in saying I could construct the car to suit the most critical, as to beauty of design, and to suit the patrons of any route that may use it. I see no reason why you cannot recommend it with confidence.

Yours truly,

PERLEY PUTNAM,
Supt. Laconia Car Co.

Closing Prices at Boston Stock Exchange,

FOR EACH DAY OF THE WEEK ENDING WEDNESDAY, DEC. 25, 1881.

NAME.	Thurs.		Fri.		Sat.		Mon.*		Tues.		Wed.	
	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.	Bid.	Ask.
Alouez	3 1/2	3 3/4	3 1/2	3 3/4	3 1/2	3 3/4	...	...	3 1/2	3 3/4	3 1/2	3 3/4
Atlantic L. S.	16 1/2	17	16 1/2	16 3/4	16 1/2	16 3/4	...	...	16 1/2	17	16 1/2	17
Atlas	...	...	...	...	...	...	...	...	...	...	...	...
Aztec	...	...	...	...	...	...	...	...	...	...	...	...
Blue Hill Copper	...	...	...	...	...	...	...	...	...	...	...	...
Brunswick	6	7	6 1/2	7	6	7	...	...	6 1/2	7	6 1/2	7
Calumet & Hecla	234	235	234	235	234	235	...	...	235	236	237	237 1/2
Catalpa	...	...	...	...	...	...	...	...	...	...	...	...
Central	...	...	...	...	...	...	...	...	...	...	...	...
Copper Falls	...	...	...	...	...	...	...	...	...	...	...	...
Contentment	...	...	...	...	...	...	...	...	...	...	...	...
Douglass	...	...	...	...	...	...	...	...	...	...	...	...
Dana	...	...	...	...	...	...	...	...	...	...	...	...
Duncan Silver	...	...	...	...	...	...	...	...	...	...	...	...
Empire	...	...	...	...	...	...	...	...	...	...	...	...
Franklin	13 1/2	14	14	14 1/2	14 1/2	14 3/4	...	...	14 1/2	15	14 3/4	14 3/4
Harshaw	...	...	...	...	...	...	...	...	...	...	...	...
Ifuron	...	...	...	...	...	...	...	...	...	...	...	...
Hanover	...	...	...	...	...	...	...	...	...	...	...	...
Humboldt	...	...	...	...	...	...	...	...	...	...	...	...
International	...	...	...	...	...	...	...	...	...	...	...	...
National	...	...	...	...	...	...	...	...	...	...	...	...
Oscoda	...	...	...	...	...	...	...	...	...	...	...	...
Pewabic	15 1/2	15 3/4	15 1/2	15 3/4	16	15 3/4	...	...	16	16 1/2	16	16 1/2
Phoenix	...	...	...	...	...	...	...	...	...	...	...	...
Pontiac	...	...	...	...	...	...	...	...	...	...	...	...
Quincy	48 1/2	48 3/4	49 1/2	49 3/4	49 1/2	49 3/4	49 1/2	49 3/4	49 1/2	50
Ridge
Silver Islet	18	19	18	19	18	19
Star
Sullivan

*No Board

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BY ALL THE POPULAR LINES,

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APPLETON MINING AND SMELTING CO.,
Appleton, Me. Incorporated, Feb. 1880.
Capital, \$500,000; Shares \$5 each; Treasury Fund 36,000 shares.
President and Treasurer, John Bird, Rockland; Secretary, E. M. Wood, Camden; Directors, John Bird, Geo. H. Cleveland, Moses Webster, S. C. Shepherd, D. H. Bisbee, George F. Woods, A. D. Bird.
CHARLES K. MILLER, Supt., Camden.

EAST BLUE HILL GOLD & SILVER MINING CO.,
East Blue Hill, Me. Incorporated, Dec. 1879.
Capital, \$500,000; Shares \$5 each; Treasury Fund, 20,000 Shares.
President, W. C. Collins, M. D., Bucksport; Treasurer, Leander Hancock, Bucksport; Secretary, O. P. Cunningham, Bucksport. Directors—James Emery, Dr. George H. Emerson, George W. Collins, Dr. W. C. Collins, O. P. Cunningham.
GEO. W. COLLINS, Supt.

EXETER SILVER MINING COMPANY,
Exeter, Me.
Capital, \$500,000. Shares \$5 each, unassessable; 40,000 shares in the Treasury.
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A. A. HAYWARD, Supt.

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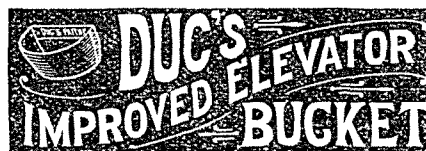
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