

4-1932

# Maine Highways, April 1932

Maine State Highway Commission

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# MAINE HIGHWAYS

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*Mount Katahdin  
from Katahdin Lake in  
Northern Maine*

APRIL-1932

10¢  
the Copy

## FOREWORD

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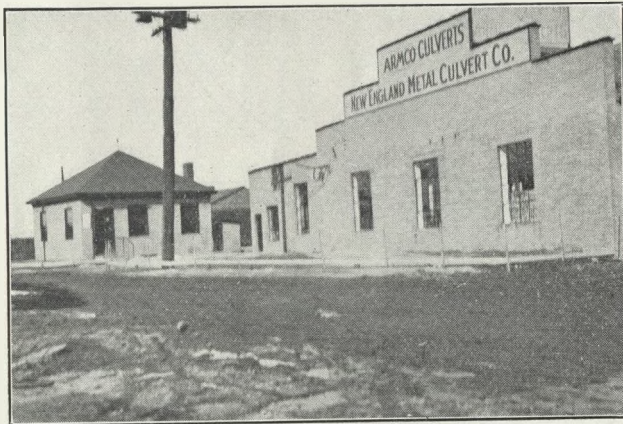
*"Wealth I ask not, hope nor love,  
Nor a friend to know me;  
All I ask, the heaven above,  
And the road below me."*

**T**HIS vagabond philosophy, penned by the great bard, Stevenson, well expresses the attitude of millions of travelers, men and women to whom roads are not only things of utility, enabling them to go about in pursuit of business, but also a means toward the gratification of a yearning for freedom, adventure, romance.

While Maine roads are provided primarily for Maine people they are used also each year by a vast, welcome pilgrimage of visitors, many persons of serious mien, minions of the gods of commerce, many others with their faces lighted by pleasurable anticipations of escape from commonplace cares, communion with nature, recreation, rest, rejuvenation.

Whether the traveler be intent on the consummation of business projects or eager to know the joys of truancy from the workaday world, he will find that roads of Maine will carry him directly and comfortably to his goal.

The highway system of Maine represents a building achievement of which the state is proud. And it is to acquaint the public with what this highway system now offers in travel facilities and what may be expected as the progressive improvement program goes forward that this magazine is published and presented. It is a non-profit undertaking and seeks only to be informative and helpful to those who journey to and within our State.



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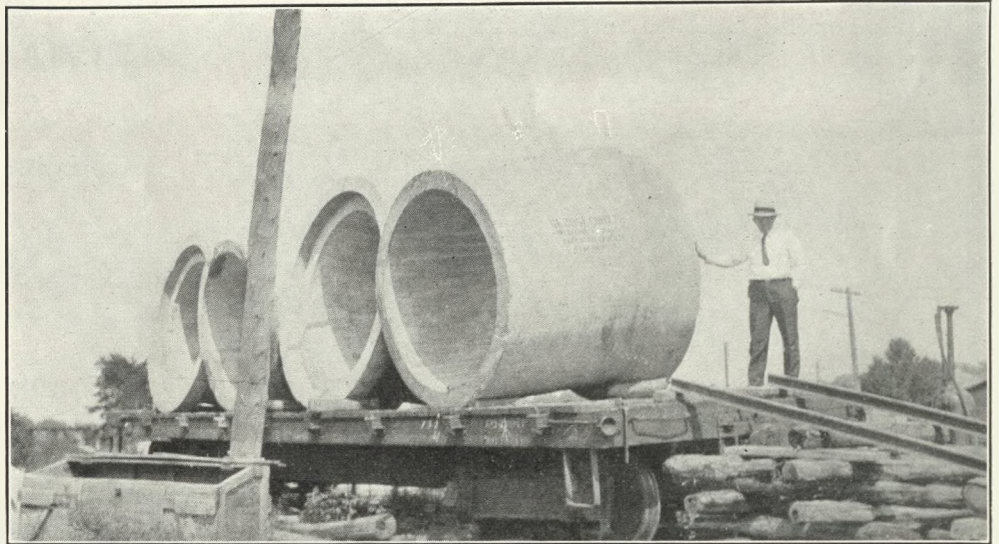
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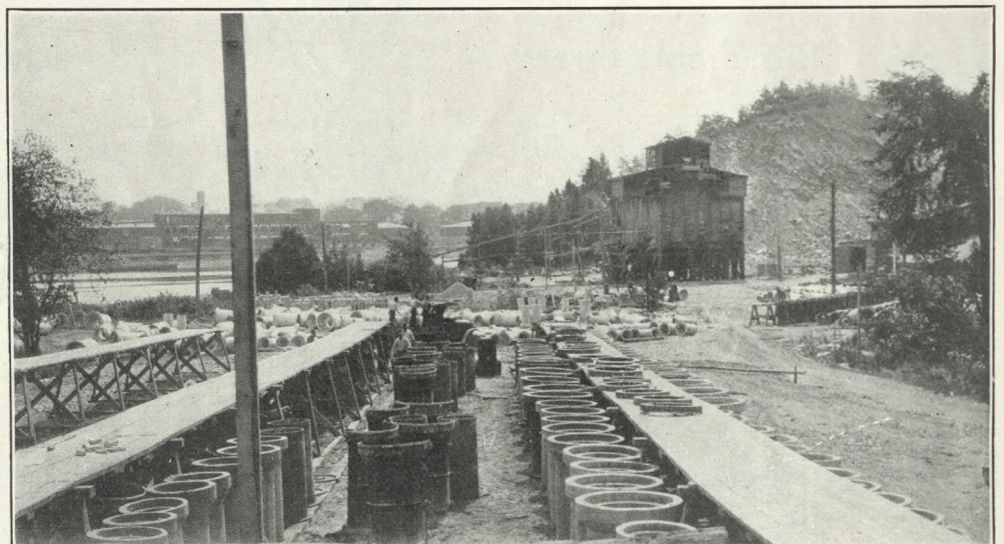
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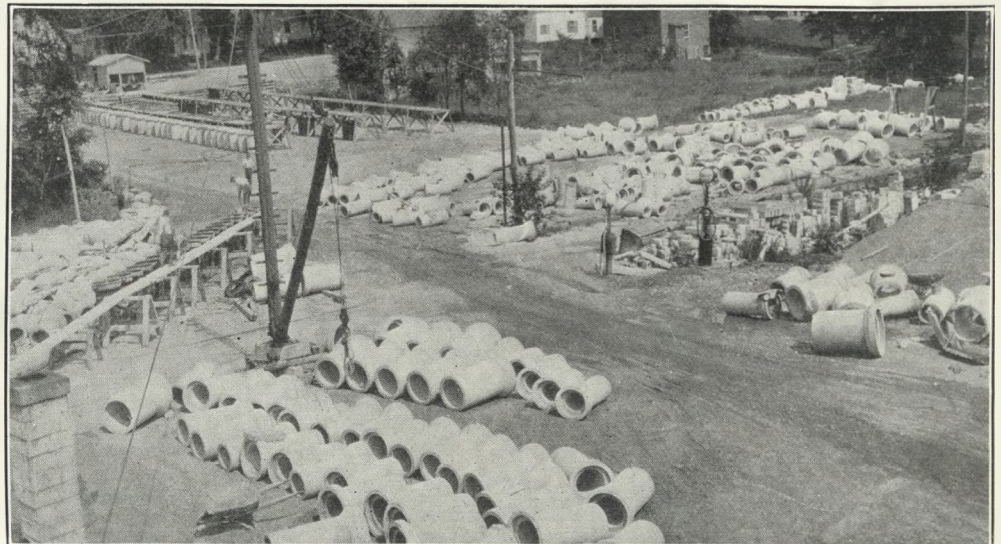
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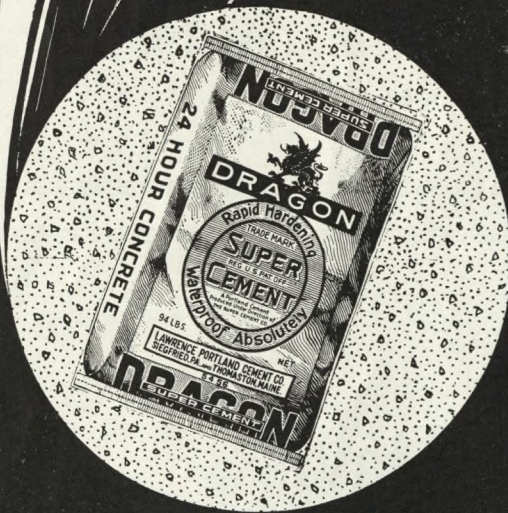
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# MAINE HIGHWAYS

Application made for entry as second class mail matter under provisions of the Act of August 24, 1912.

Vol. I

Augusta, Maine, April 1932

No. 1

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B. MORTON HAVEY, *Editor*.





STATE OF MAINE  
OFFICE OF THE GOVERNOR  
AUGUSTA

March 17th, 1932

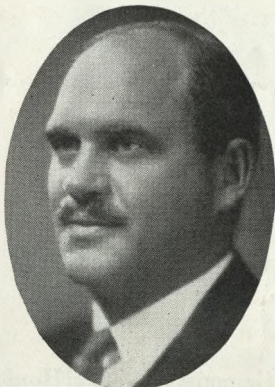
Frank A. Peabody, Chairman,  
State Highway Commission,  
Augusta, Maine.

Dear Mr. Peabody:

I wish to extend congratulations to the Highway Commission in recognition of its efforts in undertaking the publishing of a Maine highway magazine.

It is gratifying to know that our State is following the trend of many other States, through the Commission's part in taking this forward step, and I feel confident that Maine citizens will appreciate your endeavor.

With kindest wishes for the success of "MAINE HIGHWAYS", I am



Yours sincerely,

*Wm Tudor Gardner*

Governor.

# Traveling over Maine's 23,000 Mile Web of Highways

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A Historic Sketch

- Organization
- Development
- Construction

A Romance in Achievement

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By FRANK A. PEABODY  
Chairman, Maine Highway Commission

MAINE with its local highway transportation needs, with its natural attractions which every year bring into the State a large number of visitors from other states, has, for a long time, been confronted with a difficult highway problem. The magnitude of the problem is emphasized when we consider that Maine has an area of 33,000 square miles, 4,200 bridges, nearly 23,000 miles of highway, a valuation of \$757,000,000, a population of only 800,000, and highway needs which are State-wide.

As the conditions and requirements of highway transportation have changed, the people of the State have been quick to appreciate these needs, and have made a great effort to keep highway improvement in line with the ever increasing demand for better roads.

A great deal has been accomplished since 1901 when the Legislature made an appropriation of \$15,000 for the purpose of assisting towns in the construction of State aid roads. This was the first provision for the participation of the State in road construction. From old records we find that twelve towns took advantage of this first act and constructed 2.56 miles of road at a total cost of \$3,025.30, and against this expenditure, reimbursements to the towns amounted to \$1,175.00. At the time of this rather modest beginning it is doubtful if the rapid development of road improvement and its attendant great increases in expenditures were even visioned.

The development of the participation of the State in highway improvement has been under three different methods of administration; first, from 1901 to 1907 under the direction of the County Commissioners; second, from 1908 to 1912 under the direction of the State Highway Commissioner; and third, under the State Highway Commission.

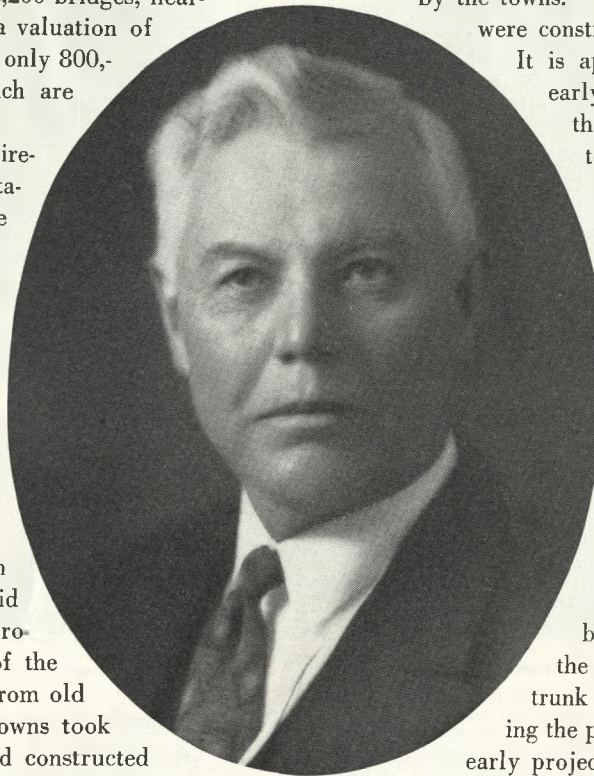
After the modest beginning in 1901 the appropriation for State aid road construction was gradually increased, and in 1913 when the work was taken over by the State Highway Commission, it was \$250,000. Up to 1913 a total of \$2,367,956 had been expended for this work of which \$1,080,208 was paid by the State and \$1,287,748 by the towns. With this expenditure 866 miles were constructed.

It is apparent, from a study of these early State aid road designations, that very little concern was given to a system of highways, or connecting State aid roads in one town with such roads in adjoining towns. In the act passed by the Legislature in 1913, definite provisions were made for the designation of a State highway system and a State aid highway system. Roads not included in these systems were classified as third class highways.

Very little was done prior to 1914 in the construction of State highways, or highways built entirely at the expense of the State. A few miles of so-called trunk line roads were constructed during the period from 1901 to 1913. These early projects have since been replaced by reconstruction. No special appropriations were made for trunk line work, but it was done with unapportioned balances in the appropriations for State aid road

construction after making apportionments in full against town funds. With increased provisions for State aid, and larger appropriations by the towns, the State has not found itself with surplus State aid road funds since 1913.

Since 1913 the work of the State Highway Department has greatly increased. This has been brought about by new provisions for additional work which has been placed under its direction from year to year, and the large increases which have been made in available funds.



FRANK A. PEABODY  
CHAIRMAN, MAINE HIGHWAY COMMISSION

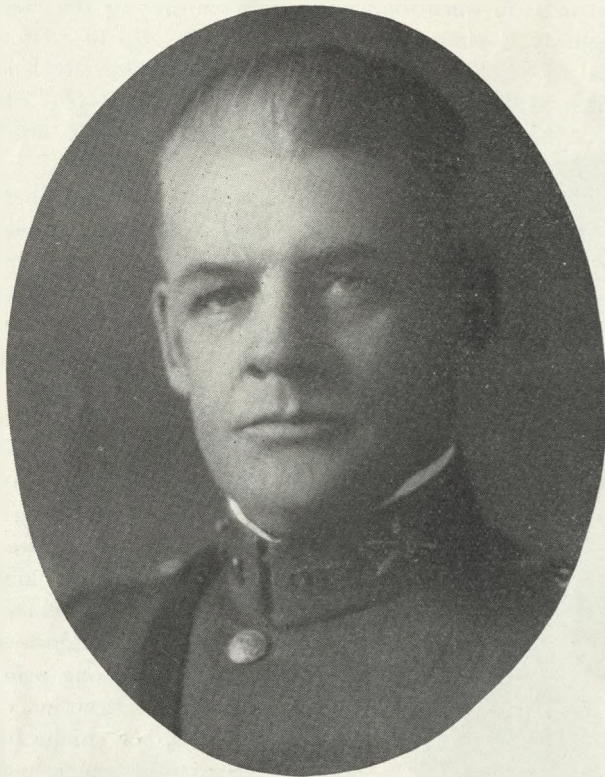
The major items of expansion include maintenance of State and State aid highways, construction of bridges under the general bridge act, Federal aid, third class highway construction, maintenance of bridges on the State highway system, and the expansion in State highway and State aid road construction.

One of the most important features of the 1913 law was the provision for maintenance of State and State aid highways. The original provisions were later supplemented by a provision for patrol maintenance. During the season of 1931 patrol maintenance was carried on by 486 patrolmen and included nearly 5,000 miles of

carried on in cooperation with the towns and of the total maintenance bill towns pay approximately \$250,000.

While the law does not require towns to make appropriations against apportionments from the third class highway fund, it does require that towns make annual appropriations for the maintenance of improved third class highways.

The cost of highway maintenance, in 1931, was \$2,594,269. When we consider that, through State aid road construction alone, we have been adding to the maintenance burden over 300 miles of gravel road each year, we realize that the maintenance problem is difficult. It



COMMISSIONER EDWARD E. FARNSWORTH



COMMISSIONER WILLIS E. SWIFT

highway. Approximately 300 miles of State aid road were also maintained by special arrangements with the towns. The work of these patrolmen is supplemented by additional crews which have been engaged in surface treatment, resurfacing and reconstruction.

For many years the State has been carrying on the surface treatment of gravel roads, and there has been a substantial increase in this work from year to year. Last season 1,900 miles were surface treated with bituminous material, and about 1,500 miles with calcium chloride. The demand and the need for surface treatment has far exceeded the funds available for the work. Bituminous surface treatment has been extended to include State aid roads as far as funds have permitted.

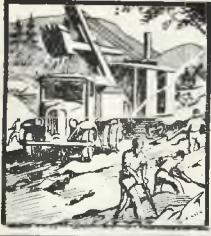
Maintenance of State and State aid highways has been

is believed that a recent act of the Legislature providing for the use of State aid road construction funds for surface treatment will materially help the situation.

The Eighty-fifth Legislature passed an act which requires that bridges on the State highway system shall be maintained by the State. This act placed upon the State the maintenance of approximately 550 bridges. As soon as this act went into effect last July, five bridge maintenance crews were organized and take care of this work.

The general bridge act was passed by the Legislature in 1915, and originally provided for the construction of bridges on all main thoroughfares, without reference to highway classification, with funds provided by the towns, counties and the State. The original law has been amend-

*(Continued on Page 16)*



# The HIGHWAY PROGRAM

by  
Lucius D Barrows  
CHIEF ENGINEER



MR. BARROWS

In the legislative act of 1929 which authorized an issue of bonds in the amount of \$10,000,000 for the construction of State highways, a provision was inserted which required the preparation of a program of construction extending over a period of not less than three years. The program, as approved, contemplates the extension of the work over a period of four years. Work was begun on this program in 1930 and was continued in 1931. To provide funds two millions of bonds were issued in 1930 and three millions in 1931. The Eighty-fifth Legislature authorized an issue of bonds not to exceed three million dollars to provide for continuing the construction program in 1932.

The 1932 program involves an estimated cost of \$4,298,170, of which Federal aid is estimated at \$1,485,600, and State funds at \$2,812,570. This program includes the construction of 61.49 miles of surface treated gravel road, 46.61 miles of bituminous macadam and 31.0 miles of concrete pavement, making a total of 139.1 miles.

The improvements scheduled for 1932 are shown below according to routes:

## ROUTE 1

The construction of 1.3 miles of three-lane concrete pavement in Kennebunk, filling in sections east and west of the village.

The reconstruction of the section from Saco to the concrete pavement in Scarborough, bituminous macadam—2.45 miles.

The construction of 0.8 of a mile of gravel in Woolwich preparatory to paving with concrete. This connects the concrete pavement at the toll house with the concrete previously constructed in Woolwich.

Surface treated gravel through Edgecomb, Newcastle, Damariscotta, Nobleboro, Waldoboro and Warren, to the concrete in

Warren—23.61 miles. This section will be constructed with base and shoulders of sufficient width to permit of future paving.

In Lincolnville 4.0 miles of surface treated gravel. This section will also be built with sufficient width to permit of future paving.

In Holden the construction of bituminous macadam across the town—5.32 miles.

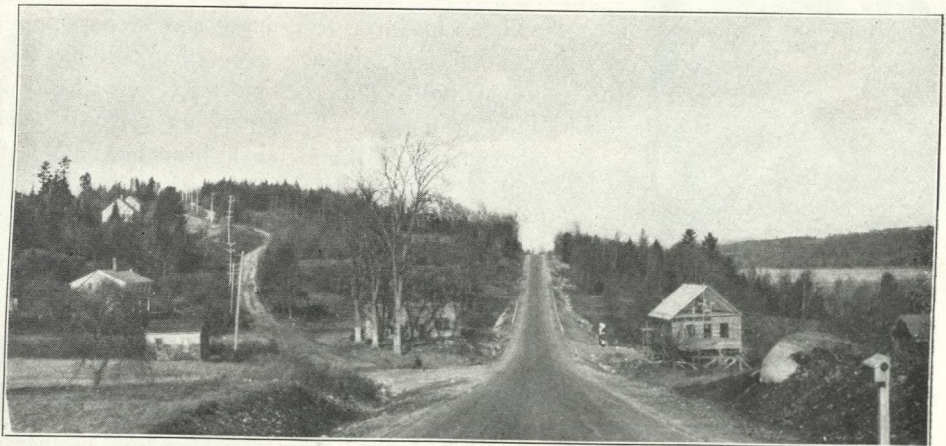
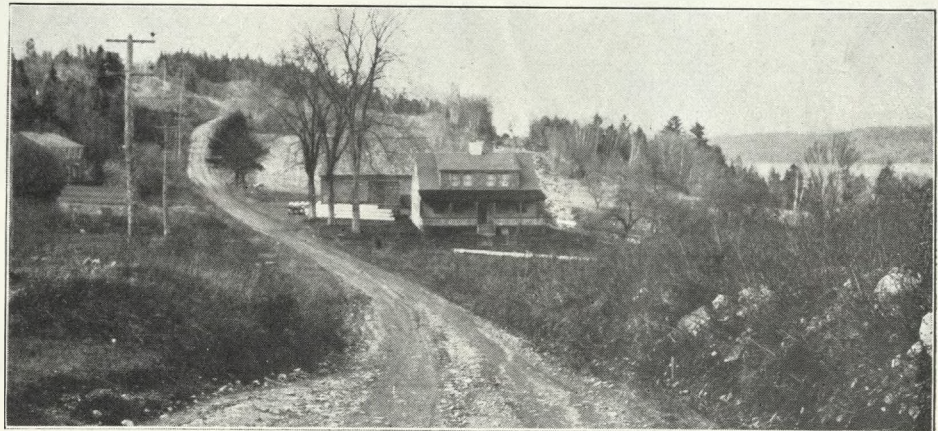
The construction of 6.4 miles of bituminous macadam in Ellsworth.

In Calais and Woodland 9.0 miles of surface treated gravel road.

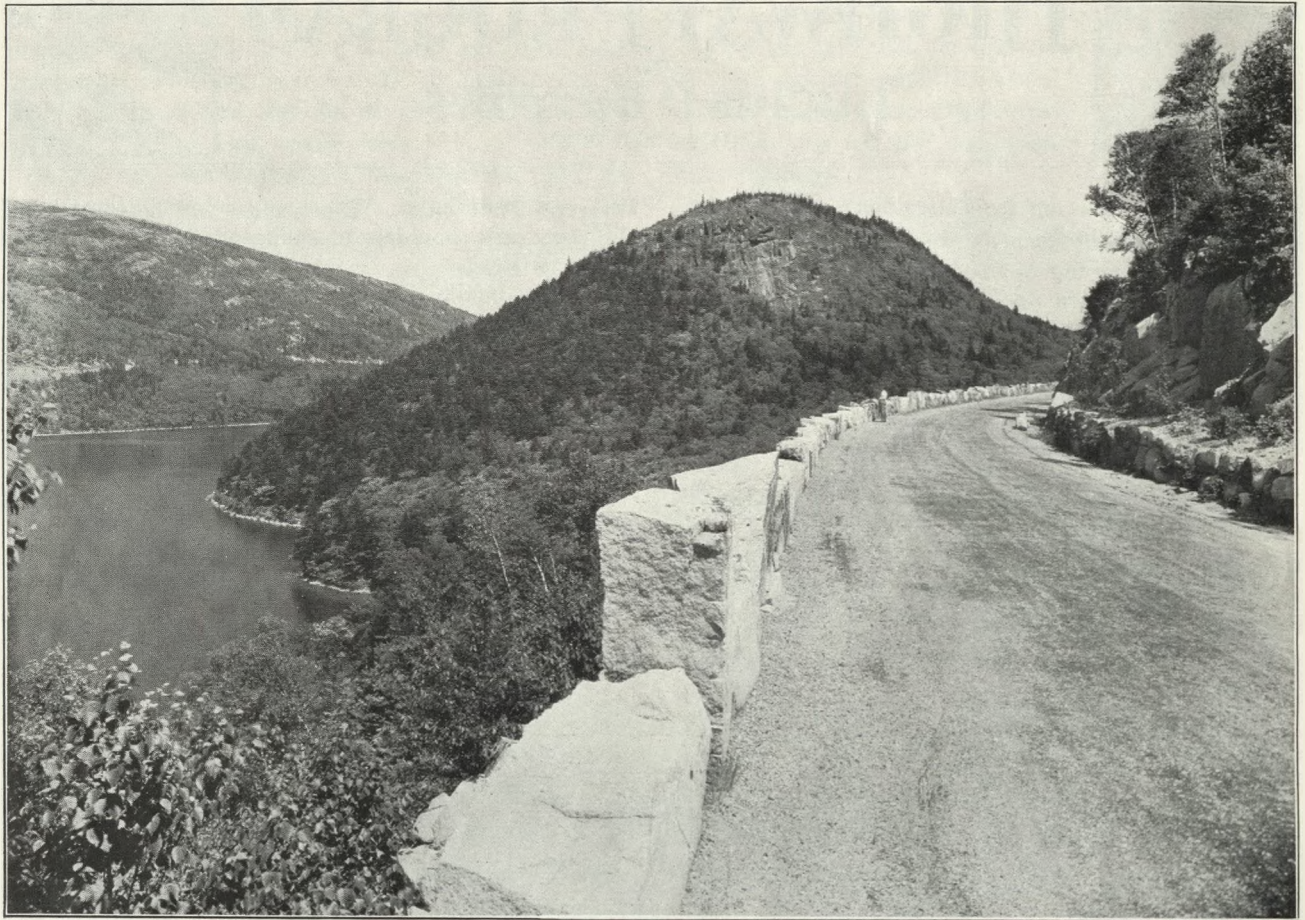
South of Houlton 5.0 miles of surface treated gravel, filling in sections of unimproved road.

Bituminous macadam in Presque Isle—6.1 miles, completing the section between Caribou and Presque Isle.

(Continued on Page 20)

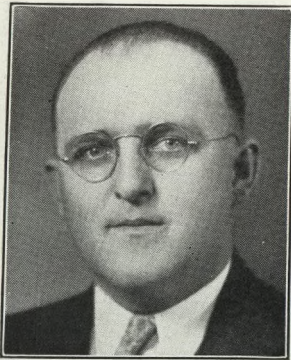


THEN AND NOW in Stockton Springs, showing improvement and straightening of highway leading to the new Bucksport bridge.



ACADIA NATIONAL PARK, Mt. Desert Island, showing a section of the Rockefeller Road. Bubble Mountain, in the middle background, and Sargent Mountain, on the left, dip their lower slopes in Jordan Pond.

## Maine's New State Controller Former Highway Accountant



WILLIAM A. RUNNELLS

The business of looking after the State's business, or any portion thereof, is a business in itself and a mighty busy business.

For reference, see William A. Runnells.

"Bill" entered the service of the State Highway Department November 23, 1918, the baptism bringing upon him the title, "In Charge of Accounts". On January 1, 1932, he became

State Controller, filling a position established under the new Administrative Code Act.

Among numerous and sundry tasks, the "In Charge of Accounts" official, in the Highway Department, has charge of all of the accounts of the Highway Commission; looks after the toll bridges, with special emphasis on the financial end; attends to the garage stock and the purchase of supplies for that branch, audits the purchases and keeps equipment cost accounts.

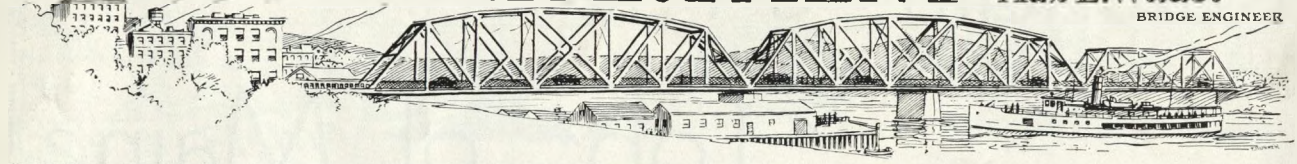
Now that Bill has been promoted to the position of Controller, he will call upon his previous thirteen years' experience for utilization on a wider range, carrying it along in behalf of all of the State Departments and Institutions. He continues, of course, in the same capacity for the Highway Department.

What does he do in the balance of his time, somebody asks? O, sleeps a little, eats a little and drives back and forth between his house and the office.

Seriously, however, Bill's many friends are pleased to know that his services have been recognized to the extent of taking him another rung up the ladder. The job is a big one to be sure, but Bill will measure up.

# BRIDGE DEPARTMENT by Max L. Wilder

BRIDGE ENGINEER



**I**N MAINE the policy of state aid for bridge construction and maintenance started very soon after the organization of the State. The Legislature of 1822 passed a special resolve granting four hundred dollars to aid in building a bridge over Great Works Stream in Sunhaze Plantation, Penobscot County.

Until 1915 there was no general law granting aid for bridges but up to that time a number of special resolves for this purpose were approved. The work was done under the supervision of the Governor, the Land Agent, the State shall pay all of the cost of reconstruction of bridges on state highways with very few exceptions and that for bridges on state aid and designated third class highways the town's part shall never exceed forty-five percent for a small bridge with a constantly decreasing percentage for larger bridges and with the maximum amount to be paid by a town fixed as one percent of its valuation.

Under this law there were built from 1917 to 1931, inclusive, six hundred and twenty-one bridges and nine the Municipal Officers or the County Commissioners as specified in the resolves, until 1907, after the State Highway Department was organized, when practically every-

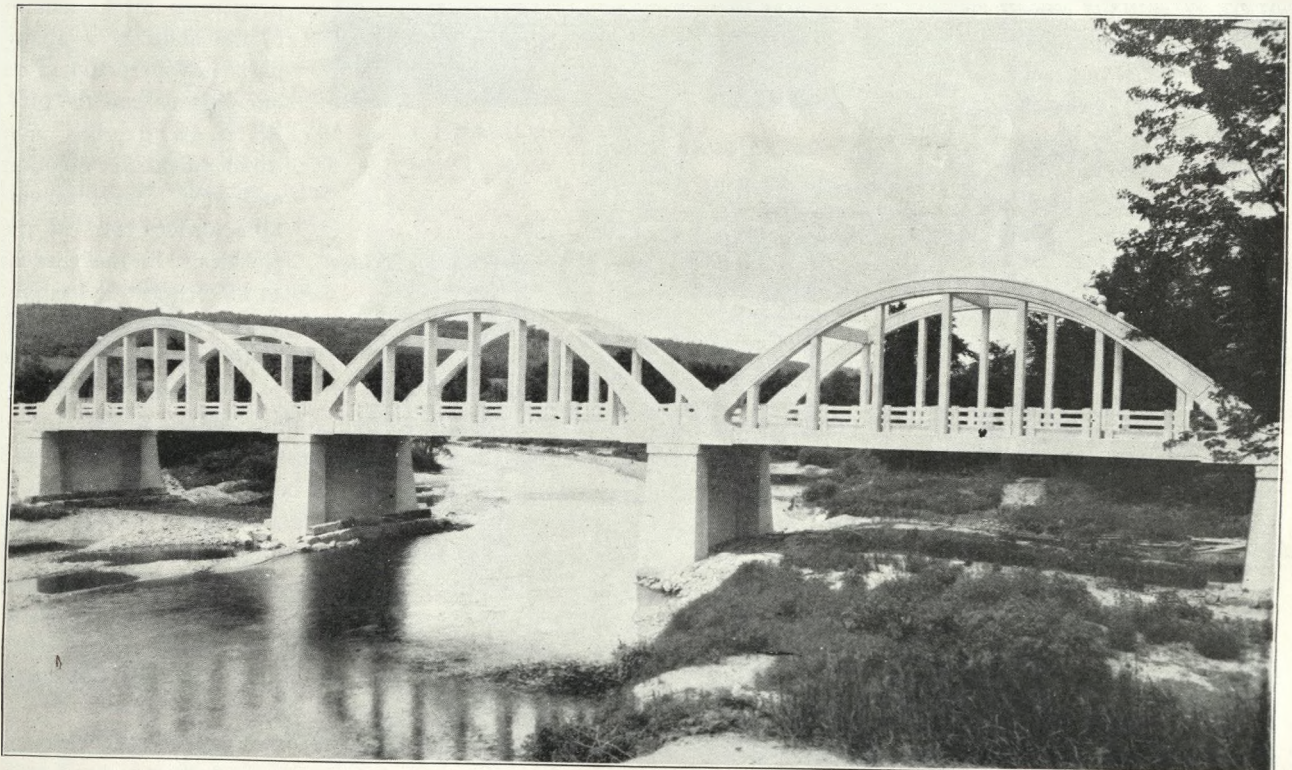
thing of this nature was done under the supervision of the highway department. In 1915 the first general bridge law was passed by the Legislature and this became effective in December 1916 after approval by a referendum vote.

Practically every Legislature since then has amended this law and at the present time it is radically different than when first passed. The original division of cost for bridge construction was twenty percent by the State, thirty percent by the County and fifty percent by the Town. The 1931 amendment to this law provides that additional bridges were built under special resolves appropriating money from funds available for bridge construction. The expenditures have increased from about one hundred and fifty thousand dollars in 1917 to over two million dollars in 1931.

The three largest bridges in the State, from a viewpoint of cost, have been built from the proceeds of special bond issues separate from the bond issues providing for other bridge construction.

Until 1931 with the exception of five international bridges, one interstate bridge and three bridges wholly

*(Continued on Page 22)*



*Fairbanks Bridge over Sandy River, on Route 107, in Farmington*

# Katahdin ~ The

# «Top» of Maine!

By ARCHER L. GROVER, Deputy Commissioner  
Inland Fisheries and Game Department.

I HAVE a friend whose idea of a day's vacation is to start out in his automobile on a trunk-line highway, then take the first secondary road branching from it. At the next fork in the road he takes the one least travelled. Following this rule of taking the least travelled road in Maine eventually brings him to a "dead end", in the yard of some farm house, usually on some hill or mountain-side.

After making the acquaintance of the occupants of the house and having the assurance "certainly it will be all right to leave your car in the yard", he makes the rest of the day's exploration on foot, climbing to the top of the hill or mountain where he sits down and increases his knowledge of geography by making a mental picture of the surrounding country with its lakes, ponds, streams, woods and mountain peaks.

This urge of man to add to his knowledge of geography is almost universal and there are still many who, like my friend, are not satisfied to do it all on balloon tires. Many of these become real "mountain fans". They are not satisfied unless they spend a part, or all, of their vacation in adding some new peaks to their list of "conquests".

About forty miles north of the geographical center of Maine, Mt. Katahdin dominates an immense forest area that is dotted by hundreds of lakes and ponds. These with their tributary and connecting streams make the "best watered area" on the American continent. Any

doubter may easily verify this statement by consulting maps.

Thousands of vacationists each year experience the thrills that only come from personal contact and communion with these rugged dominating mountain walls.

To sit on the summit and behold the miles upon miles of the soft green forest carpet, thickly strewn with silvery gems of lakes and ponds to the very horizon, fills one with awe at the lavishness of nature in creating such a picture. The experience cannot help making one a better man.

The public spirited generosity of Ex-Governor Baxter in acquiring and presenting Mt. Katahdin to the state as a public park has perpetuated to our citizens and the public at large this area which offers the grandest and most rugged mountain scenery east of the Rockies. In the wisdom of his bequest he has prevented future commercialization by prohibiting the construction of automo-

bile roads to the summit. Maine offers a long list of these challenges to vacationists. The degree of ruggedness is so great that all can be satisfied.

Those interested in some good rugged exercise and a lasting reward that is worthwhile cannot afford to miss the thrill which comes from beholding this wonderful expanse of nature from the "Top of the State" at an elevation of one mile above sea level, in the heart of the hunting and fishing regions of the State of Maine.

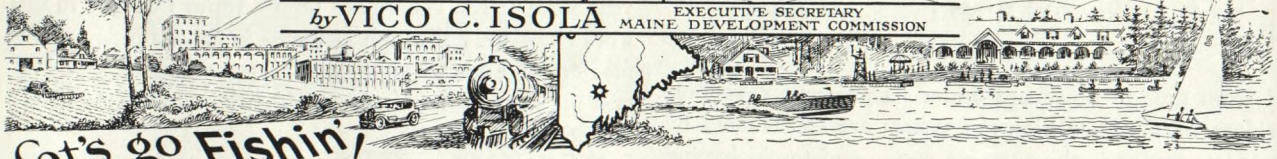


*Mount Katahdin Is*

- The Sunrise Peak of America.*
- 5280 Feet High.*
- In a State Park of 5760 Acres.*
- Sentinel Over the Penobscot West Branch Canoe Cruise.*
- In the Heart of Hunting and Fishing Regions.*
- An Outstanding Attraction to the Mountain Climber.*
- Reached by Highway Leading Through Millinocket.*

# MONTHLY TOURS OF THE STATE

by VICO C. ISOLA EXECUTIVE SECRETARY  
MAINE DEVELOPMENT COMMISSION



Let's go Fishin'!



MR. ISOLA

As brightly colored flies flash with alluring realism at the ends of anglers' lines to lure hungry fish, so sparkling lakes and splashing streams lie at the ends of countless Maine motor tour routes to lure eager fishermen.

Excellent roads lead to fast, white water and still, deep pools.

Trout, salmon, bass and togue uphold

the age-old challenge to him who loves the thrill of the strike and the tussle with bending rod.

Fishermen who know Maine well divide its 5,131 rivers and streams and 2,465 lakes,—a total area or 903,400 acres of fresh water—into seven great fishing districts. Each one of these districts, it must be understood, can be divided into many subdivisions. There are the Sebago, Long Lake and Oxford County region in southwestern Maine; the Rangeley Lakes and Dead River region in west central Maine; the Belgrade Lake region in Central Maine; the Moosehead region of north central Maine; the Allagash region of northwestern Maine; the Fish River region with its chain of lakes in northeastern Maine; the Grand Lakes and Schoodic Grand Lakes region of eastern Maine.

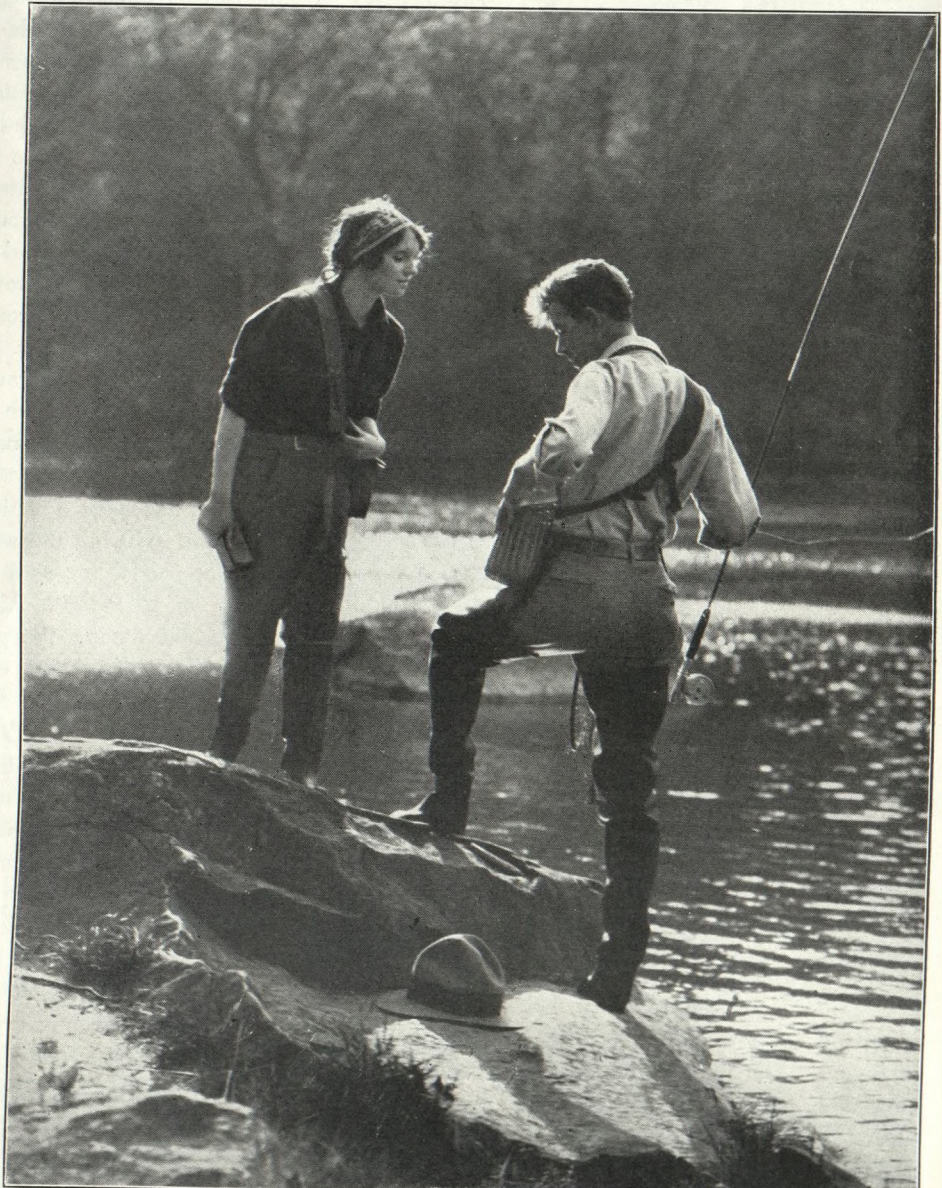
The fishing season begins when the ice goes out, excepting for black bass and white perch. The season for these species begins on June 21. The Sebago and Belgrade regions are usually open first so this article will be devoted to a discussion of these two water systems.

To reach the Sebago country follow Route No. 25 from Port-

land to Sebago Lake Village or Route No. 18 if you wish to start your fishing trip from North Windham, Raymond, Naples or Bridgton.

If you are one of the early fishermen, arriving immediately after the ice goes out, it will probably be your good fortune to hook one of the famous Sebago salmon. These silver-bellied fellows are fighters. They plunge

(Continued on Page 24)



Many honeymoon trails lead to Maine fishing resorts.

ARMSTRONG-ROBERTS



## TRAVELING OVER MAINE'S HIGHWAYS

*(Continued from Page 10)*

ed from time to time, and under its present provisions, bridges on the State highway system are constructed by the State except in the compact sections of towns having a population of over 10,000. The law now limits the construction of bridges under this act to designated State, State aid and third class highways. Bridges on State aid and third class highways are still built in cooperation with the counties and towns. Petitions for the construction of bridges under this act have always exceeded the available funds. Expenditures increased from \$121,600 in 1917 to \$2,223,000 in 1931.

At the Special Session of the Legislature in 1919 a law was passed providing that, from the general classification of third class highways, one third class road in each town might be designated as a third class highway for improvement with State funds to be apportioned from a fund established by the act. In accordance with the provisions of this act the first third class highways were constructed in 1920.

There has been a rapid expansion in the construction of State aid roads. Most people who are interested in our road laws are familiar with the provisions of the so-called Five Times Provision and the Three Town Act. The three town act became a law in 1917 and since its enactment many towns have taken advantage of its liberal provisions for State aid. In 1931, of 540 towns which appropriated funds for State aid road construction, 159 made their appropriations under the five times provision and 268 took advantage of the three town act.

In 1913 towns furnished \$207,197 for State aid road construction and the State \$195,806. In 1931 towns appropriated \$1,293,000 which, under the various State aid provisions, required over \$3,300,000 from the State. As the State fund, in 1931, was limited to \$2,700,000 it became necessary to scale down the apportionments. In 1913 the total expenditure on State aid road construction was \$403,003, and this increased to \$3,749,460 in 1931. One hundred eight miles were built in 1913 and approximately 351 miles in 1931.

Acting under the provisions of the 1913 law, the State Highway Commission, in 1914, after many hearings, designated the first State highway system which included 1,468 miles. From time to time this system has been expanded until it now includes over 2,300 miles. To finance the construction of these highways a bond issue of \$2,000,000 was authorized in 1913. This was the first provision for loan funds for the construction of State highways. The limit of highway and bridge bonds has since been increased to \$31,000,000. State highway and bridge construction is now being financed under the provision for a bond issue of \$15,000,000 made in 1929.

State highway construction has been carried on each

year since 1913. There has been a rapid increase in this work since 1917 through increases in State funds and the medium of Federal aid. Yearly apportionments of Federal aid have increased from \$48,451 in 1917 to \$1,121,860 in 1931.

The Federal law provides that each State may have a Federal aid highway system comprising not to exceed seven per cent of the total highway mileage. The Federal aid highway system in Maine, at the present time, includes 1,572 miles, and, with the exception of about 17 miles, is included in the State highway system.

While State highway construction has been financed largely through loan funds and Federal aid, these funds have been supplemented at times by the mill tax highway fund, auto fees, gas tax revenue and local funds. Yearly expenditures for the construction of State highways have increased from \$763,143 in 1914 to \$4,634,276 in 1931.

Owners of motor vehicles have come to realize that there is a large investment in motor equipment and that snow removal is one of the problems to be considered in the development of highway transportation in order that this investment may be utilized the year round. The Legislature, in 1927, passed an act which provided State aid to towns for snow removal. In general this act provides that the actual work of snow removal shall be done by the towns and that towns shall be reimbursed by the State for one half the cost but such reimbursement shall not exceed \$50 per mile. The law does not give the State Highway Commission authority to initiate a snow removal program but the Commission may approve the designation of snow removal routes upon petition of the towns.

There has been a rapid increase in the snow removal program. During the winter of 1927-1928, 3,075 miles were approved for snow removal; in 1928-1929, 4,283 miles; in 1929-1930, 5,500 miles; in 1930-1931, 9,000 miles, and during the past winter, approximately 10,200 miles. The cost of snow removal in 1931 was \$538,602.82.

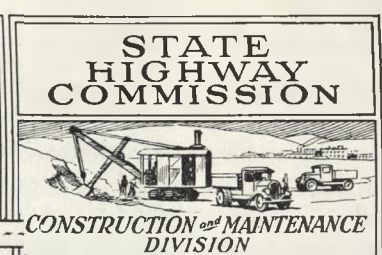
At the present time the designated State highway system includes 2,317 miles, the State aid system, 4,666 miles, and the third class highway system, 1,823 miles.

As a result of the construction and reconstruction of State highways, including Federal aid projects, we have on the State highway system 1,428 miles constructed as State highways. To this should be added approximately 650 miles of State aid road built on the State highway system. On the State aid highway system there are about 3,290 miles of improved road and on the third class highway system 1,035 miles.

Six hundred twenty-one bridges have been constructed under the general bridge act since it has been in effect.

Previous to 1931 the make-up of funds available for

*(Continued on Page 18)*



WALTER J. BRENNAN *Safety Engineer*

IT is no longer common for executives and their supervisory forces to look upon accidents as an inevitable by-product of production. The present day attitude is that accidents are waste, a waste not only of the limbs and lives of Maine's greatest natural resource, its workers, but a waste as well of time, materials and other things which can be represented in terms of dollars. It does not matter whether accidents happen in the mills owned by private capital or on projects sponsored by the people, for this terrific wastage occurs in either case and the losses reflect themselves as penalties to increase the cost per ton of product or per mile of highway maintained or built.

Executives are learning to look upon accidents as "break-downs" identical with mechanical break-downs and comparable in nearly every way except when costs are considered; the losses associated with accidents so completely exceed those resulting from the usual machinery failure as to make comparison ridiculous. This attitude on the part of those in highest authority makes it essential for those in lesser authority to consider accident prevention work as an integral part of their daily routine and stop looking upon it as something which has its virtues but which is usually quite impossible for the busy supervisor to undertake in other than a purely perfunctory manner.

It is entirely logical that the Safety Engineering Service, recently inaugurated in the Department of Labor and Industry, collaborate with the State Highway Commission personnel in an effort to intensify and carry on to a greater extent the excellent accident prevention work the Commission has been doing in the past. Space has been allotted for monthly educational articles in this magazine. The several other phases such as a review of current injuries and their remedies, a classification of past injuries, discussion of specific hazards and other such material will be offered.

Everyone is familiar with the humanitarian aspects of safety work for all are aware of the suffering, loss of income, to say nothing of the loss of limbs and lives, that frequently result when men are injured.

None but a few realize, however, that the apparent

costs of such injuries are but a fraction of the true charges. Such charges as compensation penalties and medical fees (the direct costs) have been found to constitute but one-fifth the total. Under indirect costs are listed loss of time, loss of production, damaged materials and machines, adverse psychology affecting progress of work and similar intangibles. Careful studies indicate that these usually average FOUR TIMES the direct cost.

It is evident that foremen and supervisors should hesitate to claim that they are contributing all possible to the protection of those in their charge without due reflection. Probably the most intensive safety work in Maine is being done by supervisors and crews whose no-accident days worked total months and even years. Much attention has been paid by these groups to a sound schooling on the fundamentals such as prompt attention to injuries no matter how trivial, eye protection, proper tools, safe practices in handling material and the like. A spirit of enthusiasm for safety can be created by a tactful yet firm approach and only when those who are liable to injuries enlist to fight against hazards is the ultimate achieved.

A few dirty posters tacked on a tool box lid, a bottle of iodine and a couple of pairs of grimy goggles do not constitute safety work on a construction job. In fact, such ridiculous gestures do more harm than good for they insinuate that no one cares for the kind of safety work that demands much from every individual on the job and yields a tremendous return in humane and economic results.

Present-day accident prevention, such as makes it possible for many of our Maine industries to operate nearly accident-free, is characterized by a spirit of participation on the part of all. Naturally the foreman leads the work, but every man is taught the folly of chance-taking and all realize that unsafe practices will not be tolerated. Ideas from the crews are solicited and contribute tremendously to the all-important need for anticipating dangerous conditions and taking immediate steps to protect against them.

From the moment a man is hired he is given to under-

(Continued on Page 22)



*"Prevention of accidents to our employes must ever be a first consideration."*

*E. L. Merrill  
Asst. Engineer*

*"Safety is a primary requisite in every branch of highway work."*

*A. J. Wiggin  
Superintendent of  
Maintenance*



### TRAVELING OVER MAINE'S HIGHWAYS

(Continued from Page 16)

the various classes of work has been rather complex, due to the fact that several sources of income have contributed to the total fund for each class of activity. This has been especially true of State aid, third class highway and maintenance funds.

The creation of the general highway fund has done much to clarify the situation.

Under our present financial provisions, State highway and bridge construction are financed with loan funds plus Federal aid. Other major items of work are financed from the general highway fund. This fund includes all fees received from the registration of motor vehicles and licensing of operators, income from the mill tax highway fund, receipts from the tax on gasoline, an appropriation of \$300,000 (Section 42, Chapter 28, R. S.), all fees accruing to the State under Section 118, Chapter 29, R. S., and all sums received on account of permits issued by the department to open streets for repairs on underground structures.

Definite provisions are made for the disposition of this fund. After providing each year for payments of interest and retirement of bonds, the remainder of the general highway fund is apportioned as follows:

- |   |            |
|---|------------|
| 1. For the expense of registering motor vehicles and licensing operators                | \$ 160,000 |
| 2. For maintenance of State Highway Police  | 160,000    |
| 3. Administration of State Highway Commission   | 165,000    |
| 4. Administration of gas tax law and rebates  | 190,000    |
| 5. Appropriations under Special Resolves of the Legislature for highway and bridge work | 150,000    |
| 6. State aid highway construction   | 2,700,000  |
| 7. Third class highway construction   | 700,000    |

The remainder of the fund is set aside for all maintenance work, including the maintenance of highways and bridges, and snow removal.

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Fine Grill and Cafeteria

Maine's Best Known All the Year Around Hotel

200 ROOMS BATH Rates \$2.00 up

RICHARD I. PETERSON, Manager

## Snow Removal Work Breaks Ol' Man Winter's Blockade

MAINE'S traveling public no longer "just manages to get 'round" during the winter season, for a rapidly growing snow removal program has challenged the chilly months most effectively.

In the recent winter, some 10,000 miles were plowed, giving an indication of the volume of the work being done. In round figures, 8,300 miles were plowed in the winter of 1930-31; 5,500 in 1929-30; 4,200 in 1928-29, and 2,900 in 1927-28.

Town-owned equipment is utilized for the greater part of this work. Approximately ten per cent of the total mileage is plowed under contract on a per mile basis, while a small mileage is taken care of through contracts on an hourly arrangement.

Each District supervisor, according to the current program, looks after about three hundred miles of snow removal work. These supervisors and the respective municipal officers hold frequent conferences, during the winter, to check up on the general efficiency and to consider the possibility of improvements in methods.

Previous to 1927 the use of motor vehicles in the course of the average winter season was limited to a few snowmobiles. With but a few exceptions, snow removal work, as it is known today, was practically unheard of. Roads were made suitable for traffic by either rolling with large wooden rollers or plowing with horse-drawn wooden triangles.

In either case, it was practically impossible to get the roads into first-class shape for motor vehicle travel. Consequently, with the arrival of the first heavy snowfall, a large percentage of pleasure cars and trucks were stored for several months to come.

The Legislature of 1927, in passing the first snow removal act, placed a different outlook on Maine's winter highways. This act has been improved upon by succeeding legislatures and given a larger scope. During the past winter, all State highways and practically every numbered route south of Caribou, were plowed.

The annual cost of the consequences of America's automobile accidents represents more than the annual cost of public school education in the United States; five times the country's average yearly fire loss; more than half the amount required to maintain all the agencies of the Federal Government each year. In dollars: Two billion, five hundred million!

It is reported that there are 225,000 miles of State highway in the country, against 210,826 gas stations. Pretty close to a station per mile.

# Odd Shots

by  
**HILDRETH G. HAWES**  
PHOTOS BY AUTHOR



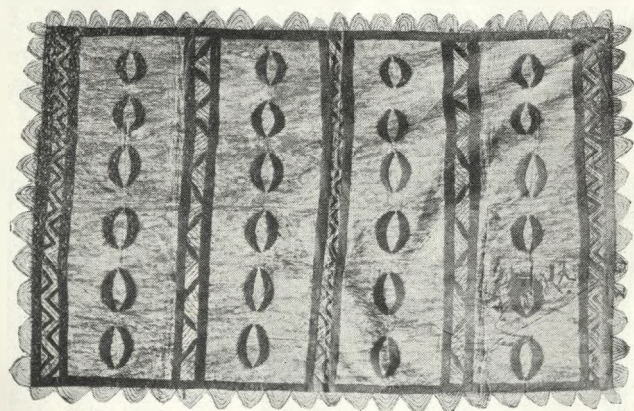
## MONEY FOR AGE

**A** FOUR by six-foot piece of Indian parchment, showing the wigwam plan of the aborigines' village on the site of Kittery, is now owned in Waldoboro and is valued at something like one thousand dollars a square foot.

A second piece of the same size bears the layout of a similar settlement, executed in the blood of animals on a base of primitive parchment now in an exceptional state of preservation. These two ancient and valuable maps have been held until recently in the hands of one of Kittery's oldest families.

Experts from the Boston Museum of Fine Arts have viewed these two relics of a bygone day, their inspection resulting in the unofficial estimate given above. Indian parchment is comparatively rare and fine examples, such as these two, demand high prices.

The use of the blood of different animals in the drawings upon the parchment sheets provides a variety of red shades, a brown, and one black color, said to be made from the brain blood of rabbits. A cross in dark red, near one of the wigwams of the sheet representing the Indian village of Kittery, is believed to mark the spot where a chief died, thus proving that "the spot" had its debut a good many years ago.



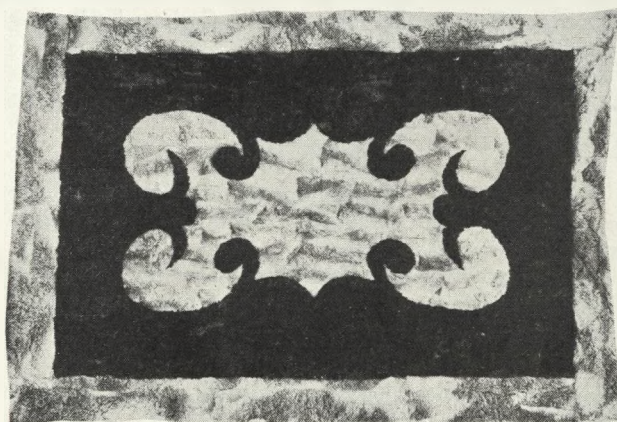
*Drawn in blood, on Indian parchment, this relic shows plan of the old aborigines' village where Kittery now stands*

Likewise, owned in Waldoboro, is an unusual fur rug that can never be duplicated under our present laws. Its story reveals a now corrected evil of the fur industry

of sixty-eight years ago, the known age of this rug. The rug is valued at about five thousand dollars.

The belly skins of three hundred brown bear cubs, of from seven to nine weeks of age, were used in the making of the border and center emblem of this odd floor covering, which is slightly smaller than the parchment sheets described in the foregoing paragraph.

Some fifty years ago a law was passed to regulate the killing of young bear, so that this rug is a graphic reminder of a day when trappers and hunters made their own law in the far reaches of the frozen North. As a result of that move the brown bear is allowed to grow to a proper size before his timely end, literally making possible bigger and better bear skins.



*Three hundred bear cubs sacrificed their lives to make possible this unique Alaskan rug*

The cub skins were used in the construction of the greater part of the rug. They are light brown in color. The darker skins of five Alaskan ground otter, fine examples of the coat of a valuable fur bearer, are an excellent contrast and form the field encircling the center emblem, the horned insignia of old Alaska.

Sixty-eight years ago this rug was shipped from Alaska to Rockland, Maine, insured for eighteen hundred dollars. It has been in storage in that city most of the time since.

In many corners of Maine can be found subjects like the three mentioned above, articles worthy of considerable interest. Many of these can be seen with little effort; others are practically without the reach of the visitor here, even the resident. One of the purposes of this series of sketches is *Maine Highways'* assistance to Maine's highways in guiding and transporting interested folk to places where they may find things of interest.

In other parts of this magazine one will find matter relating to the all-important questions confronting the person interested in Maine, but while this page is not as ambitious a project as a "Believe It Or Not" column, it

*(Continued on Page 29)*

## THE HIGHWAY PROGRAM

*(Continued from Page 11)*

## ROUTE 1-A

*(Presque Isle-Mars Hill)*

In Presque Isle 0.4 of a mile of bituminous macadam and 2.69 miles of bituminous macadam in Mars Hill, which will provide an improved road from Presque Isle to Mars Hill.

## ROUTE 2

Concrete pavement—Newport 3.29 miles, Carmel 3.48 miles, Hermon 2.76 miles. This will complete the concrete pavement between Newport and Bangor with the exception of Etna.

## ROUTE 25

The construction of concrete pavement from Gorham Village to "Two Trails" in Standish—Gorham 5.61 miles—Standish 2.94 miles.

In Porter 3.0 miles of surface treated gravel. This section will be constructed with sufficient width to permit of future surfacing.

## ROUTE 26

The construction of bituminous macadam from the New Gloucester line through Poland to the Mechanic Falls town line—7.23 miles.

Bituminous macadam from the Mechanic Falls line through Oxford to the concrete pavement previously constructed—3.74 miles.

## ROUTE 100

Concrete pavement between Pittsfield village and the bituminous macadam in Palmyra—3.85 miles. Concrete pavement from Pittsfield village westerly—3.0 miles.

Concrete pavement across the town of Clinton—4.87 miles.

Bituminous macadam between Waterville and Oakland—3.27 miles.

## ROUTE 101

In Washington 3.49 miles of surface treated gravel road. This completes Route 101.

## ROUTE 102

The completion of Route 102. Surface treated gravel in Palermo and Liberty—5.0 miles.

## ROUTE 104

Through Dexter Village to connect sections previously constructed. Bituminous macadam—1.44 miles.

## ROUTE 116

Bituminous macadam—Poland 2.0 miles, Casco 2.28 miles, Naples 1.34 miles. This completes work included in the program on this route.

## ROUTE 121

Bituminous macadam—Poland 0.2 miles, Minot 0.25 miles. This completes Route 121 between Auburn and Welchville.

## ROUTE 126

The construction of 2.99 miles of surface treated gravel in Wales. This completes Route 126 between Gardiner and Lewiston with the exception of about one mile in Webster.

## ROUTE 128

In Edgecomb 1.5 miles of bituminous macadam.

## ROUTE 174

The construction of 4.6 miles of surface treated gravel from Bucksport to the "Dunbar Turn" in Orland. This completes the road between Ellsworth and Bucksport.

Surveys for projects included in the program were made during the past summer and fall and the highway engineering force has been preparing the plans and estimates during the winter. It is believed that plans and estimates will be completed in time for the Commission to call for bids for the construction of a large number of the projects during the month of March.

## Commission's Letter on Use of Power Shovels

While power shovels, owned by the State, will be available for state aid and third class highway work during the present season, the policy of the Highway Department stands on a more or less optional basis, as to the use of this equipment, according to a recent letter addressed to the Municipal officers and signed by the members of the Highway Commission.

The foregoing is an extract from the Commission's letter:

"While we feel that reduction in cost and increased mileage, obtained by using power shovels on State Aid road construction warrant their use, we recognize the unusual conditions which prevail and that the unemployment situation is so acute in many sections that public interests may best be served by using hand labor.

"Power shovels, now owned by the State, will be available but it will not be the policy of the Department to force the use of this equipment. Conditions vary so much in different communities that we believe those familiar with local conditions are in a position to recommend the best course to follow, and the decision as to the use of power equipment will rest primarily with you. Supervisors will be instructed to confer with you in all matters pertaining to the work."

«THE MOST HOMELIKE HOTEL IN MAINE»

## Augusta House

European Plan

AUGUSTA HOTEL COMPANY  
PROPRIETORS

F. C. GATES  
MANAGER

AUGUSTA, MAINE

## Keeping Highway Fleet in Repair a Man-Sized Job

THAT the State Highway Commission has a single industry of no small proportions in itself, is quite evident to one taking the time to call at the State Highway Garage in Augusta.

A crew, averaging from eighty-five to ninety men, throughout a part of the year, is kept on the jump most of the time overhauling equipment and attending to other details of work assigned to the State Garage.

Some 275 cars and trucks; 79 gasoline shovels; 23 portable air compressors; 36 loaders; 11 rollers; seven tractors; seven power graders. In addition to this, compressors, hoists, derricks and such other equipment as is necessary to make complete construction outfits.

Of the foregoing items, 134 trucks, 8 cars, 20 gravel loaders, 4 power graders, 4 road machines and 5 shovels have been completely overhauled and 40 partially overhauled. Twelve new power gravel loaders and 4 cook houses are being built, as well, to accommodate twenty-two men, respectively, and 20 light oak drags have been rebuilt.

It has been found by this practice that equipment is kept to highest efficiency throughout the year, with very few breakdowns, and from the fact that the State Highway Commission is still having active use of several of the trucks received from the Federal Government in 1918 and 1919, it is quite apparent that the work is justified.

### TO INCLUDE OTHER BRANCHES

The furnishing of service and supplies, on a larger scale, to the other State departments and the institutions, was undertaken by the Highway Garage the first of this year.

Inasmuch as over 200 cars are owned by these other branches, it is felt that with very little extra help the work can be carried on successfully, with a considerable saving to the State.

The system employed at the State Highway Garage is to rent out the cars and equipment to the various jobs. Rates are sufficient to cover gas, oil, grease and repairs and allow enough for replacement, and still are less than the price it would be necessary to pay to go out and hire the same equipment from private interests.

Factory prices have been procured on most of the supplies and accessories, making a substantial saving in this line. Mechanics are on an hourly wage, which condition insures very little idle time chargeable against overhead.

The garage is in charge of Superintendent Frank C. Marston, with the following assistants: Charles Davis, Chief Mechanic; Gerald Guest, Chief Clerk; E. K. Sawtelle, Purchasing Agent; and Harold Hopkins, in Charge of Stock.


# QUALITY

STATE - CITY - TOWN

# HIGHWAY

# CONSTRUCTION

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AMOS D. BRIDGE'S SONS, Inc.

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MAINE

## MAINE TOURS

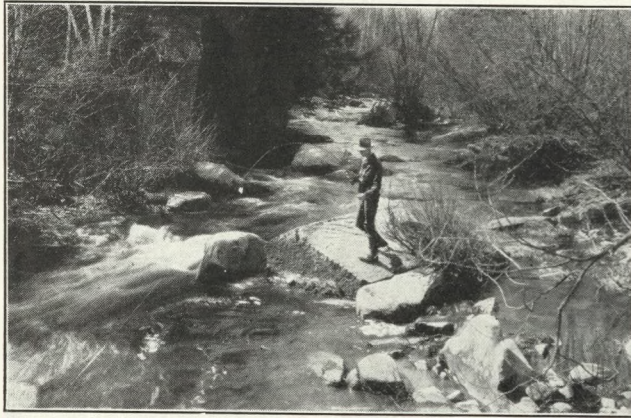
*(Continued from Page 15)*

like submarines, they pull like tractors and they're as lively as flyweight boxers.

They will be found close to shore, after the ice has gone out. Hungry? Like a boy just home from school. They'll rush at smelt and spinner. Later in the season, as insects are hatching, use a fly for these salmon and still later go after them in the deep, cold water, again using smelts and spinners.

In the immediate vicinity of Sebago Lake, which by the way is 80 square miles in area, there are streams and mountain brooks where the trout are as ferocious as Chicago gangsters. And there are ponds and rivers where bass, pickerel and perch are as numerous as World Series fans around a newspaper scoreboard.

If your preference is black bass,—and there's no pacifist blood in those fellows—drive up to Long Lake



—MAINE DEVELOPMENT COMMISSION  
*Hungry trout furnish action along the hurry-up brook waters of the Sebago region.*

in the towns of Bridgton and Harrison. There are trout there too, and salmon, both gamey enough to test your mettle. More excellent bass fishing will be found in Lake Keoka at Waterford and in Highland Lake in Bridgton. Brownfield offers fine trout fishing and Lake Kezar, in the town of Lovell, is well stocked with salmon, small-mouthed bass, pickerel and the like. Lake Kezar is one of the largest bodies of water in this section north of Sebago and Long Lake. Kezar is nine miles long.

Palatial resort hotels, rustic sporting camps and cozy farm houses offer a choice of accommodations for the fisherman and his family in the Sebago region. The Sebago Lake Steamboat Company's vessels offer some of the most delightful inland cruises imaginable. These cruises include trips through the Songo, crookedest of all rivers. The Songo, meaning "The Outlet" is but two and one-half miles in length as the bird flies, yet the

steamer must traverse a distance of six miles and make twenty-seven turns during the passage, often times sailing due south on its journey north.

As advancing springtime opens the fishing season in the various water systems of Maine, clearing the ice from lake after lake, open water usually shows in the Belgrade region soon after the Sebago chain is free.

Six lakes are found in the Belgrade chain. They are North Pond, East Pond, Great Pond, Long Pond, Salmon Lake and Messalonskee. Other lakes that may be considered a part of the chain are Cobbosseecontee, in the towns of Manchester and Monmouth; the twin lakes of Winthrop, Maranacook and Annabessacook; Androscoggin Lake in Wayne and the long chain of smaller lakes north from it in Readfield, Fayette and Mount Vernon.

East of the Kennebec, but still a part of this region, lies a series of good fishing waters to within a few miles of the coast. Some of these ponds, famed in stories of memorable fishing expeditions, are Webber Pond, Three Mile Pond, China Lake, Palermo Pond, Damariscotta Lake and St. George's Pond.

To reach the town of Belgrade, principal point of departure for fishing trips in the Belgrade region proper, one may follow the picturesque shore route, No. 1, from Portland to Brunswick, then Route No. 201 to Augusta, then Route No. 100 to Belgrade. If one prefers the inland route he should follow Route No. 26 from Portland to West Falmouth and then Route No. 100 which will take him through the lake region in the vicinity of Manchester, Monmouth, Winthrop, Wayne and Readfield. At Augusta he may continue on Route No. 100 to the town of Belgrade or he may swing eastward on Route No. 102 to the lakes in the vicinity of South China.

Throughout the greater Belgrade region the fisherman will find accommodations to his liking no matter what his preferences and purse demand.

Luxury, simplicity, crowds, seclusion, all may be found in this territory. And any point in the region is within convenient motoring distance,—less than half a day's journey from Portland.

South winds are billowing along the sky highways. The sunshine is becoming warmer and warmer. Lake ice is cracking and grumbling in ugly protest at the departure of winter.

Ho, wizards of rod and reel,  
It won't be long now!

(Editorial Note: The second article in this series of Monthly Tours will appear in the May number of *Maine Highways*.)

Maine's gasoline tax receipts in 1931 showed an increase over 1930 of considerably more than a quarter-million dollars. Rather a tough pill for Old Man Depression to swallow?

## Expenditures Under Direction State Highway Commission

March 18, 1932

### RECAPITULATION - 1931

	Administration	Engineering	Inspection & Supervision	Advertising	General Expense	Labor & Material	Miscellaneous	Total
Administration .....	\$165,866.23							\$165,866.23
Maintenance Misc. ....						\$ 47,136.15		47,136.15
Maintenance Sec. 9 .....						248.63		248.63
Maintenance Sec. 17 & 18 .....						10,685.86		10,685.86
Maintenance State Aid .....			\$ 36,400.49			960,597.22		996,997.71
Maintenance State Highways .....			47,045.64			1,485,639.40		1,532,685.04
State Highway Construction .....		\$237,428.15		\$ 2,582.01	\$97,161.52	4,249,066.11	\$ 1,419.02	4,587,656.81
State Aid Construction .....			105,963.04			3,688,618.05		3,794,581.09
Third Class Construction .....			9,585.27			758,164.19		767,749.46
Special Resolves .....			994.64			206,384.49		207,379.13
Bridge Loan Construction .....		136,634.02			44,383.00	1,887,865.27		2,068,882.29
Motor Transport & Equipment .....						737,939.58		737,939.58
Waldo-Hancock Bridge Operating .....							1,924.74	1,924.74
Waldo-Hancock Bridge Construction .....						808,465.21		808,465.21
Richmond-Dresden Toll Bridge Operating .....							2,221.61	2,221.61
Motor Vehicle Department .....							154,542.43	154,542.43
State Highway Police .....							151,273.42	151,273.42
Admin. & Rebates—Gas Tax .....							202,713.43	202,713.43
Compensation for Injuries .....							52,929.53	52,929.53
State Topographical Map .....							10,000.00	10,000.00
Carlton Bridge (operating) .....							30,089.19	30,089.19
Bridge Maintenance .....		11,147.07				57,520.95		68,668.02
Removal of Snow .....						538,602.82		538,602.82
Reserve Carlton Bridge .....							50,000.00	50,000.00
Acc. Int. Carlton Bridge .....							119,206.76	119,206.76
Reserve to Retire .....							581,000.00	581,000.00
Accrued Interest .....							752,523.33	752,523.33
	\$165,866.23	\$385,209.24	\$199,989.08	\$2,582.01	\$141,544.52	\$15,436,933.93	\$2,109,843.46	\$18,441,968.47

Supervision Charges	
Administration .....	\$165,866.23
Engineering .....	385,209.24
Inspection & Supervision .....	199,989.08
Advertising .....	2,582.01
	\$753,656.56

Labor & Material	
Maintenance .....	\$2,504,307.26
Construction .....	
Highway Loan .....	4,249,066.11
Right of Way .....	97,161.52
State Aid .....	3,688,618.05
Third Class .....	758,164.19
Special Resolve .....	206,384.49
Motor Trans. & Equip. ....	737,939.58
Bridge Loan .....	1,887,865.27
Right of Way .....	44,383.00
Waldo-Hancock Bridge .....	808,465.21
Bridge Maintenance .....	57,520.95
Removal of Snow .....	538,602.82
	\$15,578,478.45

Overhead Charges .04838 on Net Expenditures

Overhead Charges .04087 on Gross Expenditures



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**HUME PIPE OF N. E. INC.**  
 SWAMPSCOTT, MASSACHUSETTS

*Manufacturers of  
 Reinforced Concrete Pipe  
 for all purposes.*

## Guarding The Treasury

**A**T a recent conference, attended by officials of the State Highway Department and Captain E. C. Tobey, State Purchasing Agent, the matter of effecting additional savings to the State, through its highway purchases, was considered.

Captain Tobey outlined the policies of his office and offered his services at any time.

It was generally felt that substantial savings could be brought about to the Highway Department through asking for bids or quotations on all items, other than those of an emergency nature.

Those in attendance at the meeting, aside from Captain Tobey, included Lucius D. Barrows, A. J. Wiggin, P. R. Keller, E. L. Merrill, R. M. Page, Max L. Wilder, Wm. A. Runnells, John B. Church, John Burnham, E. K. Sawtelle and Charles Davis.

Maine has 2,377 miles of main line steam railways and 371 miles of electric railways. The Maine Central operates 1,070 miles of track in Maine; the Bangor & Aroostook, 644 miles; Canadian Pacific, 177 miles; Boston & Maine, 134 miles; Grand Trunk, 90 miles and the Narrow Gauges, 167 miles.

## Divisions Consolidated

Consolidation of the State Aid Highway division and the State Highway division was recently announced by the Commission.

In the new set up, all State Highway Construction, the construction of State Aid roads, Third Class roads and highway work under special legislative resolves, will be under the general supervision of Ernest L. Merrill, Assistant Engineer, and he will be assisted by Mr. H. S. Weymouth as Superintendent of State Aid Roads.

## A Public Enemy

"Weaving driver," "speeder," "roadhog" — call him what you will, he stands out as one of motordom's greatest public enemies.

Studies reveal that nearly 50 per cent of all accidents caused by improper driving are caused by this fellow. He is discourteous and dangerous.

In a recent analysis of 105,000 accidents directly due to improper conduct at the wheel, the National Safety Council reached these conclusions:

"Cutting in" was responsible for 7,051.

"Passing on the wrong side" was responsible for 865.

"Passing on a curve or hill" was responsible for 891.

"Exceeding the speed limit" was responsible for 20,370.

"Driving on the wrong side of the road" was responsible for 19,926.

Adequate traffic laws, rigidly enforced, would keep this public enemy off the road and make motoring both safe and pleasant for the vast majority of automobile drivers.

—Public Safety.

Acadia National Park, on Mt. Desert Island, is the only national park east of the Mississippi River. It contains 12,000 acres. Mt. Cadillac, within the park, is the highest point of land on the entire Atlantic coast.

## PLAIN AND REFLECTING BUTTON

Town Line → **SIGNS** ← Guide Boards  
 Stop → ← Parking  
 Street → ← Cemetery  
 Markers

ALUMINUM RUST PROOF

MANUFACTURED BY

**J. B. INGHAM**

15 Reservoir St.

Nashua, N. H.

## Commission Cooperates with Towns Setting Wage Scale

On all State road work under the supervision of the State, the State Highway Commission has announced that it will pay the wage scale for labor, teams and trucks as voted by the towns or left to the discretion of the municipal officers.

It is added, in the announcement, that in no case shall rates exceed the following maximum rates as set by the Commission:

Laborers, \$ .32 per hour.

Teams, \$ .56 per hour.

1½ yd. trucks, \$1.00 per hour but if loaded by power shovels \$1.10 per hour.

State power shovels to be rented at the rate of \$20.00 per day for ½ yard shovels and \$15.00 per day for ⅜ yard shovels.

## State Tightens Up in Behalf of Protecting Maine Labor

Definite action in behalf of general contract labor in the State of Maine was taken by the Governor and Council, in session March 2, in passing an Order reading substantially as follows:

"In carrying out the provisions of this contract the contractor shall employ such labor and under such terms and conditions as shall be approved by the authorized representative of the contracting Department."

Supplementing this action, the State Highway Commission has ordered the following incorporated in all contracts for highway work:

"After meeting the requirements of Article 16 of Section 7, in giving employment to the inhabitants of the town in which the work is located, the contractor shall give preference to the employment of citizens and inhabitants of the State of Maine. Preference in employment shall be given to trucks owned by inhabitants of the State of Maine. To enforce these preferences, the contractor must submit to the engineer the names and positions of all people from outside the State whom he proposes to employ. The engineer reserves the right to reject any such persons, if in his opinion the position can be suitably filled by a person residing in the State of Maine."

The Commission has, in addition to the foregoing action, announced that aliens will not be employed on State highway work unless it is shown that "first papers" have been taken out prior to January 1, 1932.

"Nice day", said the plumber, as he missed and hit his knuckle with the monkey wrench.

## The BOND Co.

HAROLD L. BOND, Pres.

DEALERS IN TOOLS AND EQUIPMENT FOR  
CONSTRUCTION WORK

39 Old Colony Avenue

South Boston

Telephone South Boston 0764

## Wyandotte Calcium Chloride

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REFRIGERATION	DUSTLESS FUELS
BRINE	

Write for Complete Information

Wyandotte Calcium Chloride is packed in 100 lb. bags and in 375 lb. steel drums.



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BOSTON MASS.

LOCAL AGENTS  
W. B. ARNOLD W. W. SMALL  
Waterville Farmington

## CORRUGATED CULVERT PIPE

MEETS FEDERAL  
AND STATE  
SPECIFICATION



DELIVERY  
ANY PART OF  
NEW ENGLAND  
IN 48 HOURS

UNIVERSITY 6435

PENN CULVERT COMPANY

675 Concord Ave.

Cambridge, Mass.

## HIGHWAYS AND BRIDGES

### RECENT LETTINGS

Date of Letting	Town	Route	Length & Type	Bid Price	Contractor
March 1, 1932	Carmel & Hermon	2	5.93 Miles Concrete	\$113,960.76	Manzie I. Rogers, Bangor, Maine
March 1, 1932	Clinton	100	4.89 Miles Concrete		To be announced
March 1, 1932	Pittsfield, Detroit and Palmyra	100	7.12 Miles Concrete	134,972.50	Amos D. Bridge's Sons, Inc., Hazardville, Conn.
March 1, 1932	Gorham-Standish	25	8.66 Miles Concrete	210,490.80	Amos D. Bridge's Sons, Inc., Hazardville, Conn.
March 1, 1932	Porter	25	3.15 Miles Gravel	25,161.40	R. G. Watkins & Sons, Amesbury, Mass.
March 1, 1932	York	1	Rice's Bridge	49,845.30	Kennebec Constr. Corp., Waterville, Maine.
March 15, 1932	Newport-Plymouth	2	3.67 Miles Concrete	67,435.70	Wyman & Simpson, Augusta, Maine.
March 15, 1932	Kennebunk	1	1.27 Miles Concrete		To be announced
March 15, 1932	Presque Isle	1	5.91 Miles Bit. Mac.		To be announced
March 15, 1932	Oxford	26	3.75 Miles Bit. Mac.		To be announced
March 15, 1932	Poland	26	7.21 Miles Bit. Mac.	158,648.38	Wyman & Simpson, Augusta, Maine.
March 15, 1932	Baileyville, Baring & Calais	1	7.95 Miles Gravel		To be announced
March 15, 1932	Hollis-Dayton	205	Bruce Bridge	5,190.00	Stewart & Williams, Augusta, Maine.
March 15, 1932	Gorham	25	Higgins Bridge	4,165.50	Frank W. Fleming, Scarboro, Maine.
March 15, 1932	Gorham	25	Davis Mill Bridge	4,997.00	Tidewater Construction Co., Yarmouth, Maine.
March 15, 1932	Liberty	102	Sucker Mill Bridge	4,468.30	James Frederick & Co., Pittsfield, Maine.
March 15, 1932	Waterville-Oakland		Marston Bridge	10,929.25	Cyr Brothers Co., Waterville, Maine.
March 15, 1932	Oxford	26	Welchville Bridge	13,493.50	Ulric Metevier, Rumford, Maine.

### ADVERTISED FOR BIDS

Town	Route	Length & Type	Bids Opened
Holden & Dedham .....	1	5.89 Miles (Alternate Proposals-Concrete and Bituminous Macadam) .....	March 29, 1932
Ellsworth .....	1	6.16 Miles (Alternate Proposals-Concrete and Bituminous Macadam) .....	March 29, 1932
Amity & Orient .....	1	5.21 Miles Gravel.....	March 29, 1932
Phippsburg & Bath .....	209	Winnegance Bridge.....	March 29, 1932

ODD SHOTS

(Continued from Page 19)

will be the page where is to be found minor things of major interest, descriptions of places, articles, fact, personages—curious and strange.

Maine has a river that was cursed by a mourning Indian mother in 1675. Every year since, at least three white people have drowned beneath its smooth surface. That was her promise as her papoose died through the rowdyism of British sailors.

At Belgrade is the uniquely named "Day and Night Club."

New England's largest Blue Heron Rookery is located at Bartlett's Island.

In Augusta there lives a girl, a charming three-year-old, who is said to hold a world's title as the youngest lass ever to have a permanent wave.

In Hallowell is a flounce iron, relic of dandy days, recently offered to Henry Ford for his Wayside Inn collection.

In the Dead River country there lives an aged prospector who maintains that he has found a priceless buried treasure of tremendous historical importance.

(Next Month: "A Garment Speaks")

Watch the Lights!

**A**N illuminated, animated map, so contrived that its flashing lights indicate when the ice goes out of the lakes of Maine and the fishing season begins, is the unique display which is now being shown in Boston to interest anglers in Maine's fishing attractions.

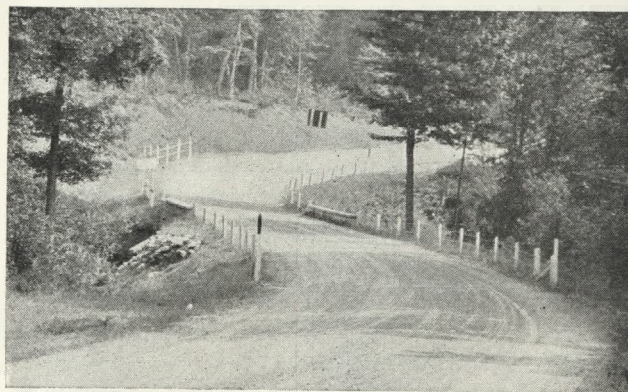
The unusual fishing exhibit was originated and built by V. C. Isola, executive secretary of the Maine Development Commission. It is 8 feet in height and 5 feet in breadth. Each lake system is cut through the face of the map and illuminated from beneath. Because the various illuminating units operate independently, the lake systems may be lighted, one at a time, as bulletins are telegraphed to Boston that "the ice has gone out."

Thus, fishermen watching the map will know when the waters of the Sebago chain are open. Later they will see the face of the map brightened by the appearance of light shining through the outline of the Belgrade lakes. Advancing springtime, clearing the other lakes northward, will bring further illumination until, eventually, the map will show that all waters from Maine's southern border to the Canadian boundaries are open for fishing.

Too many automobile drivers consider motor vehicle laws as something established for the other fellow to observe.

# KEEP DOWN DUST AND

## YOU KEEP DOWN MAINTENANCE COSTS . . .



Dowflake prevents dust the natural way—by keeping the road surface moist. This moisture binds fine particles together and they are packed by traffic into a firm, sound roadway. You can use the blader on a Dowflake-moistened road any time without waiting for rain.

Every load of gravel costs money. If it stays twice as long, it saves half the resurfacing cost. And it *does* stay twice as long if moisture-bound with Dowflake. In numerous cases Dowflake more than pays for itself in material saved.

Write for complete literature on dust control.



### THE DOW CHEMICAL COMPANY

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# DOWFLAKE

## CALCIUM CHLORIDE

77-80%

# POOR S A P

By BILL DEW

**A**BOUT two years ago I had a birch mill in the western part of the State. Mother and I and the kids had been hibernating there for the winter. Not that this information is important, but girls don't send me your picture and expect mine in return, because I'm not a bachelor and besides I didn't make any money then nor since and I want to tell you about my maple sugar industry up there and not the birch mill.

Leon Widdelber, who lived down the road, had worked for me off (mostly off) and on during the winter. He was a good hearted, big boy, five ten, two hundred and eighty pound—how we loved him. It didn't make much difference to Leon whether he was on my payroll or not he was there all the time—if he was off the books he sat around the house and if he was on he sat around the mill.

Leon, never having been married, and consequently never having had the training of us married ones, when he was doing his setting around our house always leaned back in the chairs and the back legs just simply couldn't stand that two eighty. Well, about the time the eighth



*"Order him out of the house or get a new wife."*

chair went into the shed, Mother went on a rampage and told me, in no uncertain terms, that I could either "Give that Leon Widdelber a job, order him out of the house or get a new wife." Now I knew that Mother didn't mean it, but I didn't know it well enough to take any chances and boys she sure can cook apple pies. Goodness knows I didn't want to put him on the payroll and you know in the country you just can't order a man out of your house, so I says "Mother let me give that matter a little consideration." "Well, don't be as long about it as you are in most things," says she.

That afternoon, when I was coming back from the woods, I took a short cut through our old sugar orchard and right then and there I got an idea, you know one of those super flashes, that comes to a man only once or twice in a life time. I had a big sugar orchard with a

## MORE

New England Motorists  
buy Socony Gasoline  
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any other brands.

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# LEAD WITH SOCONY

nice sap house on the place we had bought and here was a chance to save our chairs, my apple pies and put Leon to work all at the same time. I'd get Leon to run my sugar orchard on "halves" and accomplish all these things at the same time.

So on the way home I stopped into Leon's and popped the subject on him and by the time I got there I was all het up about it. "Ter halves" says he, with a snort, "How about the wood, it'll take ten cords of wood to run that orchard." "Well," says I, never having thought of that, "You can have all the dry slabs from the mill you need." "Who'll haul 'em?" says he. "Oh hell, I will," says I. "Now don't you go ter gittin' mad," says Leon, "remember we're only dickering." "How'm I going to haul my sap, remember you ain't go not trough runs for that orchard of yours," says Leon. "Haul it on a sap sled," says I. "Snow's too deep," says he. "Well, take that pair of white headed steers that are tied up in the barn," I said at about the limit of my patience. "Who's going to provide my dinners?" says Leon. "You are," says I, most emphatically, thinking of Mother and the eight chairs. "Well then I won't do it ter halves," says Leon. I thought that the "Ter Halves" business had gone by long ago, but after about an hour more of his "dickering" I agreed to give him what tobacco he would use

while sugaring in place of his dinners and the trade was made "Ter halves."

That mill job we had was, for me, one of these kind where you go to bed so late at night and get up so early in the morning that if you weren't careful you met yourself on the stairs just getting up when you were going to bed. Well, about the fourth night after Leon had started his sapping operation (on a large scale—he used a trunk strap for a belt) I woke up with the feeling that one of the horses must have the colic, there was so much pounding going on. When I finally woke up enough to really know what was going on I heard Leon yelling "Bill come here, I'm boiled down." I thought that all kinds of things had happened to him as my shirt flapped down over the stairs to the kitchen door. "Hurry up Bill, let's get up to that sap house, I don't want that syrup to burn." "Well, what do you want me for?" says I. "Why this is 'ter halves' ain't it," says Leon, "and I want you to come up with me while I make the division.

Well, right then and there I lost my temper, which is something I rarely do, so translate the following to suit your own particular style (but make it emphatic) "\*\*\*\*@—\$#’&%\*\* Don't you realize I'm a—2\$(?) \* busy man and that I don't get any @/@/@/ sleep to speak of? Why "#\$%—%&—'()\*\*\*\*@@ what do you mean by getting me out of bed?" But the more emphatic like I spoke the more bull headed Leon got and finally I went up with him.

He had two big pails and one of these old fashion long handled tin dippers that hold about a cup. He would dip this into the sap pan and pour its contents



"One for you—one for me; two for you—two for me."

into the first pail with a "One for you" and then one into the other pail with a "One for me" and a "Two for you" and "Two for me" and so on until all the syrup was divided and also until it was about ten minutes of four. By that time I was so \*@/@\* mad that I couldn't even swear convincingly so I started off for the house with a "Well, Leon, that's fine. Bring my syrup down to the house," and what do you suppose his reply was, "No sir, take it yourself, that warn't in our trade 'Ter halves.'"

## \$1,353,000,000 Road Program

### For State and Local Agencies

Funds estimated as available for public road and bridge construction and maintenance in 1932 amount to \$1,353,000,000, according to information collected from road officials by the Bureau of Public Roads, U. S. Department of Agriculture. Of this amount \$882,000,000 is the probable expenditure by State highway departments, and \$471,000,000, it is expected, will be spent by local authorities.

The detailed total of road and bridge expenditures in 1931 is not yet known but the 1932 program is less by 19 per cent than the total rural road expenditure of \$1,680,000,000 in 1930. Comparing State highway expenditures of \$980,000,000 in 1930 with similar funds available for 1932, there is a decrease of 10 per cent. Similarly there is a decrease of 33 per cent in local funds, the 1930 expenditure having been \$700,000,000.

The State highway funds have declined considerably less than local funds because they are derived in large part from motor vehicle and gasoline taxation and there has been no marked reduction in these revenues. The local road funds also participate in these revenues but not to the same extent.

The total estimated expenditure of the State highway departments of \$882,000,000 is divided as follows: Construction of roads and bridges, \$568,000,000; reconstruction and maintenance, \$197,000,000; interest on highway bonds, \$64,000,000; and miscellaneous, \$53,000,000.

The State highway departments plan to construct 36,000 miles of road. This mileage includes 8,800 miles of high-type road such as asphalt, concrete, and brick; 17,500 miles of macadam, gravel and sand-clay; and 9,000 miles of graded earth. There is also to be constructed approximately 700 miles of road in New York not distributed by types and the mileage to be constructed in Connecticut and Florida is not included. The State highway departments will maintain 314,900 miles of road.

Similar information concerning local funds and mileage is not available.

The States with State highway programs in excess of \$50,000,000 are listed in order of size of program as follows: Pennsylvania, New York, Illinois, California, New Jersey, Ohio, Texas, Missouri, Michigan.

The local program of road construction will exceed \$25,000,000 in the following States, which are listed in order of size of program: Pennsylvania, New York, California, Ohio, Illinois.

#### PUNCTUATION MARKS

The Republican said the Democrat was no good.

"The Republican," said the Democrat, "was no good."

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**S**OLVAY CALCIUM CHLORIDE eliminates need for constant sprinkling and inspection—it also gets rid of the bothersome “final clean-up”.

Perfect surface curing with Solvay Calcium Chloride can be handled by one man with a spreader. Integral curing is efficiently handled with a simple mixing device.

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# SOLVAY

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## Calcium Chloride

FLAKE 77%-80%

THE IDEAL CONCRETE CURING AGENT

## Percy Keller Selected New Town Manager of Camden

Percy R. Keller, who has been connected with the State Highway Department for the past 18 years, was selected on March 23rd, over a field of ten candidates, as new Town Manager of Camden.

Mr. Keller, who succeeds Herbert A. Thomas, manager at Camden for the past seven years, has tendered his resignation to Lucius D. Barrows, Chief Engineer of the Highway Commission, and it will be acted upon at the forthcoming meeting, shortly after which he will assume his new position.

A native of West Rockport, “Perce,” as he is familiarly known to a wide circle of friends both within and without the Highway Department, was graduated from the College of Engineering at the University of Maine in 1901. He became associated with the State in highway work in 1914 and seven years ago was placed in charge of second class road work, which includes State-aid, third class and special resolve roads. During this latter period of time the progress of this division, as other divisions, has been rapid with increased responsibilities and details, the result of new problems and new methods entering into highway work. He has acquitted himself of these varied and numerous duties with conscientious effort and unselfish labor and, in the course of his work, not only made many friends among the State House employes, but, in addition, taken an active part in civic affairs.

As an expression of appreciation, Perce’s immediate associates in the State Aid Division presented him, in view of his departure, with a gold watch, at a surprise evening occasion the past week. The Commission and Highway Department, as a whole, presented him with a desk lamp and desk clock, the former bearing the following inscription:

“An appreciation of friendly associations, a token of high esteem, and a tribute to the many years of efficient service. Presented to P. R. Keller by Associates in the Maine State Highway Department.”

The best of luck and deserved success to Perce, in his new position.

---

What a whale of a business we’d be doing if PROSPERITY had only been advertised as much as depression.

---

Whenever a man puts over a new idea, he can find a dozen who thought of it ahead of him—but they only thought of it!

---

Letting-up excesses in the evening might be better for some people than setting-up exercises in the morning.

### Tar Bids Opened

Bids were opened on March 23d, for furnishing approximately 5,250,000 gallons of refined coal tar, with results as follows:

- The Barrett Company—\$0.0845 per gallon.
- Koppers Products Company—\$0.0874 per gallon.

The award of contract will be considered by the Highway Commission at the regular meeting on March 29th.

This material is to be used by the maintenance division for the surface treatment of gravel roads. Specifications provide that delivery of this tar shall be started on or before April 15th, as may be ordered, but the bulk of the total quantity will be ordered between May 1st and July 15th.

### New Highway Map To Contain Several Route Number Changes

The 1932 highway maps, with several changes made for the purpose of consolidating routes, will be available in about another month, it is learned.

A new route, Number four, has been added. It begins at South Berwick and extends through Sanford, Waterboro, Gorham, Windham, Gray, Auburn, Livermore Falls, Wilton, Farmington, Rangeley and Stratton to the Quebec line.

This addition eliminates routes 214, 111, 115 between Foster's Corner and Gray, route 107 between Auburn and Rangeley, route 144 between Rangeley and Stratton and route 143 between Stratton and Eustis.

Route 104 between Newport and Greenville via Dover-Foxcroft will be eliminated. Route 105 will be extended from Dover-Foxcroft to Greenville, making this a continuous route from Bangor to Greenville.

Route 100 will be extended from Pittsfield through Newport, Dover-Foxcroft and Milo to Howland on U. S. Route Number two and on to a terminus at Burlington. This makes route 100 continuous from Portland on U. S. Route one to Howland on U. S. Route two.

Route 102 will be extended from Belfast through Stockton Springs and via the new Waldo-Hancock bridge to Bucksport, Ellsworth and Mt. Desert Island. This will furnish a continuous route from Augusta to points on Mt. Desert Island.

Where short sections of routes coincide, they will be double-numbered.

Refrigerator men have a knack of advertising their product in a few, well frozen words.

In total value of products, paper and woodpulp manufacturing ranks first among Maine industries. Cotton goods are second, boots and shoes third, and woolen goods fourth, followed by lumber and timber products.

# 1931

## Another Record of «L-M-C» Progress

Assets increased to \$15,521,354.57, a gain of \$519,897.91.

Premiums increased to \$14,307,236.00, a gain of \$657,165.00.

Dividends paid to policyholders in 1931 amounted to \$2,510,495.12, a gain of \$233,218.42 over 1930.

Net surplus after providing fully for every conceivable contingency increased to \$2,220,062.08, a gain of \$119,029.65 over 1930.

JAMES S. KEMPER, President

The surplus shown herein is a true surplus, reflecting the actual condition of the company on the basis of December 31st market values. All stocks are adjusted to market values. All bonds are on an amortized basis, and there has been included in voluntary reserves the difference between the amortized value and December 31st actual market value.

### ASSETS

Cash in banks and on interest.....	\$ 2,123,415.91
U. S. Government securities.....	2,403,244.71
State, province, county and municipal bonds	4,955,419.89
Public Utility bonds and stocks.....	1,040,347.26
First mortgage loans on real estate.....	2,381,227.50
Premiums in transmission .....	2,086,191.99
Due on account of reinsurance.....	405,503.98
Accrued interest .....	126,003.33

Total cash assets..... \$15,521,354.57

### LIABILITIES

Reserve for losses .....	\$ 6,943,006.00
Reserve for unearned premiums.....	4,432,521.00
Reserve for taxes and expenses.....	546,026.69
Reserve for depreciation .....	379,738.80
Reserve for contingencies .....	1,000,000.00

Total liabilities and reserves.. \$13,301,292.49  
Net cash surplus .....

Total ..... \$15,521,354.57

*Paid for Losses and Returned to Policyholders in Cash Dividends  
Since Organization over Fifty Million Dollars*

## Lumbermens Mutual Casualty Company

"World's Greatest Automobile Mutual"

HOME OFFICE:

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Portland, Maine**