The University of Maine DigitalCommons@UMaine

Great Northern Paper Company Records

Manuscripts

1978

The Great Northern Paper Company, Chapter 11: Yesterday II

John E. McLeod

Follow this and additional works at: https://digitalcommons.library.umaine.edu/great_northern

Part of the United States History Commons

Repository Citation

McLeod, John E., "The Great Northern Paper Company, Chapter 11: Yesterday II" (1978). *Great Northern Paper Company Records*. 148. https://digitalcommons.library.umaine.edu/great_northern/148

This Book Chapter is brought to you for free and open access by DigitalCommons@UMaine. It has been accepted for inclusion in Great Northern Paper Company Records by an authorized administrator of DigitalCommons@UMaine. For more information, please contact um.library.technical.services@maine.edu.

CHAPTER XI

YESTERDAY II

The year 1910 began in an atmosphere of labor unrest. This was not an acute problem in the Great Northern mills, but it led, directly or indirectly, to developments which were of great importance to the Company.

The International Paper Company was struck early in March. This strike was over union jurisdiction and recognition, although I.P. had had agreements with organizations representing at least some of its employees since 1902, and it was a bitter one, lasting three months, or until about the first of June. We will touch upon this event in another place.

During this period, there was continual pressure on Great Northern to furnish paper to International customers. Although there was little tonnage to spare, some additional production could have been squeezed out. The Directors, however, deciding that such action could only lead the Company to labor troubles of its own, refused all importunities, in spite of the fact that the situation afforded a wide-open opportunity to pick up some I.P. business. Great Northern employees were not working under a labor agreement at this time, and they did not strike in sympathy with the I.P. workers. Instead, they took advantage of the situation to approach the Company with proposals to restore the contractual relationship which they had lost in 1908. The management was preoccupied with these proposals and what to do about them all through the spring and summer. What was done established the basis for the relationship between Great Northern and the organizations representing its

employees, which, modified only by the effect of economic and social change, has endured to this time. As it is intended to go into this subject in another place also, we simply mention it here as one of the products of the labor activities of the times having a long-range effect on the Company's affairs. The other thing was the first significant change in the management of the Great Northern Paper Company. This had a most interesting background.

Mention was made earlier of George H. Parks, General Manager of the Company since the fall of 1901. We have also taken note, in connection with the controversy over the importation of pulpwood, of a young man named William A. Whitcomb, who at this time, at the age of 27 years, was a Director of the International Paper Company, and General Manager in charge of its manufacturing operations, with his office in New York. He was in charge of the negotiations before and during the strike.

On May 13th, the Glens Falls Daily Times printed an article, which is quoted in part:

"BIG SHAKE-UP IS COMING IN I.P. COMPANY"

Important Interests Demand Change in the Management

OFFFRS MADE TO G.H. PARKS

Services of General Manager of Great Northern Sought by International - Former Glens Falls Man, It Is Said, Declines to Become Interested Until Present Labor Troubles Can Be Settled.... (Special to the Glens Falls Daily Times)

BOSTON, MASS. May 13. There is considerable discussion in this city of the affairs of the International Paper Company and rumored changes in the management of the combine.

A large amount of the securities of the company is owned by local people and eastern investors who do their banking in this city.

It is reported on reliable authority that a meeting of these interests was held in this city and radical changes decided upon semi-officially, with direction that the plan must be carried out, the influence and authority back of the movement removing any question as to the action that will follow.....

There is no doubt that George H. Parks of the Great Northern Paper Company of Millinocket, Me. has had overtures made to him to become identified with the manufacturing department of the International Paper Company; and his acceptance is understood to await the formalities necessary before such change can become effective.

It is understood that Mr. Parks has declined to assume any position with the company until the labor difficulties are adjusted....

The elimination of all officials of the company at present engaged in manufacture, sales and policy of employees is among the changes rumored to follow in rapid succession...

In substance it was stated that the reorganization of the company will be extensive, and there would be a radical change in the policy of the company in every direction, probably to the surprise of many who are high up in the company, but who have had no knowledge of the prospective reorganization."

At the bottom of a clipping of this article, in Wm. A. Whitcomb's handwriting, are the following notes:

> "WAW in G.F. before Labor Board 10 & 11 " "N.Y. 12 A.N.B. in Washington WAW phoned G.H.P. 13 re report G.H.P. referred WAW to A.N.B. Labor conference with began Sat...."

Part of the last line is illegible. "G.F." was Glens Falls; "A.N.B." was Al Burbank, President of International, and "G.H.P." was of course George Parks. The urgency in these notes is almost tangible.

Somebody had an open pipe-line to information from inside the International Paper Company, and A.N. Burbank was not happy about it. Years ago, William A. Whitcomb showed the writer a letter dated October 7, 1910, with a comment about it that does not bear repeating here. A Photostatic copy is in existence. It Reads: "Mr. W.A. Whitcomb

Vice-President

Dear Mr. Whitcomb:

I am sending you a piece of the Glens Falls paper that has just come to my attention - the worst mis-statement that I have ever read. It is an outrage to have such things printed, and I wish some way could be found to stop it, or have somebody killed.

Yours truly

A.N. Burbank

President. "

enc. I would like the article back."

The "piece" to which he objected cannot be identified as to date, but must have been published some time during the first week in October. It too is quoted, in part:

"G.H. PARKS AT THE HEAD OF PAPER CO.

Change in International management is very near

W.A. WHITCOMB OUT

The annual meeting of the International Paper Company which will be held at Corinth the latter part of the month will confirm the action of the majority stockholders.... in deciding upon a change in the management and policy of the company and....will culminate in the retirement of the present vice-president and general manager, W. Arthur Whitcomb, and the election of George H. Parks of Millinocket, Maine, formerly of this city,

.

as general manager

Another newspaper article, unidentified, says that he <u>demanded</u> this differential, which is quite likely. However, William A. Whitcomb's salary was \$12,000, not \$15,000.

> "It was not until a short time ago that the stockholders interested in Mr. Whitcomb really considered it likely that there was any danger of that gentleman being retired from the company, but when it was made evident that Mr. Parks would not become associated with the company as long as Mr. Whitcomb was in control the matter was taken up seriously. Since that time some of the most interesting sessions have been held in New York and through powerful influences.... it was settled that Whitcomb was to retire. Of this, however, it does not appear that the Whitcomb stockholders were aware.... and on the outside at least no indication was given that he expected any change in management....."

This Annual Meeting was held on October 26th, and regardless of A.N. Burbank's outrage, it came to pass as predicted, at least as far as George Parks and Wm. A. Whitcomb were concerned, with an additional twist which the above source had not predicted, which was that on November 1, 1910 William A. Whitcomb became General Manager of the Great Northern Paper Company.

There was also a leak in Great Northern. On October 22nd, a rather curious article, written by our old acquaintance "Derb", appeared in the Paper Mill News. It was headed

> "HERE TODAY, THERE TOMORROW Moving Around in Two Big Paper Manufacturing Companies Which Proves that When You See It in The Paper Mill It's So, or If It Isn't Then That It Will Be Soon - William A. Whitcomb and George Parks Change Places in the International and the Great Northern"

What makes it curious was that this heading was followed by five columns of copy, in which Derb, after lauding the exploits of the Paper Mill in ferreting out the news of the industry, and in being the first to forecast such great events, goes on to discuss William A. Whitcomb at considerable length, without any further reference whatever to the statement that he and George Parks would trade places.

From this distance, there is no way of knowing what negotiations on Great Northern's part preceded this move. The first mention of William A. Whitcomb in the official records is on October 20th, when the President advised the Executive Committee that he had been hired as General Manager, at a salary of \$12,000 a year, beginning November 1st, and it was recommended that the Executive Committee be increased to six members, so that he might be included in that body. On October 27th, the Executive Committee accepted the resignation of George Parks, effective November 1st, and his salary was discontinued as of that day. On November 9th, the Directors voted that the Executive Committee would have to remain officially at five, with Mr. Whitcomb an ex-officio member. About the only other thing that is known is that he made the condition that he be located at the head office in Boston, rather than at Millinocket, where George Parks had been. He made his home in Dedham, Mass., buying at this time or shortly afterwards the estate called "Karlstein", formerly own ed by Samuel D. Warren of the S.D. Warren Company.

It is possible that George Parks engineered this deal when William A. Whitcomb who was his nephew; his sister's son; and his protege, got into trouble with International. He and Fred Parks had brought him into I.P., and educated him, as he said himself, in the pulp and paper business. Fred Parks had taken him to New York, originally as head of I.P.'s groundwood mill operations. Regardless of what inferences may be drawn from the "outrage" article, the writer, in his long association with William A. Whitcomb, knew of nothing but the best of relations between him and George Parks, and as far as is known, the latter's departure from Great Northern was in no way the result of any altercation with its management. George Parks had a five-year stock bonus arrangement, which was not cleaned up when he left. At that time, there were 355 shares in his name, but it would appear that he had taken out but a small part of it. In April, 1912, there is a neat little statement to the effect that a cash settlement had been made with him on this deal at \$135 per share. This seems to have been premature. For the actual settlement, made in October, the Company "borrowed" 155 shares of stock from Col. O.H. Payne and turned them over to George Parks, in addition to which they paid him \$130 a share for 89 shares due him, accumulated dividends, and an unspecified amount of cash which had accrued to his stock account. Col. O.H. Payne was reimbursed for the borrowed stock in two installments paid in cash the following year.

While there would seem to have been some internal troubles in the International Paper Company at that time, the strike was the immediate cause of William A. Whitcomb's dismissal. I.P.'s policy regarding labor was regressive, and William A. Whitcomb was a stout supporter of the right of workers to organize and bargain collectively. He had obeyed orders up to a point, but although he apparently had some support, he had settled the strike on terms which he felt to be fair, but which did not please the more powerful interests. When the writer first began work under William A. Whitcomb, he asked several people in the organization why he had been fired by I.P.; which was the way he put it himself; and was told unanimously that it was because he disagreed with that company's policy toward organized labor and the handling of the strike. Just why International wanted George Parks back so badly we do not know. He was not unfriendly to organized labor, as we will see later, which leads us to think that William A. Whitcomb may have disagreed with more than labor policy, and that the old guard with which George Parks had previously been associated felt that he would follow the party line more closely than his strong-minded nephew. No matter; it was a good trade for Great Northern.

It might well be asked why there has been so much comment, much of it clearly disparaging, about the International Paper Company. There will be more. It is necessary to point out that in these early days International too was a different company. Its policy, at least in the view of most of its competitors, including Great Northern, seemed to be rule or ruin. Although, or perhaps because, much of the early Great Northern brass was ex-I.P., there was no love lost between the various managements of the two companies, and the relationship was at times openly hostile. This fact bore heavily on Great Northern events, whether or not it so appears in the records. The situation prevailed through the years of the great depression and the National Recovery Administration period of the 1930's, and did not entirely disappear until I.P. entered what it has called its third or modern period, beginning in 1936 under the leadership of Richard J. Cullen. This is history.

Great Northern's original by-laws had called for meetings of the stockholders to be held in Bangor. This had been changed in 1909 to provide that they be either in Bangor or in Millinocket,

and from that time on they have been held in Millinocket. At the Annual Meeting in January, 1911, Col. Oliver H. Payne, now 72 years old, stepped down from the Board of Directors, and William A. Whitcomb was elected in his place. The Executive Committee was enlarged to six members, and now consisted of Garret Schenck, William B. Dillon, Payne Whitney, Commodore Ledyard, J. Sanford Barnes and Wm. A. Whitcomb, the last not being made an officer of the Company at this time.

The year 1910 otherwise provided no particularly significant developments, except that it produced the highest earnings of any year to that date -- over \$1,000,000 for the first time, after 1% Federal income tax, although production was only about 20 tons a day greater than the year before, and the price of newsprint remained steady at \$45.00 a ton, New York (Newsprint Service Bureau figure). It was, however, not without other interest. In this early period there were for some reason a number of lawsuits against customers, arising out of their refusal to pay for paper of allegedly poor quality. Most of these seem to have been settled in favor of the Company, as was one against the Philadelphia Bulletin in this year. All the remaining land lying in the loop of the West Branch north of Shad Pond and west of Millinocket Stream was purchased for \$6.00 an acre. Additional pier space was leased in New York and Boston to handle water shipments. Late in this year, the suggestion that a machine to make wrapping paper for home use, passed over in 1903, was revived, and decision to put in such a machine was made. It was first agreed that a

second-hand machine would serve, but a couple of months later the purchase of a new one was approved. This was installed at Millinocket, and designated No. 9. The story of this and other capital improvements made around this time will be covered elsewhere.

The next year was more eventful. There was a lot of discussion about "the change in market conditions". This change was probably the beginning of the growth of the Canadian newsprint industry, and the status of the tariff situation, noted previously. Nevertheless, things seem to have been fairly stable; the price of newsprint remaining basically unchanged, again according to the Newsprint Service Bureau, and production being a little higher than for the year previous. However, net earnings, with no change in the Federal income tax rate, were off considerably. In spite of this, there was discussion of the desirability of paying an extra dividend, versus making payment on "back interest". An extra was paid, and it may be that some of the earnings did go into reduction of unpaid interest also.

Some time in 1911, Hardy Ferguson left the Great Northern Paper Company to devote himself to the consulting practice which made him one of the world's best-known pulp and paper mill designers. From this distance in time, it is difficult to determine just how the Engineering Department functioned under him in the early years. Hardy Ferguson said himself, in an interview with one of the trade papers in 1949, that his arrangement with Garret Schenck was probably unique in the industry, in that it allowed him to carry on a consulting business while officially the head of Great Northern's Engineering Department. He maintained a staff of 15 or 18 men at Millinocket, and as far as we know, they were employed by him rather than by Great Northern. There are records of men being sent to other locations on his work, and Frank Bowler notes in his diary in many places that he received salary payments, sometimes "payments on account", from "H.S.F." It has been said that he designed a number of mills during this period, but there is not much information about these outside activities. It is known that he continued to do work for the Berlin Mills Company and the old Nashwaak Sulphite mill at St. John, N.B., and that he designed a mill for the Dalton Paper Company, but there were surely others.

Upon leaving Great Northern, Hardy Ferguson established an office at 200 Fifth Avenue, New York, under the name H.S. Ferguson & Co., and was still at that address when he retired and his firm was dissolved in 1950. He returned to Maine at that time, making his home in Cape Elizabeth. According to his former secretary, there is no complete compendium of mills which he designed during his career, but a few of them can be identified. The Abitibi mill at Iroquois Falls, Ontario; the Soundview and St. Regis mills at Fverett and Tacoma, Washington respectively; the Crossett Lumber Company mill at Crossett, Arkansas; the Hollingsworth & Whitney mill at Mobile, Alabama; the Florida Pulp & Paper Co. mill at Pensacola, Florida; a mill or mills for the Minnesota and Ontario Paper Company; the Fraser Company's Newcastle, N.B. plant, and at least preliminary design and later consultation on three mills in the Soviet Union are known projects. Finch Pruyn, the Oxford Paper Company and the Jonquiere Pulp Co. at Jonquiere, P.Q., were among his clients. In 1949, he was awarded TAPPI's Gold Medal, usually given for some specific technical accomplishment, for his long and devoted service to the industry. He continued to be consultant to Great Northern right up to the time of his death in 1956. Not only its mills, but its hydro-electric developments, and even barns and small buildings still in existence, scattered all over the Company's territory, are reminders of his genius and versatility. A truly great engineer, his work influenced that of other designers all over the world.

When Hardy Ferguson left Great Northern in 1911, the orgainzation which he had put together at Millinocket was broken up, part of it going with him to New York and part remaining as Great Northern's Engineering Department, under Frank C. Bowler, who headed the department for forty years. There will be more about him in due course.

The other important event of 1911 in the area of organization was the establishment at Millinocket of the Bureau of Economy, from which the present Research, Development and Control organizations are descended. This was a rudimentary structure for investigating, experimenting and testing. It was headed by Garret Schenck, Jr. There will be more about him later also, and some of the activities of this new department will be noted in other places in our story.

About this time, probably with the coming of William A. Whitcomb, who was an addition to the Boston Office staff, Garret

Schenck moved his office in Boston to 45 Milk Street. The exact date is not known. The first mention that has been found of this new address was in April, 1912, a year that produced a lot of action. It was a good year in the industry. The price of paper remained firm, there was plenty of water, and the profit margin was excellent. The Boston News Bureau reported that demand on the Company's production was 10% to 15% more than it could supply, and suggested that it might well consider expanding to at least that extent. As a matter of fact, the Directors did vote, late in the year, to add a fourth paper machine to the three at the East Millinocket mill.

In September, 1912, the Paper Mill reported as a fact, complete with pictures of the site, that the Great Northern Paper Company's subsidiary, the West Branch Driving and Reservoir Dam Company, had begun construction of a huge concrete dam, replacing the old timber dam at Seboomook. This was not a fact. Part of the old Canada Falls dam had gone out in the spring, and a new wooden dam was being built some distance below the old location, creating essentially the present flowage. However, while there may have been consideration of a concrete dam at Seboomook at this time, and a dam was actually constructed there, starting in 1912 and completed the following year, it was a rebuild -- a timber structure on the site of and using parts of the abutments of the original dam. It was 808 feet long, with eight shallow gates, four deep gates, a fourteen foot log sluice and a smaller dri-ki sluice. It was ten feet higher than the old one, backing up a head of 28 feet, and raising the flowage to its present level. Money for the Canada Falls project was requested by Garret Schenck and duly appropriated by the Direc-

1974

tors, but for whatever unknown reason, there is no record of any official appropriation for this Seboomook dam, which was not the famous structure built a number of years later.

It should be explained here that the Canada Falls Dam Company and the Seboomook Dam Company, owning these dams, were separate subsidiaries, not incorporated in the West Branch Driving & Reservoir Dam Co., although the dams were operated by it. This construction is mentioned here, instead of in connection with woods and river driving activities, because while the dams at these locations were originally built for log driving, and were still needed for this purpose, the new structures were obviously designed to also store more water for the generation of power.

After the Annual Meeting in 1912, the officers elected were the same as those who had held the positions since 1901. Garret Schenck was President; William B. Dillon Vice President; A. Ledyard Smith Clerk and J. Sanford Barnes Treasurer and Assistant Clerk. The Executive Committee of the Board of Directors, elected at this same time, consisted of Garret Schenck, Wm. B. Dillon, Payne Whitney, Wm. A. Whitcomb and J. Sanford Barnes. In this year, however, this hierarchy, which, with the exception of Wm. A. Whitcomb had conducted the affairs of the Company for so long, began to come unglued.

Garret Schenck and William B. Dillon had arrived at a state of open disagreement. This had been coming on for some time. Nothing has been found in the records up to the time the split occurred to show exactly what Mr. Dillon had or had not done that had Garret Schenck up-tight, but it had to do with sales policies

1974

and the resulting customer relations. There is evidence of this in later correspondence. As far as our story goes at this point, the first indication of the situation is contained in two letters written to Commodore Ledyard, one by his law partner, W.F. Taylor, dated September 11, 1912, and one by Col. A.G. Paine, dated the following day. We quote in part from the first, which contains the rather startling opinion that the founder of the Company might have to be removed from office.

"There are one or two things I want to say about the Dillon matter which you referred to the other afternoon. As you know, I have a great liking for him and would be very sorry to see his interest affected by any blundering on his part. I do not pretend to know anything about the merits & the controversy between him and Mr. Schenck. When I first learned about it a number of months ago, I strongly urged him to lay his case before Mr. Whitney and yourself personally. I also pointed out to him that if the situation developed to such a point that he and Mr. Schenck could not work together one or the other would have to get out and the Board, irrespective of the merits of the controversy, would probably retain Mr. Schenck.

I think that Dillon has blundered in delaying the presentation of his case to Mr. Whitney and yourself, and has further blundered in bringing Harding into the matter. I suppose this had been due to a constitutional desire to avoid controversy. It may be that meanwhile matters have

1914

advanced to a point where either Mr. Schenck or Mr. Dillon will have to get out. I hope, however, that this is not the case, and that a word or two to Mr. Schenck from yourself or Mr. Whitney would still be sufficient to preserve the peace and that you and Mr. Whitney will think it advisable to say a word or two pending an investigation of the merits of the controversy between the two officers of the Company."

This was followed by the paragraph about Mr. Schenck's desire for supremacy quoted at an earlier point in the story. Garret Schenck does not seem to have been one of Mr. Taylor's favorite people. Col. A.G. Paine's letter was more direct, and is quoted in full:

"Dear Mr. Ledyard:

If the rumor is true that Mr. Dillon may cease to be with the Great Northern Paper Co., I wish to inform you that as I look at it, to let such a thing happen, if it can be avoided, would be a great mistake in the policy of the Great Northern Paper Co.

His integrity and his ability as a distributor of paper and manager of a large business will not be questioned by anyone who knows him. At this critical period, largely brought about by Canadian interests and Western development supplemented by American capital now being invested, it would be extremely difficult to replace Mr. Dillon by anyone whose knowledge of conditions is equal to the occasion. We own some Four Thousand. Two Hundred shares of Great Northern Paper Co. stock, and naturally are very anxious regarding the selling department of the company in which we have so large an investment.

This must be my excuse for the earnestness of of this communication,

I remain, dear Sir

Faithfully yours, A.G. Paine "

Commodore Ledyard was about to sail for Europe, and his secretary forwarded both of these letters to Payne Whitney. What action he may have taken about them is unknown, but if anything was done, it had no effect. William B. Dillon was out. On October 9, 1912, the Directors voted to hire Wm. C. Powers as Manager of Sales, starting October 15th, at a salary of \$12,000 per year, William B. Dillon of course voting "No" and J. Sanford Barnes, obviously his ally, abstaining. Col. A.G. Paine was not at this meeting. He had not attended a meeting of the Board for more than a year.

William B. Dillon promptly resigned. This called for another meeting on October 30th, to elect F.S. Rollins, an associate of Col. O.H. Payne's, in his place as Director. F.S. Rollins was on hand, and took his seat, whereupon J. Sanford Barnes walked out of the meeting and sent back his resignation from the Board and as Treasurer, four days retroactive. F.S. Rollins was then elected Treasurer and Assistant Clerk, at the same salary as Mr. Barnes had been receiving, and William A. Whitcomb was elected Vice-President, filling the vacancy created by the resignation of William B. Dillon. Whether or not it was of any particular significance relative to the situation, the right of Col. A.G. Paine to sign checks for the Company, his prerogative since the early days, although he had not been an officer for some time, was revoked at this meeting.

We have said that there is little information about William B. Dillon. He had been a director of the International Paper Company, coming from one of the mills in the Glens Falls area which had gone into the Trust, and an unidentified trade paper clipping states that he had been a Vice-President of that company before joining Great Northern. The same article however says that he was General Manager of Great Northern, which of course he was not. Upon leaving the Company, he and J. Sanford Barnes went into the paper sales business in New York as the firm of Dillon & Barnes. Mr. Dillon died in 1933. J. Sanford Barnes had retired in 1920, and after that date was President of the Board of Trustees of the old Randall's Island Reformatory for Delinquent Boys.

On December 13, 1912, Col. A.G. Paine submitted his resignation as a Director, along with a letter to the Board, the contents of which are not recorded. He had not been on good terms with Garret Schenck for some time. The firing of William B. Dillon, if it had any further ill effect on the relations between the two men, was only an incident. They may have had other disa-

greements, but the real cause was a dispute of many years' standing, arising out of the Colonel's claim that Garret Schenck owed him some \$4,000 from the proceeds of the sale of jointly owned properties to the Company in 1899, which Garret Schenck would not admit. Col. Paine had got nowhere in the argument which had gone on sporadically over all these years, and at this point decided that he wanted nothing more to do with Garret Schenck, and resigned angrily.

We cannot say that his departure had any immediate effect on the course of the Company's history, but twenty years later one of his grandsons, Eustis Paine, was elected a Director, and fifty years down the road another, Peter S. Paine, became President and then Chairman of the Board. Both of these men were very important in the Company's affairs, and their connection with it derived in large measure from the fact of Col. A.G. Paine's early association with Great Northern.

This controversy, which involved Garret Schenck's two other associates, Charles Mullen and Col. E.H. Haskell, is unusually well documented by correspondence which took some strange turns, and we include the story of it as Appendix B. One of the letters which will be quoted contains the third piece of evidence, mentioned earlier, that Col. A.G. Paine may have brought Garret Schenck and Col. Oliver H. Payne together. Charles Mullen, after Col. Paine's resignation, made a claim of bis own, with rather startling implications of conspiracy, and there is much more of interest. The reader will find this Appendix anything but boring.

1974

Garret Schenck does seem to have been a little off-hand about some of his financial dealings. F.S. Rollins was no sooner in office than he picked him up on this, in a letter to Commodore Ledyard, dated December 11, 1912:

1974

"On the Balance Sheet of the Great Northern Paper Co. there is on the asset side the following item: Due on subscription to capital stock \$60,180. Accrued unpaid interest on this item, \$12,375.26, making a total of \$72,555.26.

This amount is due from Mr. Garret Schenck, the President of the Company, and interest is charged him on the unpaid amount every quarter, and he sends the Company a check whenever he receives a dividend, which check is credited on account of interest due. The Great Northern Paper Co. holds 760 shares of its own stock standing in Mr. Schenck's name as collateral.

It does not seem to me that this is a proper item to appear on the Balance Sheet of the Great Northern Paper Co. Are not the officers and directors of the Great Northern Paper Co. personally liable for the amount of this loan and interest?....If it is necessary to continue this loan to Mr. Schenck, could not the Northern Finance Corporation take this over and have Mr. Schenck execute a note in the same form as those which we now hold?

The Great Northern Paper Co. is now borrowing from the Northern Finance Corporation \$100,000., and if the amount due from Mr. Schenck were paid to the Great Northern Paper Co., it could undoubtedly wipe out these bills payable. We have been reducing this a small amount at a time during the past month.

I do not wish to bother you, but simply call your attention to this matter as it does not seem to me proper in its present form. I had no part in authorizing the original transaction, but I am now a director of the Company, and it is a question in my mind whether I am not personally liable by continuing to countenance its existence."

Mr. Rollins had a point, and his suggestion must have been followed. As we have already seen, Garret Schenck borrowed a lot of money from Northern Finance to invest in Great Northern stock, and this may have been the first of it. At any rate, the item disappeared from the balance sheet at the end of that year.

There were more changes in the management coming up. A Ledyard Smith resigned in May 1913. Little information has been developed about what had been going on with this man who was so prominent in the early years. He was in the Maine legislature through 1905, but not thereafter. He had retained the title of Assistant to the President until 1911, when this position seems to have been abolished. It is believed that he remained in Maine, never being stationed in Garret Schenck's Boston office, so far as is known. He was President of the Penobscot Log Driving Company in 1912, but withdrew at the end of that term. His resignation from the position of Clerk, effective May 1, 1913, must already have been received prior to the annual meeting of that year, although no notice is taken of it in the official records. Upon leaving Great Northern, he went to the Fastern Talc Company, and does not figure again in our story.

In October, 1912, the President had announced the hiring of Bryan L. Seelye (1876 - 1975) as Auditor, at a salary of \$4,000 per year. He was another I.P. man, from Glens Falls, and was a cousin of William A. Whitcomb. He was located at Millinocket. His title of Auditor was a misnomer, although it remained in use for the next forty years or more. Actually, his original function was about that of what would now be the Controller. His first duty was to set up new accounting procedures and a cost reporting system for the three mills, and he modelled this after that of the International Paper Company. Some of the forms first put into use at that time were I.P. forms, with the name of the company crossed out, and the writer recalls seeing some of these many years ago. At this stage, his operation at Millinocket had little if anything to do with the Spruce Wood Department, which had its own accounting division in Bangor. B.L. Seelye had a tremendous capacity for work, and as time went on, his duties spread into areas of responsibility which will be examined elsewhere. Unlike most Great Northern officials, he never owned or rented a home, as far as we know, but lived in a suite in the Company's Great Northern Hotel at Millinocket all his time there.

At the time of the annual meeting in 1913, there were two vacancies on the Board of Directors, caused by the departure of J. Sanford Barnes and Col. A.G. Paine. The remaining old Directors were re-elected. Col. O.H. Payne came back on the Board, and one new face was added. The Board now consisted of Garret Schenck, William A. Whitcomb, Payne Whitney, Col. E.H. Haskell, Commodore Ledyard, Fugene Hale, Jr., F.S. Rollins, Col. O.H. Payne and Lewis Cass Ledyard, Jr. The Executive Committee was made up of Garret Schenck, William A. Whitcomb, Commodore Ledyard, Payne Whitney and F.S. Rollins.

Little information, other than already given, seems to be readily available about F.S. Rollins, although he served on the Board of Directors for many years. He moved in New York financial circles, and was active in Col. Payne's interests, being connected with the Northern Finance Corporation, among other things. Lewis Cass Ledyard, Jr. (1879 - 1936) was of course Commodore Ledyard's son. A member of his father's law firm, he was graduated from Harvard College in 1900, and from Harvard Law School in 1903. Like his father, he gave a lot of time to causes of public benefit, being a Trustee and Treasurer of the New York Public Library and a Trustee of the Pierpont Morgan Library, and was on the boards of several hospitals in the New York area. He was a director of many large firms, including Melville Bond & Share and M.A. Hanna Co.; was on the Board of Trustees of the United States Trust Company, and became President of Northern Finance Corporation. He was very influential in the affairs of the Company, as representative of the Payne and later Whitney interests, and was one of the Trustees of the Payne Whitney estate.

The officers for 1913, elected in January, were Garret Schenck, President; William A. Whitcomb, Vice-President and General Manager; F.S. Rollins, Treasurer and Assistant Clerk. Although A. Ledyard Smith had apparently indicated that he intended to resign, no Clerk seems to have been nominated. However, in February, the Directors elected B.L. Seelye to this position. The Executive Committee was made up of Garret Schenck, Wm. A. Whitcomb, Commodore Ledyard, Payne Whitney and F.S. Rollins.

In April, for his own reasons, whatever they may have been, F.S. Rollins resigned as Treasurer and Assistant Clerk. The Directors elected in his place H. Merton Joyce (1876-1935), a man who was to become very important to the Company.

There is in existence a copy of a letter written to Garret Schenck, dated March 17, 1913, which has no heading and no signature, but which, because of its context, was probably from Commodore Ledyard. This reads in part as follows:

"Since the meeting last week of the Directors of the Great Northern Paper Company, at which the question of a Treasurer came up, I have talked with Mr. Rollins about Mr. H. Merton Joyce..... I doubt if we have anyone in our existing organization who would be so well qualified for this place.... As both you and Mr. Whitcomb hoped that we would be able to find a competent man for Treasurer without going outside of our organization, this appointment would seem to be in line with your views. Moreover, some of us have known all about him

for a good while, at least fifteen years, and he would have our confidence...."

H.M. Joyce had been employed in September, 1900, as an invoice clerk in the Sales Department, which apparently did its own billing at that time, at a salary of \$70.00 per month. His was one of the salary records destroyed in the fire of 1913, which will be covered a little later, so that there is no record of what he had been doing in the intervening years. He was a native of Potsdam, N.Y., and had started working at the age of 14 as an office boy with the St. Paul & Duluth Railroad. He had served in the Spanish-American War with the 71st. New York Regiment, and had worked under Capt. R. Somers Hayes during construction of the Metropolitan West Side Railroad in Chicago. He had come to Great Northern, no doubt through Capt. Hayes, when this road was absorbed by the Northern Pacific. In 1912, the position of Cashier had been established in the New York office, and in March, 1913, just before the resignation of F.S. Rollins, he had been made Acting Cashier, the original incumbent, Peter Helmsley, for some reason not lasting very long. H. Merton Joyce was a distinguished-looking man, not very tall, but well-built, alert in thought, polished in manner and quick in speech, and he did a good job for the Company.

During the years 1912 and 1913, there were a number of events, of more or less importance, which we will mention briefly here. In 1912, for instance, smallpox broke out in the towns of Millinocket and East Millinocket, and late in that year

the Company built two small isolation hospitals -- "pest houses", they were called then -- one in each town. There was of course no regular hospital anywhere in that area, until a few years later. The earth dykes built in 1903 and 1904 at Spencer's Carry and around the North Twin Dam do not seem to have stood up, and in 1912 steel piling cores were driven in them. There was a lot of discussion of the cost of insurance in that year, and decision was made to drop all fire coverage except for that carried in mutual companies and on locations which were "hazardous risks", and to accrue the premiums thus saved in a self-insurance fund, to be invested in securities. However, this action stirred up the insurance companies, who made very substantial reductions in their rates, and the move was rescinded. It was voted to sub-let the New York office at 51 Wall Street and "secure other quarters more suitable for conducting the business of the Company". As the result of this, the New York office was moved in March, 1913, to 30 East 42d. Street. Early in 1913, the President suggested that the Company join with unspecified others in exploring for sulphur deposits in Baja California. This exploration was carried out during the next few months, but produced no results. There had been a steady program of timberland acquisition, and at about this point the Company began to finance these by borrowing from Col. O.H. Payne's Northern Finance Corporation at 5%, making installment payments over a period of years. The first mention of this arrangement is in connection with the purchase of timberland in March, 1913, but the Company had been borrowing from Northern Finance for some time, and some of the earlier hiring of money was no

doubt for the acquisition of land. Early in this same year, the Company bought and presented to the Town of Millinocket a chemical fire engine, mounted on a "motor truck", with the provision that the town keep it in repair, and have a competent operator always available. Later in the year, the Directors received a vote of thanks from the Town of East Millinocket "for interest in the Town and its people", probably stemming from the construction of the hospital.

Starting in 1912, an office building, then and now called the Administration Building, was built at Millinocket, at the extreme north end of the mill yard. Frank Bowler told the writer at one time that he had designed it himself. A three-story, fortresslike structure of brick and steel, with a bow-front central section facing directly down Penobscot Avenue toward the town, and two symmetrical wings sweeping back arrow-head fashion toward the mill, the exterior, except for some slight modifications at the rear, is unchanged to this day. The interior, however, has been rearranged over and over, and bears almost no resemblance at this time to the original layout. It will probably not be possible to follow these changes as they occurred, and for this reason it may be of interest to give here a description of the original arrangement, so different from the modern office concept. This will not be easy, but we will make the attempt.

For this purpose, let us consider the building as being in five sections, or modules; the rectangular bow-fronted center

section; a wedge-shaped module in each wing on each side of this, wide at the front and narrowing to the width of a single small window at the rear; and the rectangular end portions of the two wings. On all three floors of the east wing, and on the ground floor of the west wing, there was an additional module, formed by a lateral partition about 15 feet beyond the wedgeshaped section.

There were front and rear entrances to each wing, but no central entrance. The main entrance was that in the east wing. Just inside this, in the 15 foot module, was the main entrance hall, with the stairways that are still there. From this, a corridor ran across the front of the building to the 15-foot module of the west wing. Behind the main entrance hall was a conference room. The wedge-shaped section on this side, to the rear of the corridor, was taken up, front to back, by the men's washroom, a large storage closet and the telephone exchange. All the east end of this east wing was the domain of the Engineering Department; one large room, the drafting room, out of which were taken, on the entrance hall side, two storage closets, a filing alcove, and a back hallway to the rear exit, this hallway opening into the drafting room and the conference room. The entire central section on the ground floor was one large office, oecupied by part of the Accounting Department. In the wedge-shaped section of the west wing were, front to back, to the rear of the corridor, the vault, another large storage room for the paymaster, and a back stairway to the second floor, under and around which there was a useless "dog-hole". The 15-foot module in the west wing

was the time office, a corridor straight through from front to back, with "in" and "out" doors at each end. This corridor was split down the middle by an open divider holding the time clocks and card racks. About midway of the divider was a glassed-in booth containing the pay windows. The remainder of the west wing was one large room, designated as the "men's room". This contained a fireplace, meant, it is supposed, to be decorative, as this room was intended for gatherings such as the annual meeting of stockholders, which was held here for more than forty years. Its principal function, however, was as a waiting room for men on the way to work, hence its name.

The second floor was arranged primarily for the use of the Bureau of Fconomy. In the east wing, over the drafting room, was the chemical laboratory, which for some reason it seemed necessary to provide with a very high ceiling. In the 15-foot module, over the conference room, was the "scale room" for paper testing. This was divided longitudinally by a partition making the part of it toward the front of the building into a long closet for the storage of paper samples. The wedge-shaped section of the east wing on this floor contained, from front to rear, a women's washroom, a men's washroom, and another huge storage closet, beyond which, at the extreme rear, was a passage connecting the chemical laboratory through the scale room with two smaller rooms at the back of the central section, arranged as pulp testing laboratories. The whole front part of the central section on this floor was one large office, used by Garret Schenck, Jr., and his secretary. At the front of the wedge in

the west wing was another big storage room, and behind that the back stair-well, surrounded by an access passage. The whole remainder of the west wing on this level, obviously intended for future offices, was a single huge unfinished room.

At the third floor level, the wings were provided with dormer windows all around. The part of the east wing over the laboratory was and is unusable because of the complicated truss system supporting the roof over the high-ceilinged room below. In the 15foot module, over the scale room, was a dark-room, and next to this, at the rear of the wedge section, was another immense storage closet. At the front of the wedge section was an office, use unknown. Between this office and the closet, a passageway led from the head of the main stairs to another huge room, taking up the whole central section at this level, called the "lantern room", used for projecting photographs and slides. The entire west wing on this floor, from the central section outward, was partitioned off, and while there was a door into it, it was unfinished, and was considered only as attic space. The basement was just a basement. The building was heated by steam piped up from the mill underground. Except for the chemical laboratory, the building was not ventilated in any way other than by the windows, and in the summer months parts of it were insufferably hot. The conference room, used for offices later, was a positive sweat-box, and the third floor area in the west wing, when it was made into offices many years later, was worse, if possible. The shape of the building resulted in a lot of space-wasting outside wall corridors and inside holes and corners which could be used

1974

only for closets. It was not a very efficient building, even for those days, but it was rugged. It was completed early in 1913, at a cost of \$66,945, and was occupied on April 29th. On May 26th, the old office building burned, and many records which had not been transferred, including all the salary and timekeepers' files, were lost. The accounting operation was moved into the unfinished space on the second floor of the west wing of the new building and with this began the interior remodelling which with only short respites, has been going on ever since.

Farly in this year, the General Manager's salary was increased from \$12,000 to \$15,000 per year; and speaking of salaries, a cash "salary dividend" of 10 percent, of which 5 percent was paid on June 30th and 5 percent on December 31, 1913 "to compensate for extra work rendered to the Company", was instituted for all salaried people.

At the end of 1913, Col. O.H. Payne again removed himself from the Board of Directors, and W.C. Powers was elected in his place. The Executive Committee remained unchanged. The officers for 1914 were Garret Schenck, President; William A. Whitcomb, Vice-President and General Manager; Bryan L. Seelye, Clerk; and H. Merton Joyce, Treasurer and Assistant Clerk. This latter office was of considerable importance, because it was this official who kept the records of the Directors' meetings.

In 1914, the Town of East Millinocket decided to build a Municipal Building, at a cost of some \$30,000, and asked the

1974

Company if it would contribute \$10,000 toward this sum. This was different from the fire engine, which was the Company's own idea, and the request was referred to counsel, who said that it had better be acted upon by the stockholders. Action was therefore deferred until the annual meeting of 1915, at which time the contribution was approved, and the Town duly expressed its appreciation.

Mention has been made of earlier lawsuits against customers. One of these, which had its beginnings in 1912, gives some insight into the way things were at that time, some sidelights on the people involved, and some information on the interplay of relationships between them. It started in October, 1912, with a letter, addressed simply to the Great Northern Paper Company, from W.C. Reick, of the New York Sun, who used no title:

"Dear Sirs:

I regret the necessity of informing you that the quality of the paper you are serving The Sun is not acceptable to us and in no sense equal to the sample which is appended to our contract. We therefore must insist upon an improvement in the quality in the next two weeks, or we shall be reluctantly compelled to decline to receive the paper."

William B. Dillon was still Manager of Sales at that time, and he rejected this claim. On October 8th, Mr. Reick wrote again:

"Dear Mr. Dillon:

I observe from your letter of the 8th inst. that we disagree upon the quality of the paper The Sun is getting. I don't want to be captious or critical, but the paper you are delivering to us is causing direct loss. It is breaking badly in the presses and we are from ten to fifteen minutes late on every edition of the evening paper, to say nothing of the loss to the mails in the morning. I cannot sustain this loss without protest, and I beg to inform you that I shall ask for compensation; and you are privileged to put an inspector in my press room at any time you see fit so there can be no dispute about the facts."

In January, 1913, he wrote again:

" I have intentionally held up the payment of your last bill for the reason that I think you owe us a considerable adjustment on that amount..... I warned you by letter that I would insist upon some return for the loss we had sustained....The quality was temporarily improved, but during the latter part of the year the paper was worse than before. Breaks were frequent; we could hardly get off our edition.... We have no disposition to do anything but what is fair, but we do not believe it is fair to pay the entire bill, and thereby pay you in full for a very inferior quality of paper which you served to us."
He did not get any satisfaction from William B. Dillon, who was gone from the Company when he appealed to his friend Commodore Ledyard in a letter dated May 20, 1913:

" In reference to our conversation at the club the other evening. I want to submit to you the facts, as we see them, in our dispute with the Great Northern Paper Company.

When I made the contract with Mr. Dillon... he assured me that it was his intention that The Sun get as good a sheet of paper as any newspaper in the country.

When it was first delivered, we had some very bad rolls, but I bore with it because it was explained to me that some changes in the mill were necessary. The rest of the story can be told in the enclosed letters which I sent to the Great Northern Paper Company.

I am at all times willing to make reasonable settlement without going into court....but I do believe that we are entitled to some substantial reduction."

Commodore Ledyard took this up with Col. O.H. Payne, who turned it over to F.S. Rollins. He made an investigation, and reported on May 21, 1913 to Col. Payne:

" In accordance with your instructions this morning, I have written Mr. Whitcomb, Vice-President of the Great Northern Paper Co., for a full report as to the

quality of the paper now being made at the mills..... and I will advise you further.

.....I went to the office of the Great Northern Paper Co., and had a talk with Mr. Powers and Mr. Joyce. I find that the Company is having absolutely no complaints at the present time as to the strength of the paper. Mr. Powers tells me that there is 6% more sulphite in our paper than that of the Internationalthey use only 19 or 20%. It is necessary for us to use this extra amount.... as we run at a much higher speed...

About the most difficult press room to run paper in the city is that of the New York Journal...Mr. Powers says that if paper will run on the New York Journal presses without breaking, they have no fear of the way it will run on the presses of any other paper.... The New York Journal approached us with an offer to make contract for additional 10,000 tons ... they must be pretty well pleased with the paper they are getting ... Our Mr. Powers considers he is an expert in this matter of judging the quality of paper ... He states that in his opinion the paper furnished the New York Sun is as good as they agreed to furnish, if not better, and his view is that he would resist to the last any claim for damages on (this) account.... I am going down to the New York Journal ... some night ... when they are particularly busy, and watch the paper run on the machines myself."

Mr. Reick was getting some pretty high level attention, but doesn't all this from the past sound awfully familiar to all you publishers and paper makers and salesmen? A postscript to this letter gives a hint about what may have been William B. Dillon's problem.

"P.S. The last time Mr. Powers saw the Manager of the New York Journal, he said 'Powers, I am always glad to see you, as you tell me the truth about matters, and the information you give me can be relied upon.' This is the kind of feeling we are trying to create with our customers, and shows that they appreciate a change from the methods pursued by Mr. Powers' predecessor."

The Sales Department, or "Selling Department", as it seems to have been called then, evidently had been having troubles. Garret Schenck had wanted to be rid of William B. Dillon, but if he had had a candidate to replace him, it had not been W.C. Powers. However, the latter's stock had gone up with him. On October 13, 1913, he wrote to F.S. Rollins:

"You may remember that I withheld my endorsement of Mr. Powers on the grounds that I wanted to see how he worked out. I have, for some time, been more favorably impressed with his work, and at this time am more willing to endorse him than at any period since he came to the Company Mr. Powers inherited a pretty bad

condition when he came with the Company. The company had no friends, so far as I know. I do not know where you got your information that he has made enemies among the publishers, as the direct information I receive is that we have more publishers saying a good word for us at the present time than ever before. He certainly is direct and honest with the publishers - and any good buyer likes that In regard to your suggestion of a change - I can only say that I do not agree with you. In fact, I believe it would be disastrous to make any change in the head of our Selling Department at this time, when so many contracts are up that have been covered by our present management.

In conclusion, I want to say that when I last met Colonel Payne, I told him that I would be responsible for putting the selling into as good shape as is the rest of our outfit; and I repeat this to you as one of our Directors."

This was Garret Schenck at his best. He was careful in choosing his men, watched them perform, and when they did a good job, he gave them credit. Thus it was that he built the organization which "to him gave the best they had". Woe betide the man who did not.

The Sun did not pay up, and the Company sued for \$34,516. The Sun entered a counter suit for \$35,000, charging deficiencies in weight, color, finish and strength; that the paper was not uniform, was brittle, weak, loosely wound, full of slime holes and poor pasters (splices) and in general was unfit for use. Negotiations were started out of court; the Company reduced its claim to \$25,000; the Sun offered \$20,000 as the date for the trial drew near, apparently not being too sure of its case, and after a last-ditch appeal to the Commodore to split the difference, settled in May, 1914 for \$25,000.

From 1914 until late in 1918, there was no change in the makeup of the Board of Directors, the Executive Committee or the officers, nor were there any more high-level rhubarbs -- at least none which resulted in the departure of any of the really top people. Indeed, while there were a number of changes in this area, for one reason or another, it was not until 1929 that there was another serious blow-up.

The years 1913 through 1916 were extremely active. Before going into the major developments of this period, it might be well to pause and look both ways at what had happened and what was to happen, environmentally and statistically.

The consumption of newsprint in the United States had been rising, and continued to rise at a steady rate:

YEAR	TONS
1910	1,210,500
1911	1,267,700
1912	1,358,500
1913	1,448,300
1914	1,547,200
1915	1,648,000
1916	1,707,900

While the Canadian industry did not really begin its great expansion until after World War I, it was beginning to make itself felt by 1913, with exports to the United States of 147,000 tons, about 10 percent of consumption, and with the final removal of all duties on newsprint, it had commenced to grow. In 1916, its exports to the United States were up to 438,000 tons, around 25 percent of consumption, through the construction of new mills and the addition of machines to existing mills. Because of changes in ownership and the shifting of grades, it has been hard to learn where all the Canadian expansion took place in this period, but Abitibi had started up its new mill at Iroquois Falls, Ontario, in 1915, and the Donnaconna Paper Company, had started up a big new machine in 1916.

However, the beginnings of a meaningful industry in Canada, with obvious cost advantages and no substantial markets except in the United States, not only discouraged expansion in this country, but caused news mills to begin to shift to other grades. The result was that the domestic production of newsprint practically stagnated after 1913, and while consumption continued to grow, the increased demand was almost entirely supplied by Canadian mills. This situation is shown by the following tabulation of United States and Canadian newsprint production:

YEAR	U.S. PRODUCTION TONS	CA NAD IAN PRODUCTION TONS	CANADIAN EXPORTS TO U.S. TONS	
1910	1,140,000	-	-	
1911	1,177,000	-	-	

1912	1,253,000	-	-
1913	1,305,000	402,000	147,000
1914	1,313,000	470,000	275,000
1915	1,239,000	549,000	329,000
1916	1,315,000	662,000	438,000

Figures for Canadian production and exports to the U.S. before 1913 are unavailable.

While the Newsprint Service Bureau and other sources have stated that hewsprint prices remained fairly steady through the early Canadian expansion, the price actually dropped considerably late in 1913. The Boston News Bureau, commenting on Great Northern in September of that year said:

" A year ago 2.25 cents per pound was a fair average selling price. Today paper is selling at 2.10 to 2.12, a difference of \$3 to \$4 per ton, which must have eliminated the profits of very many of the smaller mills. The markets of the United States have had to absorb this year a big increase in output from Canadian mills, estimated all the way from 1,200 to 1,500 tons per day. This production has been taken care of with no greater decline in price than that mentioned above.

The present situation in paper has improved to this extent. Canadian mills have stopped expanding and new projects are being held in suspense - a direct outcome of tight money conditions in the Dominion." Some time early in 1914, the same publication stated that Great Northern, while it was getting \$3.00 a ton less for its paper than a year before, had so much water in storage, and such a low operating cost, that it could maintain a high rate of production and earnings while other mills were experiencing difficulty on both counts; and forecast the possibility of the Company's installing another machine in 1914.

The following tabulation shows newsprint prices for the period 1910 through 1916, from official sources. From 1916 on, we will use actual Great Northern prices, as far as possible, and except as may be noted. As seen above, this tabulation is not of any great value, except for the last two years. The 1915 Great Northern price relative to the Newsprint Service Bureau figure, may be explained by the contract situation examined next.

AVG. N.Y. DEL'D PRICE	ROYAL S. KELLOGG (NEWSPRINT SERVICE BUREAU)	GREAT NORTHERN PAPER COMPANY
1910	\$ 45.00	
1911	45.00	
1912	45.00	\$ 43.00 (a)
1913	45.00	
1914	43.60	
1915	41.78	44.00 (b)
1916	51.78	42.00 (c)
(a) Calculate	d from N.Y. Sun settlement	
(b) January 1	, 1915 - September 1, 1915	
(c) September	1,1915- September 1, 1916	

Even though prices had begun a downward trend in 1913, the publishers, disturbed by the shift of U.S. mills into other grades, began to accuse them of doing this only to drive the price up again, and this set up another confrontation. In 1915, the mills formed the News Print Manufacturers Association, taking in most of the producers in both the United States and Canada. Great Northern, of course, did not join. This organization set up an arrangement whereby three U.S. sales firms handled the output of a number of Canadian mills, with the idea of preventing the publishers from playing one mill against another. Demand had begun to go up by 1915, but many contracts had already been made for the following year, at no change in price. However, by 1916 a boom in advertising had developed, causing a very much greater demand, and the large papers found themselves short of contract newsprint. In order to meet their needs, they went into the spot market, where they could afford to pay big prices for the amounts of additional paper, small relative to their contracts, which they required. Under these circumstances, the jobbers raised prices relentlessly. This hurt the small newspapers, who depended upon the spot market, rather than on contract paper, and they began to scream. To make matters worse, the industry in general, including Great Northern, adopted an F.O.B. mill price basis, plus the actual increase in the cost of certain items above those of a base period, in offering new contracts. As early as April, 1916, the small publishers had gone to the Congress with their complaint, and the Federal Trade Commission had been instructed to make an investigation of the situation. This inquiry had been started immediately, with

the large publishers not particularly interested, and the manufacturers righteously cooperative. However, by July the F.T.C., on account of the cost plus feature of the new contracts, was digging pretty deep, asking for cost information back to 1913, and word began to get around that they were finding evidence of price gouging. This brought the big newspapers into the act, criticizing the F.T.C. for not publishing its findings, and obtaining a Senate resolution calling for a broader investigation. This stirred up the F.T.C., which in November released the information that where contract prices prior to 1916 had been \$40.00 a ton, or a little less, F.O.B. mill, the price on contracts made in the first half of that year had gone as high as \$65.00, accounting for the big jump which appears in the average price for 1916 in the above table, and that spot paper was being sold at prices as high as \$140.00 a ton.(1)

In contrast, Great Northern's contract base had been \$42.00 through most of 1916. In September, it announced a 1917 price of \$46.00 f.o.b. mill, plus allowances for actual increases in cost, which came out to \$55.00, delivered New York. The Newsprint Service Bureau gives the average contract price, delivered New York, for that year, as \$63.78. The Company had also carefully refrained from having anything to do with anything that even looked like a cartel, and it had done its best to keep all its customers supplied during the shortage.

This particular investigation, started in 1916, went on in one form or another for two years, but this was the situation at the end of the 1910-1916 period we are discussing, with Great

Northern looking very good indeed.

Up to this time, and in fact for many years after this, Great Northern was very cozy about financial information. It did put out some figures from time to time in interviews with the financial press, but divulged almost no hard information, and it issued no formal financial reports. Efforts have been made to locate figures on the market value of the Company's stock in the early years, without success. As late as 1912 there was very little of it around anyway, as the Company had had to buy from Col. O.H. Payne to settle with George Parks. This is confirmed by an article in the Boston News Bureau in December, 1912, which gives the first figures that have been found.

"It is understood that Great Northern Paper Co. is planning to give its stockholders a dividend return of 10 percent during 1913. For the current year, 8 percent will have been paid, of which 6 percent has been in the form of a regular dividend with a 2 percent extra. In all probability the additional 4 percent to be paid in 1913 will take the form of an extra of 4 percent or two extras of 2 percent each.

Great Northern Paper has \$6,000,000 stock outstanding, and its earnings have for years averaged far in excess of the comparatively modest 6 percent dividend.

The common stock on outside transactions has been gradually climbing upward from 120 earlier this year to about 145, the present market. Buying has been largely in behalf of inside interests."

1974

Late in 1914, a request was received from the Internal Revenue Service (Treasury Department) for a list of stockholders and a statement of dividends paid. The Directors refused to divulge this information, although certainly dividend payments, as noted above, were public knowledge. It also received about the same time a demand from J. Sanford Barnes for a balance sheet, and from the Department of Commerce for a list of officers and directors, a statement of gross receipts, and a balance sheet. Both of these requests were referred to counsel, but there is no record of the action taken. This need not deter us from this point from giving the Company's record for the period under discussion:

YEAR	PRODUCTION TONS	FARNINGS	FARNINGS PER SHARF	DIVIDENDS PER SHARE	NO.SHARES
1910	156,030	\$ 1,168,262	\$ 19.05	\$ 6.00	60,000
1911	161,501	849,866	14.16	7.00	**
1912	164,080	1,897,632	31.63	8.00	**
1913	167,833	1,892,340	31.54	10.00	¥ \$
1914	182,824	1,624,108	27.07	10.00	11
1915	191,633	1,863,335	31.05	10.00	ŤŤ
1916	209,088	2,161,562	36.03	10.00	11

The Farnings figures are after 1% Federal taxes, except 2% in 1916.

It does not take much figuring to find the very comfortable profit margin that had developed by 1916. Incidentally, the year 1910 marked the beginning of an as yet unbroken record of quarterly dividends.

With all this in mind, let us now go back to the year 1913, when the Company began its second phase of expansion. The management seems to have had no fear of Canadian competition, the "Trust" was still somewhat in disarray, and in spite of Garret Schenck's statement that the Company "had no friends", the demand for its product had resulted in the decision made late in 1912 to add the fourth machine at the Lower Mill. The increase in production in 1914 over that of the previous year is largely due to this machine, which started up late in 1913. Immediately following this start-up, it was decided to go ahead with the twomachine expansion at the Millinocket mill which had been studied and rejected by Hardy Ferguson in 1903. The immediate reason for this decision was undoubtedly the obvious one; to take advantage of the increasing demand for newsprint and the price situation which has been noted. There had been an official appropriation of funds for the addition of the machine at East Millinocket, and there must have been a lot of discussion by the Directors of this Millinocket expansion. If there was, or if there was any specific appropriation of funds for these two machines, either it was not recorded, or the writer has overlooked it.

Construction of the new machine room, a two bay extension on the down-river side of the original room, was started in the summer of 1914, and the installation of the first of the two new machines, designated No. 9, the wrapper machine being renumbered, was begun in November. The new No. 10 machine was installed late in 1916. The design of No. 9 had some unusual features, including the Pope reel, which is evidence that this had already been worked out by 1914. Eventually, this machine was to be the first successful high-speed unit in the industry, but as installed, it was a farout experiment, and did not make much paper for quite a while. No. 10 had some of the features of No. 9, and some new ones of its own. The details of these two machines will be gone into at some length in a later chapter of our story, but we should at this point introduce the man who had so much to do with their design, and outline what it was he did that made high-speed newsprint production possible.

This was Charles Flmer Pope (1858-1922), mentioned previously in connection with the Madison mill. He was a native of Pennsylvania, and had gone to the Valley Paper Mills in Holyoke, Massachusetts, as a young man, to learn the paper business. He then spent some time in mills in Ohio and Wisconsin, and in 1893 was in charge of the paper mill machinery exhibit at the Chicago World's Fair. He returned to Holyoke about 1900, and became associated with B.F. Perkins Co. as a designer. By January 1, 1914, when he was hired by the Great Northern Paper Company "to assist in designing, constructing and starting Paper Machines", he had made a name for himself as an inventor and designer, particularly in the field of improvements to paper machines and their auxilliaries, and had a number of patents to his credit. He was General Manager of the Japanese Tissue Mills in Holyoke at that time, and one reason the Company was interested in him was that he had been active in the development and operation of tissue machines, which ran at much higher speeds than those making news.

He came to the Company under a contract whereby he was to assign all patents of which he was the owner, or his interest in any in which he was part owner, together with any which he might take out in the **future**, to Great Northern, and the Company was to assign them to a new corporation, capitalized for \$100,000, to be formed by Great Northern and others, for the purpose of marketing his inventions. He was to have one-sixth of the stock of this new company, plus \$25,000 in cash, and was to receive a salary of \$400 per month, part of which was to be paid by the St. Croix Paper Company, its participation no doubt deriving from its association with Great Northern in the Eibel Process Company.

His assignment was to develop a paper machine, or to make improvements in existing machines, that would allow production of newsprint at speeds higher than those then possible, the magic number being 1,000 feet per minute. He went at it both ways, working out improvements, and designing both improved equipment and a new type of paper machine.

The maximum speed at which Great Northern machines were operating at that time was probably around 600 feet per minute, about twice as fast as they were running ten years before. In our day, 1,000 feet per minute is impossibly slow for newsprint, but in 1914 it was just a dream. There were a number of obstacles in the way of high-speed operation. Some of these were not recognized at the time, and did not turn up until later, but the obvious problems were those of getting the paper through the machine, from one section to the other, on starting up or after a break,

and the lack of a reel that would handle greater amounts of paper. Although it became more difficult as speeds went up, the sheet could be taken through the dryers by hand at considerably more than 600 feet. The real troubles were in the transfer from one wet end section to the next, at the calender stack, and at the reel.

There is little information on the sequence of events in Flmer Pope's program, if it could be called that. It would appear that he thought that he already had a way around the wet end transfer, and that he did have the answer to the reel problem, but that his proposed solution to the calender stack bottleneck was to do away with the stack altogether. This concept was carried out in the design and construction of the original No. 9 machine, and it bombed. He eventually had to accept the need for the stack and find the answer to the problem of threading it. His original ideas on the wet end transfer had to be modified, and he made his own problems in connection with the dryer section, which had to be solved. It was several years before the goal of 1,000 feet was reached, and Pope had some help, but he was almost entirely responsible for the development of the equipment which led to the breakthrough, and the equipment itself, outside of the benefits of increased production, made the Company, and others, a great deal of money.

The Great Northern machines of 1914 were those installed in 1899, mechanically somewhat improved, but not materially different in operation. We will not try to explain the making of paper on these machines. However, it seems necessary to provide some information about the equipment and operation, to explain what Elmer Pope was up against, and to lead up to the innovations incorporated in No. 9 machine, which will be described in another place. This information will be incomplete, and will have to be understood as being simplified and general in nature.

The old jacketed couch was still being used. This consisted of a bottom roll, which drove the wire, and a weighted top roll, set a little to the fourdrinier side of the vertical center line of the bottom roll, so that it bore on the wire to give it more wrap around the bottom roll. This was covered by a "jacket"; a tube of thick felt, drawn over the roll and tied at the ends. Across the top of this, set almost vertically, was a heavy wooden doctor, called the "guard board".

The fourdrinier was followed by several presses, for this purpose all more or less alike, each having a driven bottom roll and a weighted top roll, fitted with a doctor, approximately tangential and located on top of the roll. On each press was an endless woolen "felt"; not really felt, but heavy woven material like a blanket, going between the press rolls and returning beneath on various carring rolls.

After the presses came the dryer section; two tiers of steam-heated cast iron cylinders, each tier having a separate cotton "dryer felt" or "canvas" running under and part way around each bottom dryer and over and part way around each top dryer, these felts returning under and over the machine respec-

1974

tively. The dryer section was in two parts with approximately equal numbers of dryers in each so that there were two top and two bottom felts.

Following the dryers was the calender stack; a good-sized polished iron roll at floor level, with ten or more similar rolls of smaller diameter in journal boxes, loose in sliding ways in the tall calender frames, stacked straight up on top of it, one above the other, so that the weight of the whole bore on the bottom roll. Each of these rolls was fitted with a metal doctor, "latched" so that it could be loosened so as to be clear of the roll, and footboards ran across between the frames in front of and behind the stack.

Then came the upright reel, a devilish contraption of two removable drums, some 18 inches in diameter, one near the bottom and the other near the top of a set of vertical frames. These two drums were set a few feet apart; had no contact with each other, and the drive allowed either drum to be slowed down, stopped and removed. This was not the original reel, in which the drums were not removable. The slitter and winder which followed the reel were apparently not considered to be problems.

The sheet was passed through the machine as a "lead strip" ten or twelve inches wide, cut from the front side by the "cutoff squirt" on the fourdrinier. This followed the wire, after passing through the couch, and was washed off into the wire pit, along with the rest of the sheet. It was passed over onto the

1974

first press felt by jamming a handful of wet broke against it, to which it adhered, broke loose from the wire and could be thrown down on the felt, which carried it into the nip of the first press. On the press, it followed the hard, smooth surface of the top roll up to the doctor, where it was scraped off, and piled up in a wad. A man standing on the frame of the machine broke this loose by scratching across it with his fingernails, pulled it down away from the roll, and threw it down onto the felt, which, extending on rolls several feet on each side of the press nip, carried it over to the next felt, where it went up on the top roll of the next press, and the process had to be repeated.

There was no trouble getting the lead strip into the dryer section, through which it was carried by hand, a man walking along beside the frames reaching in, catching the strip as it came up between the bottom felt and bottom dryer, passing it up into the nip between the top felt and the top dryer, and so on down the machine.

When the lead strip was safely through the dryers, the sheet was "widened out" by pushing the cut-off squirt slowly across the back side of the wire, and in a few seconds the whole twelve feet or so of paper was coming through the dryers and going down the broke hole under the last dryer into the basement. It then had to be put into the calender stack.

To do this, another lead strip was cut from the front side by pressing a sharp tool against the sheet on the last top dryer. A man standing on the footboard behind the stack could then reach

over, sieze this strip, wad it up slightly, turn, and thrust it into the proper nip near the top of the stack. This operation required practice and dexterity, but while it could be performed quite readily, this was where the grief on the stack started. The path of the lead strip had to be downward around the calender rolls, through each nip in turn in opposite directions, but it always tended to go upward. Before starting the stacking operation, the doctors were set down against the rolls, and as the lead strip came up to the doctor, it was scraped off, wadded up, and pushed out against a set of flat, curved metal fingers, which guided it downward into the next nip below. This did not always work, and the man on the footboard had to lift the guides, and shove the strip into the nip by hand. This was a dangerous procedure, but eventually the strip would get through the stack, and was again widened out by drawing the point across to the back side of the machine.

The sheet was put on the reel full width, by a man lifting the front edge to get some slack, and passing this under the empty drum. As it came under the drum, another man caught it and threw it over the top, and it usually caught, and the machine was in business. However, the top drum had to be set low enough so that this operation could be performed, and this did not leave enough space between the drums to make a very large reel. For this reason, if for no other, the upright reel was impractical at high speed, as it would have been necessary to change the spool every few minutes. Moreover, the sheet had to be shifted from one drum to the other with the full reel in place, and this did not leave much room in which to work.

1974

We have covered the points where the limitation on speed was the handling of the paper through the machine. At speeds much above 650 feet per minute, it became virtually impossible for a man to move fast enough to get the lead strip off the couch or the press rolls in the manner we have described. It could be taken through the dryers, and could be put into the stack at considerably higher speeds, but the stack could not be threaded by hand at high speed after getting the paper into it; the reel did not have sufficient capacity; its nature did not allow of re-design that would enable it to handle more paper, and getting the sheet onto the reel was a dangerous operation.

Elmer Pope seems to have had the principle of his reel worked out before he came to Great Northern in January, 1914, but as far as is known, the first commercial installation was on No. 9 machine, in that year. It is hardly necessary to describe the Pope reel, with its single large driving drum and relatively small transferrable spools; driven by friction. This reel is still in wide use, embodying Pope's original principles, although it has been much changed in appearance, and, with modifications and improvements is now sold under other names. It took care of the problem at this point, permitting the building of very much larger reels, and very many fewer transfers. From the original drawings, it is evident that it was intended to put the paper on this reel by hand, and that the air devices used with it were worked out after it was installed.

He solved the problem of stripping the sheet at the wet end by the use of compressed air, and what he did can be described much more quickly than could the condition which he had to overcome. His first efforts were in the direction of blowing highpressure air tangentially downward against the lead strip on the top couch or press roll, from a slot in a wedge-shaped air box. This had worked on tissue, but was not effective on the heavier news sheet. As we have said, we do not know what steps he may have gone through in the course of his experiments, except as they may be developed in connection with later discussion of No. 9 and No. 10 machines, but it could not have been long before he came up with the principle of the opposed air jets. The equipment consisted simply of a short piece of pipe, pivoted so that it could be swung out of the way after use, with small nozzles at each end directing jets of air under the edges of the lead strip on the roll to lift them up and throw slack into the strip, allowing fixed nozzles attached to the machine frame to break it and blow it away from the roll and down onto the felt. This device was very successful, and the equipment is still in use, although there are some recent applications that are reversions to the direct blast principle.

Compressed air was also his answer at the stack, which presented a much more challenging problem. In the early stages, he does not seem to have been concerned at all with getting the paper into the stack, which as we have said, could be done by hand at fairly high speed, but devoted his attention to means of getting it threaded down through to the bottom roll. There was

1974

nothing new about the use of air to handle paper at the calenders, there being a number of old patents on various combinations of doctors, air blasts and lead guards intended to eliminate the necessity of fisting the strip into the nips. None of these seems to have been effective at high speeds, or even at lower speeds. His so-called inventions in this case, therefore, were improvements on former air devices attached to the doctors, his patent claims providing for air to be directed against the upper roll of any nip, but in a downward direction, by nozzles placed in the doctor blade holders. The fine points of the differences between his claims and those of older patents were argued out in the courts, all the way to the Privy Council in England, and they decided that his improvements were what made the concept work.

Elmer Pope seems to have been a combination of genius, engineer and cut-and-try experimenter. He might have accomplished his purpose sooner, except for the fact that he was a dedicated alcoholic. A former Superintendent of the Millinocket mill told the writer that when he was a Bureau of Economy apprentice, one of his duties for some time was to keep track of Elmer Pope, and see that he stayed in the machine room where he belonged. In spite of his guard, he often escaped. The late Lester Smith wrote of him:

> " So far as Pope was concerned, he was a pain in the neck for me. He came from Holyoke, and as an inventor was a success, but otherwise, he was a nuisance, doubled and redoubled. The Company went

to court to get authority to pay his salary to his wife. So when he went on a binge he would go to some company that did business with Great Northern and borrow money. Then I would have to pay off the borrowed money, and when we found him, ship him to Millinocket and send for his daughter, as she was the only one who could make him behave."

The experiments with No. 9 machine at this stage were kept very secret. The first news of them was leaked through an article in a trade magazine called "The United States Paper Maker", on October 15, 1914. This is quoted in part:

> "PAPER MACHINE TO RUN ONE THOUSAND FEET A MINUTE The Rice, Barton & Fales Machine & Iron Company Is Now Installing for the Great Northern Paper Company a Paper Machine Which is Guaranteed to Run a Thousand Feet a Minute.

A revolution in paper making has been quietly under way for a number of months, but so well has the secret been kept that only a few knew of it. In this case there wasn't a chance for a censor to do any work, as there were no reports to edit.

THE UNITED STATES PAPER MAKER is, then, the first to make the announcement that a machine over 200 feet (sic) wide is being set up in the Millinocket mill....that is guaranteed by the makers to run one thousand feet a minute. And another part of the story is that if the guarantee is made good the Great Northern will order from the concern seven more machines of the same kind.

In connection with the almost incredible speed of the new machine it is interesting to note the fact that about fifteen years ago, when the average speed of fast machines was 350 feet per minute, the editors of the English trade papers ridiculed the prophecy that within a few years American machines would be speeded up to 500 feet a minute... as a good specimen of American brag....scarcely worth reprinting. Since that time the speed of machines has gradually gone up ... to 625 feet...about the present best speed. And now for one thousand feet a minute - and this speed guaranteed....."

Our old friend Derb, who was pretty close to Garret Schenck, and who had said in 1900 "You are welcome to walk through the Great Northern Paper Company's plant and see anything and everything you please", had trouble getting confirmation. In January, 1915, he wrote in the Paper Mill:

> " 'During conversation with some prominent paper manufacturers in New York Tuesday, the fact was mentioned that you had never published anything relative to the new machine recently installed by the Great Northern Paper Company, which is advertised to run 1,000 feet per minute.

1974

If you have anything relative to this machine, which you think would be valuable, would be interested to read about it in one of your issues'.

If the writer of this letter only knew what I know about the Great Northern Paper Company and its president he would not have rubbed in on me another of the many jolts that I have received since this ONE THOUSAND FOOT A MINUTE agitation loomed up with this company....

I have been out and I have been trying every way to find out whether the statement was true that he was installing a machine to run 1,000 feet a minute and make 100 tons of paper a day.

I went to Rice, Barton & Fales. They told me they were simply building another Fourdrinier machine for the Great Northern Paper Company. I went to Mr. Powers (W.C. Powers)... His statement was that 'we are simply installing another paper machine'....After traveling around for a week and talking with different people down in Maine I found out as near as I could that it was really a fact....but could I get this information from Mr. Schenck about this machine? Well, if you know him, you know that mum is the word; that is his motto and always has been on anything that he starts out to do, and yet this paper manufacturer writes to me and asks me why I don't write something about this thousand foot a minute machine....."

He did garner a little information here and there about the design of the machine, which he printed, concluding:

"The main and most important feature....is the carrying of the sheet to and through the presses, the dryers, from the wire, without the aid of human hands, and this is accomplished under a patent granted to Elmer C. Pope, whose first application for the device was on a tissue machine, where it has been running most successfully.

The machine minus clothing and wire has been run at a speed of 1,000 feet a minute, but no paper so far has been run over it....When they have accomplished this... nobody will know it but Mr. Schenck, Mr. Whitcomb and the superintendent of the mill."

The decision to install two more paper machines at Millinocket had of course also involved the decision to provide more water storage, in line with Hardy Ferguson's 1903 report, and this brings us to another important development of this period.

It has been noted that the timber dam at the foot of Chesuncook Lake, first built some time perhaps as far back as the 1330's and replaced in sections at various times after that date, had been completely rebuilt by the West Branch Driving & Reservoir Dam Company in 1903-1904 "in the old-fashioned way". This dam was 1513 feet long. It had twelve 8-foot deep gates, with sills at El. 908.6, and six 12-foot shallow gates, all in pairs; and a 25-foot log sluice. The approximate elevation of the lake behind this dam, when it was full and not spilling, was 930.6 (G.N.), and this was its level in 1910, according to the Maine Water Storage Commission. At this level, Chesuncook Lake, Caribou Lake and Ripogenus Lake were all separate bodies of water. Some three miles downstream, at the head of Ripogenus Gorge, was the old Ripogenus Dam, a small wooden structure, which had also been rebuilt in 1903 as part of the West Branch improvement program, holding water at El. 898.0 (G.N.), so that, even with Chesuncook empty and Ripogenus full, there was a drop of some ten feet between the two dams.

In 1907, the West Branch Driving & Reservoir Dam Company had obtained from the legislature (Chapter 206, Private and Special Laws of Maine, 1907), the right to raise the Ripogenus dam, or to build a new dam at or near this location, to a height which would raise the level of Chesuncook Lake 4.5 feet. This meant of course that the Chesuncook dam would be flowed out. The Company's records go back only to 1911, but it would appear that some time in 1910 the level of Chesuncook Lake had been raised by the authorized amount, or perhaps a little more, by raising the Chesuncook dam itself, as the full elevation in January, 1911, is given as 935.5 (G.N.) During the summer of 1911, the old Ripogenus dam was also raised five feet, to carry water at a maximum elevation of 903.0 (G.N.) Incidentally, Great Northern elevations are 2.41 feet higher than U.S.G.S. datum in the Ripogenus area. Two more lines of grinders had been installed at Millinocket on the strength of this increased reservoir capacity.

In May, 1913, Garret Schenck had reported that the Ripogenus dam would have to be rebuilt within a few years, and recommended that a start be made. It is clear that at this time the inten-

1974

tion was to build a big dam, flowing Ripogenus Lake and Chesuncook Lake together, as provided for in the 1907 legislation, as the first appropriation, made at this time, was for the construction of a good road on the east side of Mooshead Lake, from Lily Bay to the damsite, a distance of some thirty miles. According to Alfred G. Hempstead, in "The Penobscot Boom", a road had been started from Lily Bay in 1910, following the old tote road, and had been built piecemeal as far as the Grant Farm, but work began in earnest in 1913. A good gravel road, including a side road to the boom house at Chesuncook Dam, was completed the following year, at an estimated cost of about \$60,000. This work was done by the Great Northern Paper Company.

Construction of the new dam, the present structure, was started early in 1915, by the W.B.D. & R.D. Co., with Great Northern money, of course. It was built for additional safe water storage, the need for which had been growing right along with higher paper production. Long logs were still being driven, and more of them, but the need for additional water for log driving, while important, was almost incidental. The big need was for storage for power. The studies made at the time have not been located, but the reason for selecting the Ripogenus site rather than that of the old Chesuncook dam seems quite clear. It seems to have been the intention to provide for eventually raising the level of Chesuncook Lake to a point even higher than that authorized by the 1907 legislation. Another survey of the possibilities of additional storage on the West Branch, conducted in 1911 and 1912 under the direction of Hardy Ferguson had focused on Chesuncook and Seboomook, and the building of a new higher dam at Seboomook

in 1912 has been noted. At this time, it was determined that a new dam to raise Chesuncook Lake to the highest level possible without excessive flowage damages should be built not on Chesuncook, but at the foot of Ripogenus Lake, flowing the two bodies of water together. A higher dam at the old Chesuncook location would have been tremendously long, and while the inclusion of Ripogenus Lake in the flowage did not add much storage, the site at the head of the gorge allowed of a much shorter dam, with good landings in the high banks on each side.

There is a letter, dated February 28, 1912, from Hardy Ferguson to Everett Amey, the Spruce Wood Department's engineer:

"I have your letter of February 23d referring to the contour map of the Ripogenus damsite. The lines shown on the plan....were profiles....for the purpose of comparing roughly the quantities required for the dam at various locations. These profiles are all at Millinocket.... and I cannot remember just which one of them was thought to be the most suitable location for the dam. My impression is that either one of the profiles just below the present wooden dam or just above it were considered to be the best location....

Of course my idea was that before a final location and design could be made for the dam that reliable soundings should be made to determine the location of the ledge right across the valley..... In my opinion it is desirable to locate the surface of the ledge entirely across the valley for quite a distance below and above the present wooden dam.

I saw Mr. Gilbert when he passed through New York on his way to Bermuda, and he told me that he had ordered a well-boring machine to be shipped to the dam to make these soundings. In my opinion, soundings made by the use of such a machine will not prove reliable, and that a diamond drill should be used for this purpose in order that samples may be brought to the surface. A person is likely to be entirely deceived as to the position of the ledge by the use of one of these well machines and furthermore there is absolutely no way of determining the quality of the ledge.... Borings, however made, it seems to me, should be done under the supervision of an engineer who can locate the holes and accurately keep a record of the depths and elevations of the ledge and of the quality of the materials encountered, and record this information properly on a map of the dam site."

This letter illustrates a typical Fred Gilbert decision, and it was over-ruled. Borings were made as directed by Hardy Ferguson, and the site selected was a little below the old wooden dam. Hardy Ferguson designed the dam, a concrete gravity structure some 92 feet high above the ledge at its deepest point and 64 feet thick at the widest point. It was approximately 360 feet long, measured between points normal to its extremities. The main dam was and is approximately 704 feet long. Near its north

1974

end were four deep waste gates, in the form of passages through the solid concrete, each approximately 9 feet square, with all sides slightly convex, bottom elevation at 885.0 (G.N.). This was surmounted by 26 piers, 20 feet apart on centers, and provided with slots for stoplogs. The height of these piers and the elevation of the concrete roadway deck over them, F1.945.17 (G.N.) indicates the intention to provide for carrying water at a level somewhat higher than authorized at that time. At the south end, a short retaining wing angled upstream, adding about 25 feet as measured along the axis of the main dam. At the north end, a wing extended, on the axis of the dam, a distance of 130 feet, and in this were two log sluice gates, one for low water, with its bottom at El. 921.0 (G.N.) and one for higher levels of water, at El. 929.0 (G.N.). Below these gates was a concrete log sluice, some 450 feet long, leading down into the gorge. All the gates were steel, and the deep gate passages were originally lined with ribbed cast iron plates, anchored into the concrete. It was necessary to have power to move the gates, and the original plan called for a small wheel-room, to house a vertical turbine, to be built deep into the dam just north of the waste gates, but this was never done. Instead, a gasoline-driven generator set was installed in the gate house built over the deep gates, to provide power and light.

This dam, far up in the woods, was a tremendous project. It was said to have been the largest storage dam ever built by a private corporation for its own use up to that time, and it

created the then fourth largest storage reservoir in the United States. The site, about 100 feet below the old timber dam, was some 45 miles from the nearest railroad, which was at Kineo (Rockwood), on the other side of Moosehead Lake. Careful preparations were made to handle the transportation, really the greatest difficulty, starting with the construction of the road from Lily Bay. The Company took care of this problem itself, turning it over to J.T. (Joe) Mullen. It had a wharf and storehouse at Lily Bay, lots of experience with moving heavy loads long distances over snow roads, and hauling with horses and sleds across the lake from Kineo during the winter months was entirely feasible. For transportation after the ice had gone out, the Coburn Steamboat Company built a huge scow, 35 feet wide and 100 feet long, big enough to carry four carloads of cement, cars and all, on which this and other material and equipment could be ferried across to the Lily Bay storehouse. Somebody was careless with gasoline and dynamite at that place; (some say they were stored in the same room); shortly after the job was started, and it blew up and burned. It was immediately rebuilt, and was back in use late in June, equipped with conveyors for handling cement and other materials.

The new road, "a turnpiked highway, smooth, hard and nearly as good as a city street", according to The Paper Mill, was intended not only for the use of horse-drawn vehicles, but for a fleet of "autotrucks", some say seven and some say nine, one of which had been tested out for this service in the fall of 1914. This road had some bad grades, particularly the 1100 foot north slope at Sias Hill, near the Grant Farm, which would have to be negotiated by loaded trucks with dubious brakes. It was not deemed practical to cut down this grade, as has been done since, so a snubber, with 2200 feet of steel cable, was set up at the top of the hill to ease the trucks down. On this road, the trucks available at that time could make about 75 miles a day -- one round trip and half-way back -- or sometimes, under good conditions, two round trips -- 120 miles. Horse teams could make two round trips in a week. Every bit of the material and equipment for the dam, with the exception of the native lumber, and all the supplies for the construction crew, were transported over this road.

Most of the following non-technical description of the construction plant has been taken from two sources -- the Company's"Northern" magazine of November, 1921, author of the write-up unknown, and an article which appeared in The Paper Mill of February 20, 1915, signed "Penobscot", whoever he was, which gave rise to the following letter found in the Company's files:

"F.C. Bowler, Eng.,

Millinocket, Maine.

Dear Sir:

You will notice in the Paper Mill an article on the Ripogenus Dam. We are surprised at one outside our company having such accurate information. We therefore write to find out from you if you know where source of the information is. It is not our opinion that the information came from your office.

Yours truly,

Wm. A. Whitcomb

General Manager"

It is not recorded whether the leak was found, but this letter is illustrative of the policy of secrecy about Company affairs which had developed since Derb had written "There are no secrets for the simple reason that they have none that they are ashamed of." The management was by no means ashamed of this new project, nor of anything else, but what had been going on in the industry since that time had strengthened its determination to be independent, and one aspect of independence was that what you were doing was nobody else's business. Ergo, no matter how visible it might be, you did not divulge inside information about it to unauthorized outsiders, period.

Contract for the construction of the dam was let to the Aberthaw Construction Company of Boston early in 1915. Work at the site was actually started by the West Branch Driving & Reservoir Dam Co. in February, with the clearing of some eleven acres of land and the construction of one or two small buildings for the superintendent and engineers. These were in addition to the boom house and another building already there. The Great Northern Paper Company also started cutting the pulpwood out of the flowage, apparently leaving the rest of the stand, as an untidy fringe of standing dri-ki was around much of the shore when the lake was filled. There are indications that as much as 10,000 cords of pulpwood may have been taken from this flowage. Both the construction and flowage cutting, however, were taken over shortly by the Aberthaw Construction Company.

There is only a little information on the rates paid to

1974

labor on this job. The Company had been paying carpenters \$2.00 a day and board. Aberthaw paid them \$2.50 a day, and charged them \$5.00 a week for board and lodging. The men cutting wood had been getting \$2.00 per cord from the Company, which charged them \$3.50 per week for board. Aberthaw let contracts for 100 cords per man, at \$1.50 per cord, with the right to call the men in at any time for day work on the dam at 20 cents an hour, the board rate remaining at \$3.50 per week. The size and nature of the work force is not known, but some of it was Italian, as will be seen later.

A sawmill was moved down from somewhere upriver, and began sawing lumber "for the camps, for the forms and for the various other needful purposes". It is not known just where this was located. Quite a number of small buildings of one kind and another were put up along the hillside and on the edge of the flowage at the south end of the damsite -- "cottages" for the foremen and camps for the men, a cookhouse, a blacksmith shop, a little store, and other facilities. A 25 h.p. gasoline engine driven portable light plant was set up to furnish illumination in the various buildings and at the construction site. There was a rudimentary sanitary drainage system for at least some of the buildings, and it is said that there was a doctor on the job, as it was a long way from anywhere that a sick or injured man could get medical attention.

While horse transportation was used to a large extent to get materials to the site, for removal of spoil from the excavation, and for movement of material around the job, the operation was pretty well mechanized. An 80-ton per day rock crusher
was set on a heavy timber platform built into the side of the hill just below the south end of the dam. Rock was quarried from the gorge, loaded on small cars and hauled up to the crusher, screened stone dropping by gravity into a bin. Sand for the aggregate proved to be a problem. After considerable exploration, a bank was finally located near Carry Brook, a little more than a mile below the dam, and a pit was opened there, but the material was found to contain more dirt than permissible. Consideration was given to bringing in washing machinery, but backwoods ingenuity solved the problem in another way. Carry Brook was diverted into a flume discharging onto the hillside just above the rim of the pit. This water washed the bank down into the pit, around which was constructed a screen of spruce boughs, which let the mud go through, but stopped the sand. By moving the end of the flume, the course of the flow of water could be changed, and new banks of clean sand created. When Carry Brook ran dry, which it naturally did, water was pumped up to the flume from the river by a gasoline-driven pump. Sand was hauled by horse teams up to a storage pile near to but above the crusher, where it was picked up by buckets on an endless cable conveyor, operating without power other than the weight of the loaded buckets, which tipped automatically into a bin adjacent to the stone hopper. Bag cement was used, the storage house being also at or near the level of the crusher, a chute leading from this house down to the mixers, which were under the aggregate bins. Proportioning of the mixture was very well controlled. During the pouring of concrete, the chutes from the mixers discharged into buckets

running on two steel cables suspended across the gorge. These carried the mixture out over the dam, where it is believed that there was another movable system of buckets and endless gravity-operated cable conveyor, which distributed it to movable hoppers with jointed spouts, discharging into the forms. Four steel guy derricks were placed along the line of the work, for handling forms and materials. The ledge under the site was found to contain faults, and before pouring began, holes were drilled at frequent intervals, and the ledge was grouted.

The Aberthaw Construction Company carried on the job through 1915, but about the end of that year, for some reason which has not been determined, they were pulled out, and it was turned over to Joe Mullen, who completed it late in 1916.

On May 1, 1917, the Company's records show the maximum water level behind the new dam as El. 940.0 (G.N.), four feet lower than it is now. This meant that eight feet of stoplogs were placed on the crest. Caribou, Ripogenus and Chesuncook lakes were all flowed together; there was considerable change in the face of nature around the head of Chesuncook Lake, and the old Chesuncook dam was of course completely under water at this elevation. Before the new storage was filled, the old Ripogenus dam was removed, and the gate sills of the old Chesuncook dam were blown out, but no other work was done there, a fact which led to a cruelly difficult job later on. The highway bridge created by the new dam led to nowhere in particular except a

tote road, but in 1916, construction of a good road northward toward Frost Pond was begun. This, as Kipling would have said, is another story.

Garret Schenck, in spite of his past propensity for free spending, seems to have been watching the cost of this job most carefully, at least in its early stages. Little correspondence of significance relating to the Ripogenus Dam job has been found, but the President's inquiries drew a couple of replies from Elmer Prouty, the Company's engineer on the job, a very outspoken man. They are quite long, but are quoted rather fully, with some editing for clarity. They add some information about the job, and the nature of things at the time, and they are full of unconscious humor, although he was not trying to be funny when he wrote them.

The first is dated at Kokadjo, the post office address for the job, May 9, 1915. The parentheses, except the first, are the writer's:

"H.S. Ferguson,

200 Fifth Avenue

New York, N.Y.

Dear Mr. Ferguson:

Yours of the 6th. just received, regarding manner of handling this job which in the opinion of Mr. Schenck, seems extravagant.

of handling things here. He is much concerned for instance, about the Commissary Store, and the "luxuries" which have been requisitioned for it (but cut out of the order). I presume he may have gotten the impression that these things were to be furnished on the regular Bill of Fare in the Cook Room. This was not the case at all. For instance, there was a crate of Grape Fruit and a standing order for two boxes of oranges per week. These were included perhaps at my instigation, and I have no doubt would have been sold without a loss if possibly without much profit. The same way with candy and soft drinks, our proposed line including grape juice, moxie and ginger ale, all of which sell very freely around construction work in warm weather especially.

We have a supply of chocolates which have sold freely. You understand, of course, that the men can get none of these things unless the Commissary carries them, and will naturally turn next to the Italian Shanty for what ever they can find there. And in this connection would say that Murray Bros. (the labor contractors) have a camp, bake oven and store here, over which the A.C.Co. (Aberthaw) have no control. Our point of view is that whatever we can reasonably do to make the men contented and supply reasonable desires, tends to the efficiency of the men and the loyal forwarding of the work.

In regard to this point about the foremans cottages, would say that the first one was built by the Great Northern Paper Company in February, before the A.C.C. came here, and that the plans for all these cottages and other buildings were submitted to Mr. Gilbert before any others were started. He also built the Italian Camp for Murray Bros... These as well as all the buildings are constructed of the roughest sort of green, fresh sawn lumber, unsheathed.

As to his contention that plenty of foremen can be obtained for this work who would be willing to leave their families, I will say no doubt they could be. Foremen have always been available for woods operations on that basis. But construction work is somewhat different than lumbering, and I know from severe experience that a man who has with him a wife of average good temperament, is more contented, does better work, and is far more permanent and altogether more dependable than a single man or one undergoing an enforced separation from his wife. As to the cost of the cottages will say that (They are estimated) to show a net loss of \$466.26 in one year. I fancy this amount may be reduced; but granting it, I consider it a good investment of a good deal larger sum than that, if we can keep the experienced and tried bunch of foremen that Mr. Maxson (the A.C.C. Superintendent) has drawn about him during the last eight years, and keep them contented and loyal.

Finally Mr. Schenck should realize, and I think he will from the A.C. Cos. Report for the month of April,

1974

that no man on the payroll is getting something for nothing. That is, the Great Northern has always paid about so much per month and board. That was the system when the A.C.Co. took hold here in March.....

As to the accounting for all supplies brought in here which also seems to worry Mr. Schenck, would say, that the Great Northern have had all kinds of Auditors here and none of them seem to be able to criticize or improve on the system in use, which does absolutely account for every item, no matter how trivial...."

On June 17th, Hardy Ferguson wrote again, saying that he had inquiries from Garret Schenck about the building of a tennis court, criticizing the extravagance of building separate homes for individual men, and complaining about the installation of electric lighting, piping and sewers. This really blew Mr. Prouty's cool.

"Dear Mr. Ferguson:

Replying to letter of June 17th concerning various matters here at Ripogenus which unfortunately seem to greatly trouble Mr. Schenck. We have heard about this so often and in such a variety of ways in the past six weeks that it is becoming annoying. We would much prefer to hear for a change how much Mr. Schenck was worried about the quality and variety of the Food he was feeding us on during this same six weeks.

Several times these matters have all been explained out to Mr. Schenck.... We have tried absolutely to conform as nearly as possible not only to the letter but to the spirit of his wishes and directions. If Mr. Schenck could only get that idea fixed in his brain it might help a lot.

Just who the interested parties are who so busily keep him so continually stirred up I can only conjecture. Like most reports of that kind he gets only one half the story.

With reference to the building of a Tennis Court here. It is a fact- several of the boys here wanted one and we could see no harm in their having one. They built it evenings after supper and hired a few Italians to do the heavy digging. Also had the Company's team a few hours to plough the piece of ground. The boys paid the Italians and the Teamster.... The cost to date is \$42.00... and the Club has about Twenty members including myself, each of whom pays \$3.00 to cover any expense. It does not seem that this matter should occasion serious concern to Mr. Schenck.

We also have a very decent Base Ball Club here and some really good players. Sunday, June 20th, to the number of about thirty, the boys went down to Kokadjo ... for a game with the boys from the Grant Farm. As you will probably hear from that this week, I may as well give you the facts as to wait for you to ask for them. Mr. Hamilton owns a 1-1/2 ton White Truck which he bought for his stage line with the understanding that he should have the contract for transporting men to and from this job. The Company

1974

has seen fit to cut him off, having bought a truck just like it and are running a daily stage service between here and Lily Bay.

Now, Hamilton made a rate of \$1.50 per person from here to Kokadjo and return, and furnished them dinner... the boys all had one good meal, and a good time generally. There was no booze and everything was quiet and orderly.

Now as to the matter of building separate shacks or cottages for individual foreman's families. This was a policy decided on in Boston before even the A.C. Co. took hold here.... I supposed that Mr. Schenck had decided it finally when he allowed the A.C. Co. to proceed with building them when he was here May 18th, after having once stopped them. He seemed quite well satisfied then.

The Electric Lights are another sore point. These were started up June 18th for the first time.... In this bunch of board shacks it seems sensible to use Electric Light from the standpoint of safety from fire if nothing more..... Perhaps it did seem ridiculous to Mr. Schenck to order this apparatus the very first order - but probably it might never have been purchased otherwise.

He mentions piping and sewers as worthy of criticism. There has been a minimum of piping of any kind done on this job so far, and all of that on the dam site. As to the sewers, we have drained the swamp along the Carry Road with a ditch and blind drain...picking up the drainage from the cook-room, washroom and other buildings along its line. This is no more than an ordinary precaution to the interest of health, along with hauling water to the camps and putting lime in the closets.

As to the Bunk House and Italian Quarters, we have repeatedly tried to emphasize that none of the camp buildings, including the store and the Office buildings, but what pay rent. And no employee here but what pays his board.... All these people have got to be housed somewhere. They are forbidden to build any shacks for themselves if they wanted to. Way back in February, Mr. Tuttle wrote me that the Great Northern insisted on having these camps built according to their ideas....

To be perfectly frank about it I cannot make out what so agitates and worries Mr. Schenck. Of course someone keeps prodding him with these stories, some of which are half truths, some of them gross misrepresentations. Just who they are who send them from here I haven't yet discovered. The man in Boston who does the prodding is in a high enough position to better mind his own business. Things would have gone along smoothly if it had not been for the petty jealousy of a man who should be far above such things... I expect to discover the Secret Agent up here after while, but you may bear in mind that it seems to us here that nothing occurs, having any bearing on the A.C. Co., that we don't hear about it from Boston within a few days. Its getting to be pretty irritating when we are trying our best to please the Company.... If Mr. Schenck could only get that idea

1974

into his head, it might exclude some of those he does get."

From the very beginning of the Company until 1952, when it ceased to be the headquarters of the President, when there was very little that the Boston office did not know about what was going on anywhere in the operations, and it had its own ways of finding out, as we will see later. Whether Flmer Prouty ever located the "secret agent" is unknown, but there undoubtedly was one on the job. He was also certainly right about someone needling Mr. Schenck. The man in a "high enough position to better mind his own business" could at that time been one of only two people. One was Lester Smith, who besides being the President's secretary was handling the Company's insurance, and had become a sort of investigator. Although as Derb said at one time "Mr. Schenck consults with nobody but Mr. Schenck", he had the good manager's knack of finding out what was going on. The writer knows that Lester Smith was at Lily Bay immediately after the storehouse fire, and that around that time he was looking into the Spruce Wood Department's methods of keeping track of supplies used in the camps, and ridiculing the meticulousness of a ledger record of the consumption of pepper, not realizing, perhaps, that this was the most important meat preservative of the time. The other was William A. Whitcomb, who had little use for Fred Gilbert, and the West Branch Driving & Reservoir Dam Company was in Fred Gilbert's bailwick. This teapot tempest blew over, but it has implications of some attitude on the part of Garret Schenck toward the Aberthaw Construction Company that

may have resulted in their not completing the job.

A few other events of 1916 are worth mention in concluding this chapter. In April, 1916, the SS "MILLINOCKET" was taken off the paper run from Stockton to New York, at the urging of the United States Government, occasioned by the demand for overseas shipping. This was done under an agreement with A.H. Bull & Co., renewable at six month intervals, whereby they were to give Great Northern one-third of the increased earnings which they could get from this vessel in other service ... This arrangement resulted in a return of over \$47,000 for the first six months. At the same time, the Company chartered the steam barge "America" for six months, with an option to purchase her for \$65,000 at the end of that period; \$30,000 being advanced against the price, the owners holding a mortgage for the balance. This was another profitable deal, as in December, Garret Schenck announced that he had exercised the option, and had immediately sold the "America" for \$125,000, with a net gain of \$45,000, after commissions. The lease on Pier 42, New York, which had been obtained with so much difficulty, was cancelled at this time for one year, in consideration of payment of \$30,000 by the Royal Mail Steam Packet Company. This, however, by no means meant the end of Great Northern's salt-water navy.

Early in the year, John Moore, who owned one-half the stock of the Millinocket Water Company, got into trouble, and was so deep into Great Northern that it was able to take over his interest without payment, and with the provision that he come up with \$4,500 to satisfy the Water Company's indebtedness to the

Millinocket Light Company. This was the first of a series of moves arising out of Mr. Moore's financial peccadilloes which resulted in the eventual take-over of all his interests, for the protection of the people of the communities of Millinocket and Fast Millinocket. These things will be examined later.

As one of the last acts of the year, the Company turned down an offer of \$250,000, from unidentified parties, for the Mattaceunk water power. The 10 percent salary dividend, inaugurated in 1913, had been continued through 1916, and in another late action of that year, W.C. powers, about whom Garret Schenck had been doubtful, was voted a bonus of \$10,000 per year, in stock, starting May 31, 1917 and payable on that date in each of the four following years, if he remained with the Company. This action, incidentally, establishes the market price for Great Northern stock at that time -- \$250.00 per share; more than double the price of early 1912. In this year, the Company's timberland holdings had reached almost 1,000,000 acres; its earnings had broken \$2,000,000, and it had begun a new phase in its history, as we hope to make apparent.

APPENDIX I

Notes - Chapter XI

1. Ellis

APPFNDIX II

Reference Bibliography - Chapter XI

L. Ethan Ellis: "Newsprint", 1960, which includes the text of "Print Paper Pendulum", 1948. Rutgers University Press, New Brunswick, N.J.