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## The Great Northern Paper Company, Chapter 15: Of Many Things

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C H A P T E R   XV  
OF MANY THINGS

The death of Garret Schenck on January 3, 1928 brought on the first high-level clash, of which there is any record, since the early days of the company. This was preceded by some maneuvering, which is pretty well documented, and we will tell the whole story as well as we can, partly from recorded information, partly from memory and partly by deduction.

At this time, the Company was operating under by-laws enacted in 1927. The original by-laws had been amended in 1901, 1903, 1909, 1920 and 1921, the changes, except those of 1903, which added two Directors, and those of 1920, being unimportant to our story. The 1920 amendment, as was noted at that time, called for the election of two Vice-Presidents instead of one. The only duties of the 1st Vice-President spelled out were that he was to act as President should the latter be absent or disabled. Therefore, he had to be a member of the Board of Directors. The duties of the 2nd Vice-President were specific. He had "general direction of matters relating to timberlands and the general superintendence of timberland operations and the employment and dismissal of all employees engaged therein." We have previously indicated the reason for this, and this provision remained unchanged in the 1927 amendment.

Following the 1920 revision, and for the next seven years, William A. Whitcomb was elected First Vice-President and General Manager. The inclusion of the title "General Manager" ignored the

fact that the by-laws specifically stated that the President "shall have the general direction of the affairs of the Company.... and shall perform the duties usually incident to the office of General Manager", a provision going back to the time when Col. O.H. Payne had agreed to put up the money if Garret Schenck would run the enterprise. The anomaly had technically existed since the time William A. Whitcomb had been elected Vice-President and General Manager in 1913. George Parks had had the title of General Manager before that, but he was appointed, not elected, and was confined strictly to the manufacturing operations. So was William A. Whitcomb, by tacit agreement, and the situation did not surface until the point we have reached.

There was never any question that William A. Whitcomb would succeed Garret Schenck, and therein lay the problem, because it would have been normal that the 2d Vice-President would move up. Sheldon Wardwell, from his friendship with both men, and his close association with William A. Whitcomb, knew that the latter would never stand for Fred Gilbert as his first officer. The time element was critical. The next meeting of the Board of Directors was but a few days off, and the Annual Meeting of Stockholders only two weeks away. Sheldon Wardwell moved quickly.

On January 4, 1928, the day after Garret Schenck's death, he wrote a confidential letter to Commodore Ledyard, requesting a private session with him before the Directors' meeting coming up the following week. While he did not give any reason, it is clear from the content of later correspondence. As the result of this meeting, while the matter was pressing, the decision as to nominations for the Vice-Presidencies was held up until after the Annual meeting.

At this meeting, held on January 18th, incumbent Directors Lewis Cass Ledyard, Lewis Cass Ledyard, Jr., William A. Whitcomb, Eugene Hale, Jr., F.S. Rollins, Sheldon Wardwell and H. Merton Joyce were returned. John Hay Whitney and Hilbert Schenck were elected to fill the vacancies created by the deaths of their respective fathers, Payne Whitney and Garret Schenck.

Of that astute young man, John Hay (Jock) Whitney, we will not write here. Sportsman, World War II Army Air Force officer, financier, diplomat and philanthropist, his name has been known worldwide for more than a generation. We will say at this point only that he was twenty-four years old at this time, and heir to a large part of his father's great fortune, which legacy, however, was as we recall, in trust until he should reach the age of forty-one; this, if our memory is correct, probably governing to some degree his conduct during his earlier years on the Board of Directors, during which he participated seriously but not obtrusively in its business, listened more than he talked, and deferred, it would appear, to Commodore Ledyard and Lewis Cass Ledyard, the guardians of the Whitney interests.

We have already made mention of Hilbert Van Nydeck Schenck (1893 - 1972), a 1918 graduate of Williams College. He was an insurance man all his working life, making his home in Brookline, Massachusetts. He was an active member of the Coast Guard Auxilliary during World War II. Of medium height and sturdy build, a quiet, unassuming gentleman, he was a quiet, unassuming Director. He chose not to throw his father's weight around, and was not given to controversy, but the writer has heard him, on occasion, express himself in vigorously salty language on some proposition which offended his



strong sense of fairness. Hilbert Schenck served on the Board of Directors continuously through 1964; thirty-six years.

It might be interesting to note here, in connection with the way things were done, that Garret Schenck had handled the petty cash account for the Boston office personally, through a small bank account in his own name. This of course was frozen, and it was necessary for the stockholders to vote an appropriation of \$2,500 to be placed in the hands of Lester Smith for the payment of small bills.

In the meantime, Sheldon Wardwell had caught up with the situation which we have mentioned. On January 19, 1928, he wrote Commodore Ledyard, admitting that he had overlooked the section of the by-laws which made the President also the General Manager, saying:

"This provision may not absolutely exclude the appointment of a General Manager, but it would seem that it would be better to give such officer another name, as for instance "Assistant to the President":.

He explained that this might be done under a provision that the Directors could appoint "such other officers, agents and servants as may be deemed necessary", and added:

"Another matter overlooked is the provision of the By-Laws relating to the Second Vice-President, which has a bearing on the suggestion that Mr. Gilbert should be made First Vice-President",

and then quoted the complete section specifying the duties of this office, the essential content of which we have already given, saying:

"You will remember that this section was drawn in this manner for a particular purpose, and it would appear to me that Mr. Gilbert should be appointed Second Vice-President instead of First, and in passing, I think it would be rather advisable to call Mr. Gilbert's attention to this provision of the By-Laws prior to the Directors' meeting, as I believe that he expects to be made First Vice-President."

He then pointed out that their discussion he had also forgotten that the First Vice-President must be a Director, which Fred Gilbert was not; excusing himself by pressure of other business; and set up another private meeting to be held early in February, prior to the election of officers, ending:

"My first impression was that these provisions of the By-Laws created complications but I now think they will work for the best interests of the Company, although your suggestion that the directors should not choose a Second Vice-President can not be followed."

On January 23d, he wrote again:

"My dear Commodore Ledyard:

Talking with Mr. Whitcomb this morning, he brought up the question of General Manager, and his anxiety to have McKay in that position. I called his attention to the provision of the By-Laws and my letter to you of January 19th.

Mr. Whitcomb particularly and with good reason disliked my suggestion "Assistant to the President" and suggests the title "Manager of Manufacture" which seems to me a title which would adequately define Mr. McKay's activities."

It was ironic that the change in the by-laws engineered by Garret Schenck in 1920 to give Fred Gilbert full sway as head of the Spruce Wood Department should now prevent his being moved up. However, the writer's guess, from his recollection of the time, is that while he might have wished the promotion as a matter of pride, he did not expect or even really want it. The antagonism between him and William A. Whitcomb was no secret, and he knew that he was vulnerable anyway. Sheldon Wardwell's prompt reaction, triggered by his knowledge of the relationships and William A. Whitcomb's desire to have William O. McKay put in charge of manufacturing, with the resulting invocation of the by-law provisions, must have made it obvious that should he become First Vice-President he would not only lose control of his Spruce Wood operation, but would be in an even more exposed position.

Commodore Ledyard's reply to Sheldon Wardwell, written on January 24th, was as follows:

"Dear Mr. Wardwell"

Answering your letters of the 19th and 23d instant:-

It seems to me that the present by-laws, as you explain them, would make it impossible to appoint Mr. Gilbert First Vice-President, and that he should, therefore, be re-appointed Second Vice-President. The provision of Article II of the by-laws, to the effect that the First Vice-President must be a director, is also a bit embarrassing. I do not think there is anyone we could appoint in this place except Mr. Joyce, and I do not know what effect that would have on Mr. Gilbert. What would you say to

appointing Mr. Joyce? In any case, I think it desirable that you or your father should talk with Mr. Gilbert and explain to him that we did desire to make him First Vice-President but an examination of the by-laws shows that that would result in a complete overturning of the duties and powers which he desires to assume.

Of course, this is all subject to the possibility that we might suspend the appointment of these gentlemen pending a possible change in the by-laws, which would take time. On the whole, I think it is less desirable than going ahead with the by-laws as they are.

Referring now to the question of appointing McKay to the position of General Manager. I agree with you that the present by-laws would prevent his being appointed General Manager, and if Mr. Whitcomb does not desire to have him take the title of Assistant to the President, I see no reason why we should not create the position of Manager of Manufacture, as you suggest.

Very truly yours,

Lewis Cass Ledyard "

Upon receipt of this letter, Sheldon Wardwell immediately telephoned Fred Gilbert, explaining the problem to him, and on January 25th wrote Commodore Ledyard again, advising that he had expressed himself as being quite satisfied to remain 2d Vice-President, and had not expected anything else. He assured the Commodore that he did not think there would be any problem with Fred Gilbert if H. Merton Joyce were made 1st Vice-President, but that William

A. Whitcomb should be consulted. He pointed out that the position could not be left open, as there would then be no one to act as President in case of need, and that if H. Merton Joyce were not selected, he had no alternate to suggest, but that if he was the man, he should not be considered interim or temporary, as failure to be re-elected would hurt him in the trade. Obviously in order to get William O. McKay into the line-up, he suggested consideration of having three Vice-Presidents, one in charge of each major department, but because of the time element and the necessity of holding another stockholders' meeting, he did not feel that it would be necessary to make this change, if it seemed desirable, until the next year.

On January 26th, Fred Gilbert wrote Sheldon Wardwell the following letter, which, under the circumstances, the writer believes was entirely sincere:

"Dear Mr. Wardwell:

Further in regard to our telephone conversation of January 25th: Official title never meant much to me. I have served the Company nearly twenty-eight years, and never had in that period of time an unhappy experience or a word of embarrassment between the Chief Executive and myself; and I hope that the few remaining years that I serve the Company will be continued on the same lines.

In gratitude for the kind treatment received from Mr. Schenck and the directors of the Company, including your father, my services will always be available as

long as I live (without monetary consideration) for the purpose of protecting their interests.

Very sincerely yours

Fred A. Gilbert "

This brief letter is interesting for several things. It reflects the spirit of pride in the Company and loyalty to those who represented it, which we have tried to explain; in this case those who had represented it; it emphasizes the secrecy surrounding everything -- J. Otis Wardwell, who was Garret Schenck's fishing companion, was never a Director, but there was no way for even Fred Gilbert to know that unless he was told, which apparently he was not -- and a certain apprehension, which as it turned out was justified, can be read between the lines.

From this point, events moved very quickly. Commodore Ledyard bought the three Vice-President concept, and he did not worry about a second stockholders' meeting. The Executive Committee, meeting on February 8th, just ahead of the Directors' session, recommended revision of the by-laws to provide for this change in organization, and Sheldon Wardwell was put to work on them. In the meantime, there being no other choice, officers were elected under the existing by-laws -- William A. Whitcomb President, H. Merton Joyce First Vice-President and Manager of Sales, Fred A. Gilbert Second Vice-President and Manager Spruce Wood Department; Bryan L. Seelye Clerk, B.C. Ward Treasurer. H. Merton Joyce was elected Assistant Clerk and Charles Bowles Assistant Treasurer. The salaries of the officers were set at \$30,000 for the President; no change; \$23,000 for the 1st Vice-President, up \$3,000, and \$20,000 for the 2d Vice-President, no change.

The new Executive Committee was composed of William A. Whitcomb, F.S. Rollins, Commodore Ledyard, Lewis Cass Ledyard, Jr., and Sheldon Wardwell.

Where Garret Schenck had done pretty much as he pleased, William A. Whitcomb wanted to know where he stood, and he wanted some changes in the way things were handled. For instance, we said in another place that the policy of the Company was to confine expenditures for new work to the amount set up for depreciation. This policy is noted officially for the first time in the minutes of this meeting, at which a vote was taken "to spend for new work an amount approximately equal to depreciation." A similar resolve was usually made each year thereafter, and individual projects were approved within this limitation. No more money was borrowed for plant improvement until the expansion of the 1950's.

At the March, 1928, meeting of the Board, Sheldon Wardwell was sent back to do a little more home-work on the by-laws, which were approved in their new form early in April, and revisions were ratified at a special meeting of the stockholders on April 25th. The essential change was the elimination of the positions of First and Second Vice-President, and provision for three Vice-Presidents, one to be Manager of Manufacture, one Manager of Sales and one Manager Spruce Wood Department. These were the title changes to which we referred in the chapter on the old Company. The provision that the President should perform the duties of General Manager was left as it stood. William A. Whitcomb interpreted this literally, and this had a lot to do with the way he took direction of the Company. Following the special meeting of stockholders, H. Merton Joyce and Fred

Gilbert resigned as 1st and 2d Vice-Presidents respectively. William O. McKay was elected Vice-President and Manager of Manufacture, H. Merton Joyce Vice-President and Manager of Sales, and Fred Gilbert Vice-President and Manager Spruce Wood Department, their duties being spelled out in the votes. H. Merton Joyce was empowered to act for the President in case of his disability or absence. William O. McKay's salary was set at \$15,000, the others remaining unchanged.

As we have indicated, William A. Whitcomb liked to have things done ship-shape. Between November 1, 1899 and December 31, 1927, Garret Schenck had signed as President, without specific authority -- as he had done in the case of the airplane spruce contract which we have noted -- deeds to literally hundreds of lots sold by the Company in the Townsites of Millinocket and East Millinocket. At this meeting, William A. Whitcomb submitted a complete list of these sales, which were entered in the minutes, and the old President's action was ratified. Incidentally, this may be a good place to spike the rumor which has persisted for seventy years that conveyances from the Company for lots in these towns were not deeds, but 99 year leases. No one knows where this rumor started, but it is absolutely untrue. All conveyances of Company-owned land for house lots, from the beginning, were quit-claim deeds, with reservations permitting the installation of pipe lines, and, until some time in the 1950's a restriction on the sale of liquor on the premises. We will have something on the reason for this restriction in another place.

Several rather minor events of more or less interest took place in 1928. One was the sale of the Seboomook Hotel, or as named in



the record, the Seboomook House, to J. Otis Wardwell, for \$17,589. It may be remembered that this property had been bought by the Company and put in his name in 1924, and while it says that the sale was at his request, it is more likely that it was at the suggestion of William A. Whitcomb, who was not in favor of Company property being in somebody else's name. The sale included 17 acres of land, and in a typical snafu it was discovered a little later that the Company's oil and gasoline storage tanks at that location were on the property sold, making it necessary to go through the process of setting off the piece of land on which they sat in trade for another piece of equal area added on in another place. Pier 42 in New York, which had been obtained with so much trouble nearly twenty years before, was sub-leased to the North German Lloyd Line for two years, eliminating all expense in connection with it, for that length of time. The Woodland Hotel in East Millinocket was sold to one Patrick Trainor for \$5,300. About 15 acres of land on Weston Island above Madison was purchased to improve the holding ground there, and two lots of land were purchased at The Ledges, on the St. John River near Fort Kent, for a possible loading plant. In December, the Directors approved the payment of a 7-1/2 percent salary dividend "to such salaried employees as receive the approval of the President." Although no vote is recorded, the usual 7-1/2% had also been paid in June.

William A. Whitcomb was now eyeball to eyeball with Fred Gilbert. Why these men mutually disliked each other the writer does not know. The feeling was there when he first knew either of them, and it was not the result of rivalry for position. Garret Schenck had kept them apart. His relationship with each of them had been close, but

different. He had left William A. Whitcomb a free hand in the manufacturing area, but they were both mill men and organization men, were in constant personal contact, and there was a certain deference on William A. Whitcomb's part toward the old President. Fred Gilbert was more a friend and partner to Garret Schenck. They went fishing together, and they had long business discussions usually at the President's unpretentious camp on Little W., but Fred Gilbert was allowed to run the woods operations as he saw fit. In this area he was the expert. Whatever he wanted to do was all right with Garret Schenck, who had complete confidence in him, and this was why the Spruce Wood Department was a little kingdom unto itself. William A. Whitcomb intended to run the whole Company. He could tolerate no private domain such as this, and was immediately faced with the problem.

There were several meetings in Boston between these two men during the spring, which apparently produced no understanding. The writer recalls hearing some uncomplimentary remarks about Fred Gilbert at this time, but does not remember that there was any talk about his having to go, because in the old Company people were always given a chance. However, in the absence of any working arrangement, William A. Whitcomb simply took charge, doing what he felt he had to do, and demanding what he felt he had the right to demand. This put them on a collision course. Charles Glaster, who knew Fred Gilbert well, says in his book "The West Brancher" (Vantage Press, New York, 1970, P.191): "After Mr. Whitcomb was elected to the presidency, Mr. Gilbert knew that his position from then on would be clouded with uncertainty. Where he had had a free hand to carry on the Spruce Woods Department, he knew he wouldn't be able to be dictated to by Mr. Whitcomb."

Early in the year, William A. Whitcomb had obtained for the Spruce Wood Department an appropriation for the construction of a new tow-boat to replace the old side-wheeler "F.W. Ayer" on the Lower Lakes, and the purchase of six new twin-engine tractors to replace worn-out single-engine gasoline and steam-driven log haulers. Before they could get around to doing anything about these projects, he postponed them indefinitely for further investigation. He required copies of every contract for the operation or purchase of wood and the purchase or sale of stumpage to be sent to Boston for study. He ordered a reduction of 100,000 cords in the 1928-9 operations, to reduce inventory, and the purchase of 50,000 cords of peeled wood from the Province of New Brunswick to reduce average cost. He requested and was given authority by the Directors to himself execute permits for the sale of hardwood and cedar from Company land. He discovered a case where 1,000,000 feet of spruce saw-logs were being cut on a verbal permit; insisted on a written contract being signed, and had the Directors instruct Fred Gilbert that all such sales were to be approved by the President in future. He ordered the Social Service Division dissolved, and publication of its "NORTHERN" magazine discontinued in October 1928, a sad blow to history, this being one of the most outstanding periodicals of its kind, and he declared the Seboomook Lake & St. John Railroad into which Fred Gilbert had sunk almost a million dollars, officially dead, and it was written off.

Late in the summer he held two conferences; an unusual thing for him; with the three Vice-Presidents and some other department heads, to discuss cost-saving measures. One of these was held on August 23d. We have said that he and Fred Gilbert had reached no understanding, and this meeting is a case in point.

On the above date he instructed Bryan Seelye by letter "following through arrangements discussed with you today" to proceed forthwith to transfer the Spruce Wood Department Accounting and Auditing operations from Bangor to Millinocket, presenting a plan for the move, but not waiting for any further conference before taking action. In this letter, a copy of which went to Fred Gilbert, he stated that the latter was entirely in accord with this change, and felt that it would result in a very great saving.

On the same day, which is a little hard to explain, but we are working from typed copies, and there is a possibility that the dates got confused, Fred Gilbert wrote to him a letter beginning "I am not a little surprised at the copy of letter written Mr. Seelye regarding the consolidation of offices"; going on to say that he had made the suggestion that the whole Bangor office be consolidated with the Millinocket office, and the Boston office with the New York office, and that it was his understanding that Mr. Seelye was to study this proposition and submit it to a future conference, so that proper consideration could be given to office space, housing for relocated employees and the like. At the same time, he wrote to H. Merton Joyce, sending him copies of William A. Whitcomb's letter to Bryan Seelye and his letter to William A. Whitcomb, which he said was self-explanatory, stating that this was the idea he had intended to convey, and that he believed that it would save at least \$200,000 a year.

Consolidation of the offices was not a bad idea -- such a move was made more than 30 years later, but the suggestion was ahead of its time, and Fred Gilbert could have made no worse mistake than to try to involve H. Merton Joyce in a disagreement with William A.

Whitcomb. The Spruce Wood Department Accounting and Auditing operation was moved to Millinocket in October, but otherwise the offices remained just as they were.

Back in June, the President had informed the Directors that in 1926 the Spruce Wood Department had bought the Ashland Company, lock, stock and barrel, for some \$53,000, and that the deed had been received; the inference being that this had never previously been reported, as approval of the action was voted.

We have mentioned only the things about the Spruce Wood Department that William A. Whitcomb brought to the attention of the Directors during his first year as President. He did not know very much about the production of wood and the customs and practices that had been established over the years, and he made continual inquiries, which turned up all kinds of things incomprehensible to him; handshake deals; construction with inadequate records of cost; long-term contracts for stumpage to be paid for whether cut or not; long-term agreements with contractors; prepaid stumpage not cut; too much inventory; wood left undelivered and deteriorating in quality, and other conditions which to him were evidence of loose management or worse. This constant probing and the ensuing charges and criticism of course enraged Fred Gilbert, who defended his policies stubbornly. He made some concessions, but the pressure on him continued, and the relationship got no better, in spite of efforts by Sheldon Wardwell to patch things up. Finally, when along toward the end of the year he lost his cool altogether and took a swing at that old diplomat, A.P. Lane, who had been sent to Bangor to question him about something, breaking his glasses and cutting his face, he had had it.

William A. Whitcomb demanded his resignation, and on January 17, 1929 he wrote to Sheldon Wardwell:

"Dear Mr. Wardwell:

I have been advised by the Company's attorney, Louis C. Stearns, Esq., that my resignation as Vice-President and Manager will be accepted at the convenience of the Board of Directors, with the understanding that I am to receive salary until February 1, 1930.

I want to express my deepest appreciation of the kind treatment I have received at the hands of the Board of Directors, and assure you that the Company's interests will always be my interests and I shall always be ready to do anything I can to assist in the Company's welfare.

I thank you most heartily for your past support.

Very respectfully yours,

F.A. Gilbert

His resignation, was accepted by the Directors on January 23d, with this brief note in the records:

"It was VOTED that the resignation of Mr. Fred A. Gilbert, Vice-President and Manager of Spruce Wood Department be accepted, and in consideration of his long term of service with the Company the Treasurer was instructed, until further ordered by the BOARD, to continue Mr. Gilbert's name on the payroll, but in no event beyond January 31, 1930. "

Another book could and probably should be written about Fred A. Gilbert (1866 - 1938), one of the most outstanding of Maine's lumbermen, and in his time one of the most popular figures in the State, where his name was strongly identified with that of the

Company. He had left school to work in the woods at an early age, and who and what he was, and how he came to Great Northern has been covered in an earlier chapter.

He was a big, beefy, florid-faced man, and hard. Energetic, almost tireless, it seemed, he was continually on the go, giving personal attention to even the most obscure activities of his department, which we have examined briefly as it was at the point to which he had developed it. He probably left more to his subordinates than did the head of any other department, but he came very near telling everyone what to do. An example of what we mean, perhaps not the best, is contained in a letter written to the head of his Forestry Department on September 23, 1912:

"Mr. Everett E. Amey,  
160 Exchange Street,  
Bangor, Maine.

Dear Sir:

Send an engineer to the Grant Farm to lay out a road from the main tote road to the Grant Farm field, across to the cellar and storehouse, from the storehouse to the main yard in front of the blacksmith shop, from the storehouse to the Trout Hole road through the potato patch, also set grade stakes for levelling up the dooryard in front of the blacksmith shop, also grade stakes to make fill from the first barn to the second, taking the fence on the left as the outer line on one side and the slope of the fill in front of the barn as the other side. Also measure and lay out sewer drain and cellar drain as well as approaches to potato cellar and embank-

ments surrounding the cellar and the finish of the approaches on the ends of both barns.

Yours truly,

Great Northern Paper Co.

By F.A. Gilbert "

See what we mean? He also had a pungent way of putting forth some of his ideas, as we have noted in a letter quoted earlier. Here is another, also written to Mr. Amey:

"Dear Sir:

Replying to yours of Oct. 6th regarding fence at Kineo. Any kind of a fence that will keep horses and hogs in and people out that looks well will be suitable for the Kineo stable."

Usually affable, he had a rough tongue -- his "Get off this line, you black son-of-a-bitch" (or bastard, or rascal, depending upon who is telling the story), shouted at someone who had picked up a receiver somewhere on a party line on which he was talking -- is famous; but he knew how to handle men. Within his department he created the atmosphere of loyalty that we have attempted to describe in our chapter on the old Company. His people at all levels were devoted to him. They all knew him by sight, and he knew most of them by name. Between themselves, he was "The Big Fellow". To his face, those who did not call him "Mr. Gilbert" addressed him as "F.A.". Like any man of his personality in a position of power, he had enemies. He never forgave anyone who tried to put anything over on him, and he was hard on malingerers or those who did not follow orders, but he was full of compassion for the guy in trouble.



Many an old-timer, past the point where he could do a full day's work, found himself in an easy spot as a dam tender or camp watchman, and Fred Gilbert always had money in his pocket for the down-on-his-luck man who approached him on the street.

He loved horses, and personally inspected every animal bought for the Company. Before the time of dependable automobiles, he kept at the Blair Farm near Greenville some of the finest driving horses that could be found, for use in getting around to the operations. He was as much at home in the poorest lumber camp as in his mansion on 100 acres of land in Hampden or his summer home in Searsport. He was progressive; developed the only true forestry organization that existed in the State for many years; supported the development of new types of logging and driving equipment; established the conservative cutting practices that the Company followed for so long; set up forest fire prevention policies and fire fighting procedures; established the Social Service Division, and encouraged social contacts among the members of the Spruce Wood Department family, to many of whom he was a friend and advisor.

At the time of his resignation, a number of carefully written editorials were published, calculated to eulogize Fred Gilbert without offending the Great Northern Paper company. A quotation from the Portland Press Herald of January 18, 1929 perhaps sums up the sense of all of them:

"The resignation of Fred A. Gilbert as Vice-President of the Great Northern Paper Company, with which he had been connected for a quarter of a century, is deeply regretted by the people of Maine .... Fred A. Gilbert.... was a liaison man between

the corporation and the people of the State. To him everyone went who had any questions to ask or problems, relating to the corporation, to be solved. He had always been outspoken and frank in his dealings with the public. He has been sympathetic in his treatment of all who have come into any relations with him. Because he is a Maine man and was known to have the welfare and the interest of the State at heart, the people of the State are sorry to have him sever a connection which has meant so much to them."

It seems to the writer that apart from whatever the personal differences between William A. Whitcomb and Fred Gilbert may have been, the basic trouble, as the writer sees it, was that he had to be what he was -- the "bull of the woods". He always remained a lumberman in the old sense, and while he did the Company's work, he was not an organization man. He did business on a personal basis, and trusted too much in people to whom a big corporation was fair game. Garret Schenck understood this. William A. Whitcomb never did, and the result was almost inevitable.

Fred Gilbert's life, after his resignation from the service of the Company, was something of a tragedy. He had not managed his own financial affairs too well. In 1928 he owned 4044 shares of Great Northern stock, all of which was held by a Bangor bank as collateral for loans totalling \$250,000. The price of the stock was in the low 80's, there was not much market for it, and it would appear that when rumors began to get around that he was in trouble with the Company the bank began to put pressure on him.

On September 8, 1928, he wrote Sheldon Wardwell, asking him if he could help him find someone to buy 2,000 shares of his stock at \$85, which would reduce his debt to more manageable proportions. Sheldon Wardwell replied, in two letters, that he thought he might be able to help him, but that no way could he get more than \$82; that if he sold his name must not appear -- the reason for this of course was that it would not look good for an officer of the Company to be selling -- and that if he would bring the certificates to Boston they could be put in the name of a broker who he thought could handle the transaction.

In the meantime however, Fred Gilbert had written to Lewis Cass Ledyard Jr., in New York, and we quote his letter in full. It is a little pathetic.

"September 13th, 1928

Lewis Cass Ledyard, Esq.  
342 Madison Avenue  
New York City.

Dear Sir:

There are many rumors here concerning the Great Northern Paper Company that are disturbing to me.

I own 4,044 shares of the Company's stock which at the present market value represents the approximate value of my entire estate, and this stock is held by a local bank as collateral security for loans.

I would be greatly obliged if I might have some assurance that in case a sale is made of the majority stockholder's stock I might have the privilege of putting mine in at the same price.

I am on my twenty-ninth year of service to the Company, and in its early pioneering days staked all I had for its benefit and many times no doubt did more than I was expected to do, as Mr. Schenck if living would tell you.

Any assurance you care to give me will be greatly appreciated.

Very respectfully yours,

Fred A. Gilbert "

He then wrote Sheldon Wardwell again, sending him a copy of the above, saying that as the stock was collateral it would have to be transferred to the bank if it was to be sold -- which would take it out of his name -- but that if he heard favorably from Mr. Ledyard he would carry the loan until such time as the latter advised him to sell, adding as a postscript:

"I am having it split up into hundred share blocks so if anything does happen that the bank forces me to move it I will have a way of handling it."

Hard information on this subject ends here, as we have available to us no stockholders' list after 1927, at which time, incidentally, the Company had about 1000 shareholders, but it is our guess that he did not sell his stock at this time, at least not all of it.

Fred Gilbert did no more work for Great Northern. In April, 1929, he formed a small corporation, the West Branch Lumber Company, for the purpose of carrying on a lumber and pulpwood business, but this was not successful. There were those who said that he had feathered his nest at the expense of the Company. Those who knew him best denied this vehemently. In a letter written on December 23, 1912, he wrote "I am about to sell whatever lands I own, in order

to sever any ties of that sort with the Company." That in fact he had not made any great fortune is indicated by the fact that in 1929 he was still heavily in debt to the Eastern Trust & Banking Company, his notes being partly secured, and guaranteed by his brother Charles. It is our conjecture that this was the old debt, still secured by his Great Northern stock, or part of it. Anyway whatever his collateral was, it went sour after the stock market crash, and he was unable to meet his notes. In the fall of 1931, the bank sued the guarantor, who attached everything his brother had. In January, 1932, Fred Gilbert petitioned himself into bankruptcy.

The people of the State, even those who felt that he had been overbearing, were genuinely sympathetic. An unidentified newspaper clipping, quoted in part, expresses the general feeling:

"No man during the period of his major activities has worked harder and more purposefully for the progress and up-building of Maine, and the hope is everywhere expressed that, when his affairs have been adjusted, he will return to this work and meet in it the full measure of success that his knowledge, business foresight, energy and integrity deserve. Perhaps the comparative smallness of his estate, as indicated by the court statement is a surprise to many people, but Mr. Gilbert has been a constructor and business developer rather than a mere accumulator of money...."

Fred Gilbert was colorful and controversial. Not everybody was as enthusiastic about him as these encomiums would suggest. He was respected for his power, but not universally admired for the way he used it. The story that whenever a driving dam was to

be built he simply put his finger on a spot on the map of the stream and said "Build it there"; and there it was built, whether there was the best place or not, probably has a grain of truth in it. He probably did know every drivable stream in Northern Maine, but the test hole incident at the Ripogenus Dam shows that his judgment was not all that infallible. As the representative of the Great Northern Paper Company most in the public eye, his place in the scheme of things was magnified, and he was given personal credit for accomplishments which were the result of the work of many. None the less, whatever his faults, he was a man of stature.

For the next few years after his "affairs were adjusted" he lived quietly, doing some consulting work, and passed away in April, 1938. What was written about him at that time has already been said, and we add nothing from his obituary. The great house in Hampden, when last seen by the writer in 1969 was practically a ruin, but still known as the Gilbert Mansion, the reminder of a big man who did big things in a big way.

In the foregoing, we mentioned the Seboomook Lake & St. John Railroad and the Ashland Company. The first we will take up later, but let us dispose of the Ashland Company here. Its history, mostly taken from such Great Northern records as we have found, is not entirely clear, and it has not seemed important to try to fill in the gaps, but we believe that what we are able to tell about it is generally correct and sufficient for our purposes. It is believed to have had its beginning in the Ashland Manufacturing Company, set up some time before 1897, probably in 1896, and which built the sawmill on the railroad at Sheridan mentioned earlier in our story,

along with a dam across the Aroostook River at that point to make a holding pond for logs. In 1897, it was empowered by the Legislature to build piers and booms between this dam and St. Croix Stream (Chapter 351, Private and Special Laws, Maine), and to build dams and make improvements on the Big Machias River (Chapter 354, Private and Special Laws, Maine), and to charge tolls for the use of these facilities for driving logs. In 1904, there seems to have been a reorganization of some kind, from which emerged the Ashland Company, to which the rights of the Ashland Manufacturing Company were assigned. In 1905, this company was given the right (Chapter 255, Private and Special Laws of Maine) to build dams on Mooseleuk, Munsungan, Millimagassett and Millinocket Lakes, all tributary to the Aroostook River, and to charge tolls for their use in driving, and in 1921 (Chapter 88, Private and Special Laws of Maine, 1921) it was granted permission to put piers and safety boom in the river below its plant. In this same year, it appears that the Gould Electric Company (Maine Public Service Company) was authorized (Chapter 111, Private and Special Laws of Maine, 1921) to take over the Millinocket Lake dam for water storage purposes, subject to the right of the Ashland Company to continue to use this storage for log driving, and as far as can be determined this was the last year that the sawmill itself was operated.

Early in 1927, following the purchase of the Ashland Company by Great Northern, the sawmill was demolished, and a loading conveyor was built on the site. At the time the conveyor was built, the shingle mill which had been part of the old operation was put in repair, and was operated

for some unknown length of time. Somewhere between the time of the purchase and June, 1928, the old stock had been voided, and 1000 shares of new stock, \$100 par, all held by the Great Northern Paper Company, had been issued. In 1929, it was voted to decrease capitalization from \$100,000 to \$5,000, and the stock was reduced to 50 shares.

Up to 1941, exclusive of the loading plant, the Great Northern Paper Company spent on various improvements, mostly repairs, including repairs to the dam at the foot of Big Machias Lake, about \$60,000, which it carried on its own books. In that year, this amount was transferred from the assets of Great Northern to the Ashland Company. As the operations in the Machias River area became more important through a deal with the Wheatland interests for stumpage, additional piers were added at the holding ground in 1941; a new dam was built at Twelve Mile in 1945; the dam at Sheridan was repaired in 1946; the Mooseleuk dam was either rebuilt or repaired between 1948 and 1952 respectively, something like \$150,000 being spent. In 1954, the Ashland Company was merged with the Great Northern Paper Company in the action taken at that time to eliminate the cumbersome set-up of subsidiary log-driving companies. All the dams mentioned, except the one on Millinocket Lake, maintained by the Maine Public Service Company, have washed out.

Mention of the Seboomook Lake & St. John Railroad provides a convenient introduction to another subsidiary log driving company which we may as well discuss here also. It has been said, and it is quite probable, that the building of the railroad was preceded by study of a sluice or canal between St. John Pond and the North Branch



in the vicinity of the Big Bog. This would have been possible under the charter of the North Branch Dam Company, which was owned by Great Northern. This company, chartered in 1893 by Eugene and Clarence Hale and the Bradstreets and their associates, had the right to build dams and make improvements on St. John's Stream (the Baker Branch of the St. John River) in T. 5 R.17 and T.6 R.17, and on the "North West Branch" and its tributaries and Norris Brook and its tributaries, in T.6 R.17, T.5 R.18 and T.5 R.19 and to "construct and maintain" 'carriers and sluicers' from said Saint John's Stream within the limits of T.6 R.17 to said North West Branch of the Penobscot River, provided that the water of said Saint John's Stream shall not thereby at any time be diverted or reduced below its natural flow." The charter was amended in 1907 to include the right to build dams and make improvements on Dole Brook in T.4 R.18 and T.5 R.20 (all the above towns are in the W.E.L.S. survey -- (West of the East Line of the State) and in T.3 R.5 and T.4 R.5 N.B.K.P. (North of Bingham's Kennebec Purchase).

According to Alfred G. Hempstead's account of it in "The Penobscot Boom", the North Branch Dam Company never did build any "carriers" or "sluicers" from St. John to Penobscot waters. There is not much question as to how it came to be owned by Great Northern. Practically all of the land in the six W.E.L.S. survey towns was bought by Garret Schenck, Charles Mullen and Col. E.H. Haskell. There is little doubt that the stock of the North Branch Dam Company came with it, and was included in their 1899 sale of this land to the Company. The first record found in the Company files is in 1917, at which time only five shares of the original fifty -- the North Branch Dam Company

was capitalized at \$5,000, shares \$100 par -- were left outstanding, all owned by Great Northern people, one of whom was H.H. Pope, about whom almost nothing is known except that he was originally at Madison but at this time was designated as the "Great Northern Paper Company's Agent in Bangor", a function about which no information is available, and held this position as early as February, 1907, when he was authorized by the Directors "to execute U.S. Internal Revenue Report Form No. 217, reporting receipts of oleomargarine"! At any rate, Great Northern owned this company, and Garret Schenck was President of it, prior to the 1919 survey, and could have exercised its rights to get wood from the St. John watershed into the Penobscot without building a railroad. A longer drive and more towing would have been required, but if the original scheme was considered at that time it may have been that the probability that it would have meant the diversion of international water, a touchy subject, was a factor in a negative decision. However, a number of dams were built on Penobscot waters under the North Branch Dam Company's charter, and it was carried as a wholly-owned subsidiary until 1953, when it was merged with the Great Northern Paper Company, and about this same time a canal, the equivalent of the "carriers and sluicers" envisioned sixty years before, was finally constructed and put into use. Now let us return to earlier events.

The acceptance of the resignation of Fred Gilbert coincided with the election of officers for the year 1929, and the Directors, on William A. Whitcomb's recommendation, and without hesitation, elected William Hilton, who was then Superintendent of the Division of Forest Engineering, Vice-President and Manager of the Spruce Wood Department.

All other officers, the Executive Committee and counsel were the same as those elected or appointed after the change in organization in 1928. The new Vice-President's salary was set at \$15,000, the same as that of his predecessor. William O. McKay was raised to \$17,500. There was no further change in the Board of Directors, the Executive Committee, the officers or counsel until 1932, except that Hugh Chaplin resigned as counsel at the end of 1929, at the age of 72, the appointment of Louis C. Stearns, mentioned earlier, having been in anticipation of this.

The Great Northern Paper Company has had many fine men in its management. There was none better, as a man and as an administrator, than William Hilton (1886-1964). Bill Hilton was a man of above medium height, well-built, soft-voiced and mild-mannered, but stubborn, with what used to be called an "honest" face. He was born in Chesuncook Village, the little settlement that had grown up around the "booming-out place" at the head of Chesuncook Lake, right in the middle of Great Northern country, just after his father, Leonard Hilton, had come there to run the hotel -- the Chesuncook House -- built a few years before. He went to school in Greenville, and graduated from the University of Maine in Civil Engineering in 1911. He told the writer at one time that when the first fire lookout tower in Maine, some say the first in the United States, was built on Little Squaw Mountain, he was the first man to serve as fire watch there -- a summer job while he was attending the University.

After graduation, he worked a few months with James W. Sewall, of Old Town, a professional forester, and joined Great Northern as a "draughtsman" on August 1, 1912, at a wage of \$3.00 a day. In

1915, he was promoted to the position of Engineer, in the Division of Forest Engineering. The following year he was made Assistant Superintendent, and had become Superintendent of the D.F.E. in 1917. Some time in 1928, while Fred Gilbert was under fire, he had been made a sort of unofficial Assistant Manager of the Spruce Wood Department, which had put him in a somewhat uncomfortable spot. During his time, he served on the Bangor City Council, was a Director of the Eastern Maine General Hospital, the Merrill Trust Company and the American Pulpwood Association, was a Trustee of American Forest Industries, served as an advisor to the War Production Board during World War II, was a Trustee of the Pulp & Paper Foundation of the University of Maine, and a Director of the Northern National Bank of Presque Isle.

He was not a "conservationist" in the current sense, but a conservative; a pragmatic forester, who perpetuated Fred Gilbert's careful cutting practices, intended to insure that the Company would always have wood, without indulging in his excesses. He knew every acre of Maine timberland, and engineered the purchase of nearly half the land ever owned by the Company. He improved on the program of long-range planning for roads and operations, and continued the development of more efficient equipment and methods. He did not have the charisma of Fred Gilbert, whom he greatly admired, but he was universally respected for his strict honesty and fairness. He loved working with wood, and the house near the Eastern Maine Medical Center, which he bought after he became Vice-President, was full of truly beautiful reproductions of antique furniture which he had made, all of maple, mostly birdseye, because he was strongly allergic to dust from every type of wood except that species. His home life was a

model one. He was devoted to his wife Florence and his family of two sons and two daughters. The writer learned a great deal from him. Their first real contact was when William A. Whitcomb, early in 1930, sent the writer to Bangor, to be educated on the Spruce Wood Department in general, and specifically to investigate the purchase of some 50,000 acres of timberland then on the market and recommended by the Vice-President. Nobody could have been much more ignorant of the subject, but orders were orders, and after studying the matter in the light of everything he could find out, he recommended that the purchase be delayed. The President agreed. Bill Hilton was angry, and said so very plainly, but, understanding the situation, bore no ill-will. Indeed, in spite of the difference in their ages, he and the writer became close friends at this time, and the latter was a frequent guest in the Hilton home over the next thirty years. Incidentally, just to show that he had done his homework, the land in question was bought later in 1930 for \$3.00 an acre less than the original figure. William Hilton was afterwards a Director of the Company, and continued to serve as Vice-President and Manager of what in his time came to be called the Woodlands Department, until his retirement in 1960.

This was an exciting period. A great many things were happening or getting ready to happen. Some were related and some were not, and the events overlapped in time, but again we will do our best to put them in some kind of order, and explain, where memory and available information allows, what they were all about.

Let us first, however, take care of the Sourdnhunk Dam & Im-

provement Company, a wholly-owned subsidiary which happens to turn up late in 1928 by reason of an appropriation of \$17,000 to repair the Toll Dam. Logs had been driven out of Sourdnahund Stream as far back as 1851, before there were any dams on it, and could always be identified by their battered condition. This company was chartered in 1878 and incorporated in 1879 for the purpose of improving the stream for driving. Caleb Holyoke was the first President, and was succeeded by his brother Franklin, from whom, much later, the millsite at East Millinocket was purchased.

There were some interesting things about this company. Its first dam, the lowest down the stream, was the so-called Toll Dam, mentioned above. The construction crew of fifty men walked in from Medway, with the exception of eight, who poled four batteaux loaded with tools and supplies up the West Branch. The dam was put together with hardwood pegs, no iron being used, and the bottom withstood several rebuildings. As soon as work was under way at the Toll Dam, a team went up to survey for another at the foot of Sourdnahunk Lake, dragging a batteau, fitted with hardwood skids, over the rocks, and on their return, part of the crew at the Toll Dam was sent up to start work at the lake. Both dams were completed in 1879. We mentioned earlier that dynamite was first used in Maine on the construction of these dams and improvements to the stream. It had to be brought all the way from Old Town in batteaux, as the railroad would not carry it to Mattawamkeag, and no teamster would touch it. On the way up the stream, the survey crew discovered the slide which had occurred nobody knew exactly when, but probably around 1870. This had started on The Brothers, bounced off the lower slope of O.J.I. Mountain, and

blocked the stream for two or three miles, diverting its course and making driving impossible without another dam. This, the Slide Dam, was built in 1880, but, as it had to be laid on the material from the slide, no good bottom could be found. It went out and was rebuilt in 1882, 1884 and 1895. In 1915 it went again, and with short wood being driven, it was not rebuilt. All three dams were of course of wood construction.

Great Northern probably acquired its first interest in this company through the purchase of land in T.4 R.10 in 1906. In that year Fred Gilbert became Treasurer and Clerk. Additional stock was issued as money was needed. By 1918, the Company held all but 11 of the 63 shares, and Garret Schenck was President. By 1921, 73 shares had been issued, and they were all owned by Great Northern. Pulpwood was cut in the Sourdnahunk valley and driven out of Sourdnahunk Stream at intervals until 1961. After the Toll Dam was repaired in 1928, it was allowed to gradually fall into disuse, although it was patched up temporarily a few times to assist in driving. The Sourdnahunk Lake dam has been maintained for storage purposes. It must have been repaired and rebuilt many times between 1879 and 1929, when a new one was built some little distance below the original location. This structure, rebuilt in 1950, is the one there as this is written. The Sourdnahunk Dam & Improvement Company, however, has disappeared, being one of those merged with Great Northern in 1953.

The Company had in its timberland holdings at this time a considerable acreage in northern Aroostook County, and with this had acquired water power rights on the Fish River. The writer has in his notes a memo from some Company source which he cannot now identify

reading: "Garret Schenck offered to sell Fish River for \$350,000 in 1925." Hardy Ferguson had made another study of the power in this area in that year, and it is believed that this offer, which was not accepted, was to the International Paper Company, because in 1926, the American Realty Company, I.P.'s timberland-owning subsidiary, and Great Northern began negotiations which resulted in a deal, consummated in 1927, under which the American Realty Company traded its interest, amounting to some 50,000 acres in seven towns, mostly along the East Branch, for Great Northern's interest of a like total amount in ten towns in the Allagash and Fish River area. International then introduced into the Maine Legislature in 1929 a bill for a charter for the Fish River Power & Storage Company. The incorporators named in the bill included five local people from Washburn, Fort Kent, Van Buren and Grand Isle, one man from Bangor, two Portland lawyers, and A.R. Graustein, President of the International Paper Company. Archie Graustein first personally approached William A. Whitcomb with this proposition. As the latter reported it to the Directors in January, 1929, it was to provide for the building of two storage dams, one on the Fish River and the other at the mouth of the Allagash, and in consideration of being granted these rights, I.P. would build a pulp and paper mill at Van Buren. He stated that he had agreed that the Company would not oppose if the provision for the dam at the mouth of the Allagash were taken out. The 1929 act which emerged from this bill, in whatever form it may have been presented, allowed the Fish River Power & Storage Company to generate and sell electricity in Aroostook County, and to build dams at the outlets of Eagle Lake and St. Froid Lake, both on the Fish River, but prohibited the building of any dam on the Allagash. Whether because this legislation was



unsatisfactory, because it had not been intended to go ahead with the Van Buren mill immediately, or because this proposition was an alternative, I.P. constructed no paper mill at Van Buren, but its subsidiary New Brunswick International Paper Company proceeded at once to build a large new four-machine newsprint plant not far away at Dalhousie, N.B. This started up in 1930. The new James MacLaren Company mill at Buckingham, P.Q. went into production in the same year, with two wide machines. In the meantime, two more big units had been added to the Price Bros. Riverbend mill in 1928, and other Canadian newsprint mills had speeded up and added machines of which we have no record. We have probably missed another mill or two constructed during this great Canadian expansion; for instance the very efficient mill of the Mersey Paper Company at Liverpool, N.S., which came into operation in 1929; and we have neglected developments on the West Coast entirely, as while these had some effect on the situation, it was the big new eastern mills that are important to our story. Anyway, the Canadian industry was rapidly building itself into bankruptcy.

We have said in another place that in our opinion the Great Northern Paper Company had missed the boat by not getting with it ten years before. This was now becoming apparent. The Canadian industry, growing by leaps and bounds, with its many new mills embodying the latest in pulp and paper making technology, was for the most part grinding wood on modern four-foot grinders, with unlimited amounts of power at low rates from enormous hydro-electric developments that made the one at Millinocket look like a toy, and making its chemical pulp under sophisticated controls. Great Northern was still manhandling two-foot wood into obsolete grinders, fighting recurrent

power shortages and operating two sulphite mills, one forty years old, the other not much younger, and neither improved to any extent. The new Canadian plants were also in the most cases making newsprint on big new high-speed paper machines, half as wide again as any of the Company's sixteen, eleven of which, although modernized to some degree, were vintage 1900, give or take a few years. Great Northern did have some unique off-setting advantages, in that it had good and long-established customer relations, at least versus some of the newer Canadian concerns; it had no debt load; probably a slightly lower average wood cost; it could make newsprint with less chemical pulp than anybody; it was short of power, but what it had was cheap, and it had a dedicated management and work force. However, these were hard to measure, at the time, against the relentlessly mounting competition and its historically predictable effect on the price of paper. This was already beginning to show. In June, 1928, the Company had set its price for newsprint for the year 1929 at \$60.00 a ton, F.O.B. mill, freight allowed, retroactive to July 1, 1928, and on November 14th, the President had informed the Directors that International had made a large contract with the Hearst papers at a cut price, and that a general reduction was likely in 1929.

It was William O. McKay who saw most clearly that something ought to be done, and it was he who put on the pressure, but it was late in the game, and there was not time to make the Company over. Much that was done helped, but in the end Great Northern rode out the coming storm, when most of the rest of the industry was sinking, on the strength of the advantages we have noted. This will be evident as we proceed with our story.

Two of the old Millinocket paper machines, and one of the Madison machines, had already been replaced, but while more efficient than the original units, they were still not in the class of much of the new Canadian equipment. One of the first jobs William O. McKay gave to Dick Caspar, when he became Assistant Manager in 1928 was to head up an investigation of competitive machines and cost of operation. The result of this study was the decision to replace the old Nos. 1 to 6 machines at Millinocket with four 234" units. William A. Whitcomb had been hard to convince. He did not feel that good formation, to which he attributed the ability to get by with low sulphite, could be obtained on a wide machine. The writer recalls that at this time he made many simplified drawings of various comparative sections and elevations of the machine room for his study. There were long discussions with George Barton and Steve Stafford, of Rice, Barton & Fales, who of course would make the equipment, and this was when Charlie Pennings, Foreman of the paper room at Millinocket, asked if he could produce a good sheet on a big machine, gave his classic answer: "Hell, yes! It's only got two edges, ain't it?" William A. Whitcomb was finally persuaded, and as we have already noted in another place, work was started in 1929 on a new two-bay machine room, to take the four new machines. This was built over and around the old three-bay No. 1 - 6 room, and because the cost of new construction at all three mills had to be kept within the depreciation figure of \$1,000,000 more or less, only the steel was put up in this year, and the job was finished in 1930. William A. Whitcomb had \$4,000,000 in the bank and in receivables at this time, but he did not intend to spend a nickel of it if he did not have to.

A simultaneous move, which we have also already mentioned, was to begin the conversion of the Madison mill to the manufacture of specialty papers, it being no longer able to compete in the newsprint market. The action was confined at this time to No. 2 machine, model 1899. The appropriation to effect the change to "high grade sulphite specialties" on this antique was the magnificent sum of \$45,000. No. 1, a relatively new machine, was to be left on news for the time being, but the plan was to eventually take the whole mill out of newsprint production.

The production of the two Penobscot mills had tripled since they had been built, without the development of any power except that at the original sites. The proposed new machines, when installed, would have raised the output of the Millinocket mill to around 800 tons, an increase of some 200 tons per day, and this meant that around 20,000 horsepower, not then available, would have to be found somehow. This question was the subject of much discussion. New hydro-electric developments all the way from Ripogenus to Five Islands were considered, Hardy Ferguson making new estimates on the Ripogenus power, as we have noted. It was at this time that the purchase of the Rockabema station, built by Charles Mullen's Penobscot Power Company a few years before, was studied and turned down. It was finally decided that the place to develop next would be Mattaceunk Rips, which the Company owned, and in 1929 test borings were made at what seemed to be the best site, flowage surveys were made, and the optimum head, with the flowage it would create, was determined. This information was put on the shelf for future reference, because a more immediate project was the conversion of

the Dolby grinder room into a hydro-electric station. This, it will be recalled, had been decided upon some years before, at which time one grinder line was removed and a generator installed. Hand in hand with this was the matter of providing for East Millinocket more efficient grinding equipment, capable of making more pulp than the two existing grinder rooms together. The lack of such equipment, in the opinion of the management, meaning William A. Whitcomb, had been the principal reason for holding up work at Dolby. Its successful development by the Company itself had been a factor in the decision to go ahead, not only with this job, but with the expansion at Millinocket. What had been arrived at was the Whitcomb grinder, which became famous as the Great Northern Grinder, used in mills around the world, and which later became the Great Northern-Waterous. Since this was an important development, we will tell about it here as well as we can, without trying to get into all the details.

This matter of four-foot grinder equipment had been the subject of study in the Company for many years, beginning perhaps as far back as 1917-1918, when pulpwood began to be delivered at the mills in four-foot lengths. Wood for grinding had always been cut into two-foot blocks, and since the barking drum began to be used around 1910 it had been barked in two-foot lengths. While the barking drums had many advantages over the old knife barkers, in labor saving and reduction of wood loss, they had one great drawback in that they "broomed" or splintered the ends of the blocks of wood. These splinters did not grind into pulp, but broke off in the grinding process, and greatly increased the amount of bull screen waste, which at that time went right into the river. This

condition had been accepted as a necessary evil, although many efforts at drum improvement, intended to reduce the brooming effect, had been made. However, the increasing cost of wood, and the fact that it was being received in a manageable length, began to make the loss of fibre in an extra saw-kerf and the brooming of four ends instead of two important, and grinders of several types to handle four-foot wood had been developed, and were in use in other mills, before 1920. Some of these were just over-size machines of the three-pocket type, and some, like the Voith chain-fed grinder developed in Germany much more sophisticated.

William A. Whitcomb interested himself in the subject personally. An engineer and a groundwood man by training, he very early became convinced that continuous grinding, with a constant amount of wood surface always in contact with the stone, was the optimum condition. He consequently was interested in the chain-fed grinders, which in theory met this condition, having a single wide pocket, directly on top of the stone, surmounted by a vertical magazine filled with wood, which was pressed against the stone by spurs or dogs on electrically-driven chains running downward inside the magazine, one at each corner, returning outside. Early in the 1920's, he had sent Charlie Carrier on a number of trips, including one to Europe, to study four-foot grinder installations, and as a result of these investigations chain-fed Warren grinders were installed in the rebuild at Madison. However, at this time, it seemed necessary to use a magazine twelve feet or more high above the stone, presumably in order that a sufficient number of the spurs on the chain would be in the wood at one time to prevent them from tearing

through it under the downward thrust. This type of machine was impractical for use at either of the Penobscot mills, because of the excessive expense that would have been involved in rebuilding the grinder rooms and conveyor systems to provide the required elevated wood storage lofts. Besides, Great Northern ought to be able to devise something better.

There was already in use a hydraulic grinder, built by Waterous Ltd. in Canada, which had two horizontal pockets, one on each side of the stone, above each of which was a magazine much shorter than that of the chain grinder, holding enough wood for perhaps four or five charges of the pocket, but still requiring an elevated charging floor. The plungers or pressure feet in these pockets, connected by a single piston rod to a double-acting piston in the main hydraulic cylinder, were box-like, the flat top surface a little longer than the opening between the magazine and the pocket. In operation, the pressure foot was retracted and wood in the magazine moved down, filling the pocket. The motion of the piston was then reversed, and on the downstroke the pressure foot literally sheared through the mass of wood, pressing what was in the pocket against the stone, the long skirt of its top gradually closing off the bottom of the magazine so that no more wood could come down. When the pocket was ground down, the process was repeated, the magazines being replenished from the top, and by timing the operation of the two pockets the stone was always grinding on one side, and on both sides except for the very short interval while the pressure foot was being backed off, approximating continuous operation. The writer has nothing to confirm this, but he believes that the general principle of this machine provided the inspiration for the design of the Great Northern Grinder.

The Waterous grinder could not be used as it was, because it required a charging floor; the nature of the pressure foot made the machine too long on each side of the stone to fit the existing grinder line spacing, which was immutable, and anyway, William A. Whitcomb did not believe that wood dropped into the pocket in this manner would always be arranged properly for grinding. Revisions in the design might have taken care of the first two of these objections, but William A. Whitcomb typically set out to have the Company design a machine tailored to its own needs. He provided the solution himself. This was to utilize the principle of two large opposed pockets, each with a conventional hydraulically-operated pressure foot, and with, over each pocket, a small magazine into which a single charge of wood could be loaded from a conveyor, and in which it could be arranged so that it would drop freely; the bottom of each magazine a sliding steel door that could be opened and closed by a quick-acting hydraulic mechanism. Opening this door, with the pressure foot retracted, would drop the charge of wood neatly into the pocket; the sliding door would be immediately closed, and the pressure foot started down. While the pocket was being ground, the magazine would be refilled, and by proper timing between the two pockets, grinding could be almost continuous.

There is not too much information about the evolution of the successful grinder, but the writer knows what happened in a general way. The first working model was built for two-foot wood, and experiments were carried out with it in Millinocket in 1924. At the same time, an ordinary three-pocket four-foot grinder was being tried out on No. 6 line at East Millinocket, the old two-foot stones having been removed from this line. This was unsatisfactory, because



it was difficult to get wood to it, and the heavy work of loading it with four-foot sticks made it hard to get men to work on it, emphasizing the importance of a grinder that could be fed from the top. The two-foot prototype showed sufficient promise to warrant the building of a four-foot unit on this principle, and this was installed in place of the three-pocket machine on No. 6 line at East Millinocket in 1925.

This grinder was designed for the space available. The use of a standard-type pressure foot reduced the overall length, and this was further shortened by angling the pockets upward about 20 degrees. It gave a lot of trouble. As the writer recalls, this first unit had only one main cylinder on each pocket, connected by a single piston rod to a long pressure foot, the width of the pocket. The Waterous grinder was built this way, but its long pressure foot gave no trouble because of its box-like shape, and its extended top, which bore against both sides of the pocket its entire length. The conventional pressure foot, having little depth from front to back, tended to twist, bending the piston rod and binding or plugging the pocket, as one end of it might be exerting pressure on the wood before the other. When this happened on one pocket, with the other empty, as was often the case, especially during the experimental stages, the water wheel went to runaway speed, causing a lot of stone breakage, particularly since natural stones were being used. The machine was too lightly built; pockets and bridge-trees broke frequently, and the bearings were inadequate. With a load on one pocket, and the other empty, the whole thing racked out of shape, and the stone shaft deflected 1/8 inch or more, leaving an opening between the finger bars and the stone on the loaded side, which

allowed an excessive amount of shims to escape, while on the other side the clearance was cut down so that slivers jammed there and burned the stone. Except for the trouble with the pressure foot, there were fairly obvious solutions to all these difficulties. Parts of the machine were remodelled several times, and experiments were carried on with the sliding door and various shapes and sizes of magazine which proved that this essential feature of the Whitcomb grinder was viable.

The International Paper Company had already solved the pressure foot problem in an ordinary three-pocket grinder by the use of two hydraulic cylinders and two separate pressure feet for each pocket -- the Curtis "double follower" -- and had patented this principle. This Curtis patent was either purchased or licensed lump sum, probably some time in 1927, and the grinder was rebuilt again in 1928 with this feature incorporated. This answered the pressure foot problem, although there was still some grief from the piston rods bending under the pressures used on the new grinder. That was taken care of by using much larger rods, with brass sleeves, after trying ball joints on the pressure foot end, and other expedients.

Along the way, an effort had been made to make the operation of the grinder automatic; that is, the magazines were to be loaded by hand, but the retraction of the pressure foot, the opening and closing of the sliding door and the reversal of the pressure foot were to be controlled automatically by limit trip mechanisms operating hydraulic valves; and a lot of work was done on this. However, after all the other problems had been solved, it was decided that this was not worth the trouble; manual controls were installed, and

there was the successful, working grinder. In the meantime, patents had been applied for in the United States and Canada. These were granted in 1928 in Canada, and in 1930 in the United States, in the name of William A. Whitcomb, and were assigned to the Company. Patents on the water conveyor designed to feed the grinders were granted in 1932 in Canada, and in 1934 in the United States.

In 1928, after all the bugs had been worked out, the grinder was completely redesigned in detail by Great Northern engineers, most of the work being done by Dolore Theriault, with help from Jim Waterhouse, manager of the Montague Machine Company, and after a final study of the new machine in comparison with other types, during which the writer drew for him many little formal sketches illustrating the parts and principles of each, William A. Whitcomb made up his mind that he had what he wanted, and decided to go with it. On December 2, 1928, he asked the Directors for approval to resume the program of converting the Dolby grinder room into a hydro-electric station, starting with the purchase and installation of two of the new grinders and a 1,200 h.p. synchronous motor at the East Millinocket mill. The estimated cost of this first step was \$70,000, and this amount was voted, to be expended in 1929. We will cover the details of this project in another place.

It is a curious fact that the President's request was for approval of the purchase of "two four-foot two-pocket Montague grinders". The reason for this, as the writer recalls, was that it had been agreed, in connection with obtaining the Curtis patent, that Montague Machine Company, of Turners Falls, Mass., a subsidiary of the International Paper Company, would build the equipment to go into the experimental

grinder, and this is how Jim Waterhouse, a tall, thin, deliberate, pipe-smoking gentleman, came to be in the design picture. Thus involved, it was natural that the order for the first units went to them, and having the patterns and the experience, it was a normal consequence that they built all the Great Northern grinders installed by the Company, without competition. The machine which started out as the Whitcomb grinder was never known by that name in the trade. William A. Whitcomb wanted it called the "Great Northern". The name "Montague", however, was vaguely associated with it through the name-plate identifying this company as the builder. It was immediately popular in the industry, and the Company made quite a little money on it in royalties. Separate license fees were collected on the water conveyor, where it was used, this patent running a few years beyond those on the grinder.

Within the next few years, non-exclusive licenses to manufacture were issued to the Montague Machine Company and Carthage Machine Company in the United States; to the Hydraulic Machinery Company and Waterous Ltd. in Canada; to Walmsley's, Ltd. in England and to Linne & Jerne in Finland. Individual royalty agreements were made on each sale by these companies. As far as we can recall, Hydraulic Machinery Company made few if any sales, and Carthage was a one-shot deal. However, the others shipped Great Northern grinders all over the world. Montague made or supervised the manufacture of a number with stainless steel pockets to resist the corrosive action of eucalyptus wood under a special license to Australian Newsprint Mills, Ltd., and Waterous shipped one grinder to, of all places, Haiphong, then in French Indo-China, later North Viet Nam. Mechanical improvements

were made from time to time -- heavier parts where breakage occurred; more efficient operating valves; wear plates; stronger lathes and anti-friction bearings, for example -- all the grinders installed at East Millinocket had water-cooled babbitted bearings, because the engineers did not trust anti-friction bearings for service in such a wet location -- and foreign builders made some improvements of their own.

In 1944, when the Canadian patent was nearing expiration, the Hydraulic Machinery Company license was terminated, and a three-way agreement was made between the Company, Montague Machine Company and Waterous, Ltd., under which the last designed a new grinder, based on the Great Northern principle, but embodying some features of its own machine on which it had patents still alive. The agreement did not prohibit the manufacture of the old Great Northern grinder, and the Company collected royalties on a number of these after its patent had expired, on the basis of a fee for the use of the drawings. We are again away ahead of our tale, but the story of the Great Northern grinder had to be told somewhere, and this was as good a place as any.

We have said that the Company did not have any steam-generated electric power. It did have, about this time, a little generator in the boiler house, driven by a steam engine, to provide emergency lighting for the Millinocket mill, and there was possibly a similar unit at East Millinocket, although the writer does not remember it. However, this could hardly be called auxilliary power. In February, 1929, the Company made its first small move in the direction of auxilliary steam-generated electric power when the Directors authorized

the purchase and installation of two 1,000 KW steam turbo-generator units at the Millinocket mill. While it increased generating capacity a trifle, this job really grew out of the necessity of relieving the load on the two hydro-electric units at Millinocket. The original wheels and generators had been replaced years before, but the new equipment could never be run at capacity, because discharge of water beyond a certain point set up a vibration in the 11-foot penstock provided when the mill was built. With the demand for power, these units were being run on the edge of disaster. In brainstorming this problem, someone came up with the thought that the boilers, which were good for 200 p.s.i., were being run at only 135 lbs., and that this difference could be utilized to produce power. The proposal, the installation of two 200 lb. back-pressure turbo-generator units, bleeding steam at 135 lbs. for the sulphite mill and paper machine engines, and exhausting at 43 lbs. for process use, was eminently sensible; called for no new building construction, since there was space in the boiler house; required the use of only a little more fuel, and was estimated to cost \$145,000. It was approved promptly, to be paid for out of the allowance for depreciation, of course.

In the way of miscellaneous information about this year 1929, a charter was granted to the Quebec Extension Railroad, organized by A.R. Gould, to build a line from Washburn across the state to Lac Frontier on the Quebec border. This would have opened up a lot of Great Northern land, and the Company did not oppose it, and actually, the sale of land for a portion of the right-of-way was authorized, but the project never materialized. The writer's recollection was that this was to be an electric railroad, and perhaps was tied in

with the proposed development of additional power in the area, which we have mentioned, and which did not materialize either. This was a low-water year. There was almost no precipitation during the fall months, the line on the storage chart went down-hill on a rapid slope after July 1st, and the Company began to buy groundwood in December, purchasing something like 12,000 tons during the winter at nearly twice the cost of its own pulp. Another quarter of a million dollars worth of Spruce Wood Department structures and equipment on the books and deemed to be of no further use was written off. The salary dividend of 15 percent, half on July 1st and half at the end of the year was continued, but motions began to be made at doing away with it, at least for the higher-paid people. In June, when the "bonus" for the first six months was voted, the Treasurer's salary was raised from \$10,000 to \$12,000, with the stipulation that he was not to receive any salary dividend or bonus in future. There was no general action on the matter, however, until later on.

About this time, radio had come of age, the networks were being formed, and it became a serious competitor for advertising dollars. This situation was viewed with alarm by the publishers and the newsprint manufacturers alike, and while not publicly stressed, had a disquieting effect. There was talk, even at that time, of a machine in every home which would receive news by radio during the night and deliver a printout in the morning. Some newspapers suggested that they would retaliate against any of their suppliers who bought radio advertising time. Great Northern's management, while not endowed with any prescience, was not in the least alarmed, and even predicted that in the long run radio would have the effect of increasing interest in all forms of advertising, and give it a boost which

would reflect in more advertising space being used in both newspapers and magazines. This furore over radio did not last very long, but it was worrisome for a time.

It has been noted that the Company's stock had been split four for one in 1927. There are no actual figures available as to the market value of the \$25 par shares, but judging from the price discussed in connection with Fred Gilbert's holdings, it was probably around \$90.00 at the time. Not long after this, the stock was "adopted" by the old Curb (American) Exchange, and was quoted occasionally, although no figures have been found until about the time of which we are writing, when it stood at \$60. This put it within reach of a lot more people, and there began to be considerable interest in it among employees, a number of whom asked to be allowed to buy under the old purchase arrangement. In the first half of 1929, a total of 1130 shares of Treasury stock was sold to six employees at this \$60.00 price, on a down payment of 10 percent, with 5 percent interest on the unpaid balance, the stock being held as collateral and dividends credited against the account. This brought the number of shares outstanding to 998,330, a figure which was to remain unchanged for many years. During the remainder of the year the price of the Company's stock continued to slide downward, because of the unsettled conditions in the newsprint industry, but the October, 1929, stock market crash had no immediate drastic effect on it, and the Directors took no official notice of this event.

One of the last acts of the year was to set the price of newsprint at \$60.00 a ton for the year 1930, but the officers were given authority to make further discounts as they deemed necessary, indi-



cating the instability of the price situation, which had grown so chaotic as to practically defy explanation.

By 1927, through growth and mergers, two huge enterprises, the Canadian International Paper Company and Abitibi Power & Paper Company, had developed in Canada, but there were also a lot of smaller independent producers. In that year, a group of these smaller outfits formed the Canadian Newsprint Company, a sales coordinating organization, which in effect bought paper from the mills and sold it to the publishers, this giving it the power to allocate tonnage to its members. It was short-lived, breaking up within a year, but in the effort to keep its mills up to production, it made long-term contracts, notably with the Hearst papers, the largest U.S. consumer bloc, at prices below the then ostensibly prevailing \$65.00, F.O.B. mill. We say ostensibly, because some companies had been giving discounts, mostly by way of paying all or part of the freight, particularly to the points most distant from their plants. This organization came apart because some of its members could not live with the prices it was making, but when it did so, some of them still adhered to the lower prices on their Hearst contracts.

The tonnage involved was great enough to influence the situation, and in recognition of it, the manufacturers in general, starting in 1928, began to make prices on an "F.O.B. Mill, freight allowed" basis. This was not exactly the same as the old "delivered" price system which had prevailed away back before 1917, since the entire cost of freight was not necessarily allowed. Some time in 1928, the International Paper Company introduced a new pricing scheme,

under which the United States east of the Mississippi was divided into four price zones, the bounds of which were probably determined by the contour of freight rates. The price set for each zone was different, but all customers in each zone were charged the same price, F.O.B. mill, freight allowed. This system was very soon adopted by the industry in general, not by any agreement, but as a matter of self-protection.

Just at this time the Federal Trade Commission started an investigation of pricing practices, H. Merton Joyce receiving a long questionnaire which he referred to Sheldon Wardwell late in August, asking for his opinion as to whether he should answer it. That cautious individual declined to give an immediate answer, but a few days later suggested that the forms be filled out but not filed until after they had been discussed at the September meeting of the Directors. In the meantime, however, H. Merton Joyce had decided, from the nature of the questions, that the investigation was not really aimed at the newsprint industry, which was making only one product, and on September 6th wrote a letter to the Chief Economist of the F.T.C. explaining the Company's past and current pricing policy, which seems to have quieted the matter. However, this little flap was followed immediately by another, brought on by a study and report issued by the Corporation Trust Company of New Jersey, questioning the right of a corporation chartered in any particular state to "do business" in any other state in the union in which it was not licensed or registered in some way. The Company was of course chartered in Maine, and was licensed in New York state, where it had an office, but nowhere else. The question, as Sheldon Wardwell said, was "a very intricate one", and caused a certain amount

of sweat. However, in the end it was decided not to turn over any rocks, but to simply proceed on the basis that the Company might properly be regarded as doing an interstate business, requiring no special authority from the states in which it was selling paper.

We might say here that within a few years this system had been pretty much formalized, all companies using essentially the same zones; the number of zones was increased -- there were ten at one time, covering the entire United States -- and the differentials between zones became more or less standard, based on the price for Zone 4, an area roughly bounded by the Mississippi River on the west, the Ohio River on the south and extending to the east coast, excluding New England and all of New York State, except the area just north of New York City. Under the New Deal's National Recovery Administration (N.R.A.), the differentials became an arithmetical progression, after some gerrymandering of the zones. This system remained in effect until 1957, when it broke down, the Zone 4 price being extended to nearly all the country east of the Continental Divide, again excluding New England and northern New York State, which had a minus differential. Since then, some new geographical areas have been established, with uniform prices for each, but these are only vestiges of the newsprint price zones that were in effect for so many years.

In the spring of 1928, the International Paper Company, probably through the initiation of its zone system, reduced its price to \$62.00 for the remainder of the year. This move followed the demise of the Canadian Newsprint Company, and was perhaps I.P.'s reaction to the activities of this organization, which had weakened the already

disorganized price structure. The dissolution of this outfit of course ended the arrangement which Hearst had with it, and late in the year the Hearst buying organization put up a large tonnage for bid, on a five-year contract basis. This was taken by International at a price of \$57.00, F.O.B. mill, freight allowed, which would have meant approximately \$50.00 at mill, in the base zone, and in accordance with its policy, it extended the same price, with zone differentials, to all its other customers. The first of these moves was what caused Great Northern to reduce its New York price to \$60.00 as of July 1, 1928. The second occasioned the President's warning in November of an impending further cut as a consequence of the negotiations between Hearst and International, the results of which were not then known, although they came out within a few days. Just to confuse matters further, if one looks at the official record of the Company's delivered New York price for the last half of 1928, as we will do shortly, he will find it stated as \$65.80. This has to be understood to be the F.O.B. mill, freight allowed figure, which netted \$60.00 at the mill.

The Great Northern Paper Company, true to form, pursued its own independent course. It did not adopt the zone system at this time, like everybody else. What it did is outlined in the draft of a letter prepared by the Company's attorneys as a reply to written questions from Rep. Emanuel Celler, Chairman of the House Sub-Committee on Monopoly Power, which investigated the newsprint industry starting in July, 1950. This will help to illustrate why it is still more difficult, more than twenty years later, to reconstruct the price situation of the time we are talking about:

"Dear Mr. Celler:

I have your letter of July 21, 1950. All the personnel connected with the price policy of the company in 1928-29 at the time the company was forced by competition to depart from F.O.B. mill pricing practices are now dead. Consequently, it has been somewhat difficult to piece together the information you request. However, I have done my best from the sources available, and wish to advise as follows:

Your first question: "Date of adoption of newsprint price zone system and copy of initial price zone system."

Up and until some time in 1928 the company was selling its newsprint F.O.B. mill to all customers irrespective of location, which meant, of course, that the distant customer paid more for his product than the nearby customer. Sometime in 1928, the company adopted a policy of offsetting some of the increased cost to its distant customers by making a freight allowance to such distant customers.

In 1929 the company discovered from its contacts with its customers that competitors were offering newsprint on a delivered price basis, which of course resulted in underselling the company's prices in markets distant from this company's plants. In the beginning of 1929 this company in order to meet this competition began to quote its customers on a delivered price basis. Apparently no written or recorded zoning system was established by this company. However, from an examination of the actual contracts....we have reconstructed a map.... Exhibit A....showing our geographical price differentials.

Apparently no zones were set up. This effort on our part to meet the competition was apparently done city by city.

Your second question: "Changes in price zone boundaries, zone price differentials, port allowances and all other changes in the zone price system since initial adoption..."

Sometime in 1930, the company again returned to its policy of F.O.B. mill pricing with varying freight allowances.

In 1931 the company changed back to its 1929 method of pricing, shown by Exhibit A, which policy it continued in effect until June 1, 1932. Our records indicate that at that time the company adopted a zoning system which was and probably had been for some time in use by many of its competitors. In this early period of adoption of the zone system, however, apparently it was not used by this company in exactly the form later publicized by the N.R.A. and O.P.A.....

The record seems to indicate that our sales department in its contacts with its customers from 1928 on gradually learned that an integrated zoning system had been put into effect by all its competitors. As this whole period was one of falling newsprint prices and excess of supply over demand, it was always necessary to meet price competition to the penny in order to keep and retain business. By 1932 consumers of newsprint were apparently fully informed of the zone system and unless our price conformed thereto, we would have been unable to meet the competition, and in order to do so this company decided to adopt the zoning system in use by its competition...."

In discussing this mixed-up period, we are confronted with figures for price F.O.B. mill; price F.O.B. mill with freight allowed to distant customers; price F.O.B. mill with partial freight allowed; price F.O.B. mill with all freight allowed; price delivered, no point specified; price, period; price by zone, freight allowed; price for the base Zone 4, and the long-established standard of comparison, price delivered New York, regardless of the manner in which this was arrived at, with the complication that under the zone system New York city was a "port", with a differential of \$1.00 a ton under the base Zone 4 price. If you get confused, we would not be surprised.

We have anticipated developments a little, so let us go back again to late 1928. The general price cut by International, arising out of the five-year deal with the Hearst papers, with its traumatic effect on the rest of the industry, shook up the governments of Ontario and Quebec, who, aided and abetted by U.S. publishers, had encouraged this industry, had seen it grow, and finally, by overbuilding any conceivable rate of consumption, became a monster which seemed bent on financial suicide. On November 19, 1928, Premier G.H. Ferguson of Ontario wrote to each of the newsprint producers in his province a letter which was released to the New York Times as of that date, and which is quoted in part:

"For some time the government has been much disturbed over the condition of the newsprint industry and what is regarded as a very critical situation has been receiving careful study....

Among other efforts, the government encouraged the establishment of paper mills. A few years ago the conclusion was reached that the industry would be on a sounder basis... if large, financially strong units were built up. A large

number of small plants with limited means would in times of depressed markets be forced to reduce if not entirely suspend operations with the result that the communities dependent upon them would suffer seriously..... It is with this view in mind and to bring this about that the government a few years ago revised the existing contracts with the companies and enlarged their scope.....Notwithstanding the assistance the government has given to the paper business as indicated above, the whole industry today finds itself in a very unfortunate condition.

During the greater portion of the past year this government has hoped that the good sense of the people in charge of this great industry would bring about some arrangement that would stabilize conditions.... It is apparent, however, that no serious effort along this line has been attempted. Methods have been pursued that have created what appears to be a condition of chaos. This government....does not intend to stand quietly by and see settlers and wage earners suffer and small investors.... have their savings jeopardized, while those responsible for the efficient operation of this business spend their efforts in a keen competition for who can get the largest share of the market .... regardless of what becomes of the rest of the industry....

It is with great regret that the government finds it necessary to draw your attention to the fact that you are under contract to this province;.... that many of the companies are in arrears and default has occurred with respect to a number of the conditions and obligations provided in the contracts.

This condition cannot be allowed to continue. I am therefore writing you in behalf of the government to say that unless



the people interested in the operation of the industry take some immediate steps to put the industry on a more satisfactory basis and improve the present situation, the government will be compelled to give serious and immediate consideration to what action it should take....to protect the interests of this province, its investors, its settlers, its wage-earners and its people generally.

May I suggest that you inform me promptly what immediate action is contemplated by your company and the others engaged in the industry to rectify the present situation?"

Premier Taschereau of Quebec made like noises, and their warnings were not to be taken lightly. The "contracts" to which they referred were Crown Land leases, granted on a year to year basis, and revokable at any time -- in fact this very thing has happened within the last year or two -- and they made their point.

The result of their action was the immediate formation, with government approval, of the Newsprint Institute of Canada, Ltd., which was joined by all the major producers except International. This group at once established an 80 percent production quota, with allocation of orders, and began to confer on price stabilization, specifically, as the year passed, on the price for 1929. The answer did not come easily. The Boston News Bureau of November 27, 1928, commented: "It is said that there is a difference of opinion as to whether \$55 or \$57 a ton should be the minimum. A major difficulty in the way of agreement is International's contract with Hearst at a price of not much over \$50."

The United States publishers, through their Association, had not

remained quiet, but while the smaller newspapers, as usual, were interested in nothing but lower prices, regardless of the results to the newsprint industry, the attitude of the larger consumers at this time seems to have been one of agreement with the provincial governments that prices should not be driven so low as to get the mills into real financial trouble and evoke government action which might bring on price controls. At any rate, the government pressure finally resulted in some sort of deal on the Hearst contract, and the general price for 1929 emerged as \$55.00 F.O.B. mill; \$5.50 less, delivered New York, than the 1928 figure. Great Northern's price of \$60.00 F.O.B. mill, freight allowed, established in June, 1928, had put the Company under the general delivered New York price at that time, by \$1.70 a ton. However, as a result of the above maneuvering, a further cut of \$3.80 was necessary to meet the competition, and the Company's price for 1929 was \$62.00, delivered New York, this being equivalent to the \$55.00 F.O.B. mill figure set by the Canadian mills.

As the end of 1929 approached, things were no better. A third force, the Canada Power & Paper Company, antecedent of Consolidated-Bathurst, larger in point of productive capacity than either of the other two giants, had been formed out of some of the independents in the group making up the Newsprint Institute, of which Col. John H. Price, of Price Bros., was Chairman. The Institute was allocating tonnage to its mills, but International was not bound by any agreement, and as we have seen, still more new mills were under construction. The fears of the governments of Ontario and Quebec that their forest resources were being depleted, not only without providing adequate return to the existing Canadian industry, but presenting the

prospect of greater grief ahead, prompted the Premiers of these provinces to intervene again, in an effort not just to hold the price, but to get it raised, even if it resulted in a lower rate of operation, as the lesser risk, and it looked as though they might be successful. By this time, however, the ideas of the American Newspaper Publishers' Association had jelled behind the principle of open competition, free of government control, which meant, under the conditions, a continuation of low prices, and they were actively campaigning to this end. On or about December 10, 1929, the A.N.P.A. issued a statement, published in the Boston News Bureau, reading in part:

"Since the increased price announcement, Canadian press agent sources have sent out....propaganda to effect that publishers, particularly in the United States, view such price increases as essentially reasonable and as an evidence of desire of Canadian producers to stabilize conditions.....

Following the demise of the late Canadian Newsprint Company, Ltd., a new group was formed....known as Newsprint Institute of Canada, from the officers of which we have sought but failed to secure information regarding its purpose....

From other sources, however, your committee is informed the Institute includes.....nearly all newsprint mills of Ontario and Quebec, some of which are said to have become members under pressure.

While heretofore there has been at least a semblance of competition....we are now....confronted with a combination, held together for five years under penalties for breach of agreement so great that all must obey the will of the majority.

The tonnage is pooled, production controlled and price and marketing conditions fixed to the end that nearly all mills within the provinces of Ontario and Quebec....may be kept in operation on an equal percentage of capacity, this perfecting an absolute monopoly and thereby subverting the law of supply and demand....."

It also accused the Newsprint Institute of trying to set up a cartel with European manufacturers to keep their paper out of the United States market, and authorized its officers to take up the matter of the combine with the Federal Government. Premier Ferguson's comment on this was, in effect, that the price of newsprint, as far as Canada was concerned, was no business of the U.S. Government; that the price had been \$70 to \$75 only a few years ago; that settlers cutting pulpwood were getting only \$4.50 to \$5.00 a cord delivered to the railroad, and that the provinces had no quarrel with the U.S. publishers, but were concerned with placing production on a pro-rata basis, so that it would be equalized for all the mills.

The A.N.P.A.'s outcry was brought on by the fact that on November 30th, under pressure from the two provincial premiers, members of the Newsprint Institute had made a price move. The Boston News Bureau, that prolific source of information on the subject, said, in its December 18, 1929 issue, in part:

"Chief interest in the dispute between Canadian newsprint producers and United States consumers over price for 1930 centers on attitude of International Paper Co. Although the three largest Canadian companies, other than International -- Abitibi, Canada Power & Paper and Price Brothers -- have announced \$60 a ton, an increase of \$5.00 over 1929 price

with a draw-back of \$5.00 for first six months in cases of three-year contracts, the matter is by no means settled.

International has the alternative of following the big Canadian companies and increasing the price, if settlement can be made with Hearst interests on the present contract.... or of announcing a lower price and incurring the ire of the premiers of Ontario and Quebec, who have insisted a higher price be established....

United States publishers have given warning they will not agree to a higher price without a struggle. President Graustein of International has stated he favored a higher price.....but doubts whether an increase is possible in view of present over-production.

Usually....International is first to announce its price for succeeding year on Nov. 30....However the company postponed its price announcement for one month. Canada Power & Paper then announced their price at an increased rate, followed by Price Bros.

International....unhampered by organized competition and opposition of Canadian provincial governments....could probably eventually lead the newsprint industry, but as the situation stands, it may be forced to follow the dominant interests in the organized Canadian industry.

The provincial premiers defend their position on grounds that unrestricted competition would seriously cripple one of Canada's leading industries. They say Canada is using up its valuable timber resources with profit only to foreign consumers, under present price conditions....."

On the same day, Premier Taschereau, of Quebec, said in a speech, reported by the same source:

"Canada is producing 60 percent of the paper produced on the continent, although two years ago we produced less than half. In the United States they cannot compete with us at present, and the situation is becoming more difficult with them every day. We have invited American capital to come here, and we have done well.

We find American manufacturers of paper here (International, by inference) wish to dictate the price....We are told they are selling their paper at \$55 a ton, fixing a price they wanted accepted by our Canadian manufacturers.

I have no hesitation in saying that no one in the United States, and they are fair-minded men in the United States, should expect our manufacturers to sell paper at cost price. Both governments of Ontario and Quebec have come to conclusion that \$60 is a fair price.

The government will not, by legislation, fix the price of paper. No government can do that. This government will not take any harsh measures, but I do say it is a duty upon this government....to see that the forests are not depleted without our people having a fair return for the trees cut down."

A.R. Graustein was not impressed by all this, and on December 23, 1929, International announced that it would hold to its \$55 price for the first six months of 1930. Canada Power & Paper, Abitibi and Price Bros., the mainstays of the Newsprint Institute, had no choice but to go along, and presumably in view of the fact that

unemployment would have resulted, the premiers did not implement their threats, although they continued to jawbone, Premier Taschereau telling the Quebec Assembly, as quoted in the Boston News Bureau of January 16, 1930, that \$55 was entirely too low a price; that the harm had come from I.P.'s untimely and imprudent five-year contract with Hearst, which seemed impossible to get rid of; that I.P. could count on the ill-will of the government which furnished its raw materials, and which held it responsible for the industry's troubles; that there was no combine among Canadian manufacturers, and that the newspaper publishers should not forget that ruin of small independent mills would inevitably create a trust which would have them at its mercy, and that any such development would find the Quebec and Ontario governments in its path -- interesting in view of the statement in his letter of November 19, 1928, in which he advocated building up "large, financially strong units", and the mergers of Canadian mills which had been going on with his blessing.

Through the year, there were a number of meetings between the Canadian manufacturers, including International, and government people, and between representatives of the Newsprint Institute and the A.N.P.A., but with consumption slipping, and Canadian mills running at an average of about 71 percent of capacity, the price stood for the remainder of 1930. Great Northern, already competitive and running full, stood pat.

Let us now leave the price situation for a while, and go on to some other things. In 1930, the depression was really beginning to be felt, and there was widespread uncertainty, but the Company was committed to its improvement program for the year, including the completion of the new machine room at Millinocket, a start on improve-

ments to the sulphite mill at that plant, and continuation of the conversion of the Dolby and Lower mill grinder rooms, and proceeded on its way. After tests by Prof. Charles Allen of Worcester Technical Institute, who did all of this kind of work for the Company, it had been figured out that with wheels of higher efficiency, operated at the best point, there would be sufficient water at Dolby to support another unit. An expenditure for this unit, designated No. 8, was approved in February, and work was started at once. Along with this, the Directors authorized the rebuilding of the transmission line from Dolby to East Millinocket, and the installation in available space in the Lower Mill boiler house of a 1,000 KW steam turbo-generator unit, similar to those at Millinocket. Late in the year, the second line of two four-foot Great Northern grinders and a 1,500 h.p. synchronous motor to drive them, were authorized for the East Millinocket mill, together with an 1,800 K.W. generator to replace another line of grinders at Dolby, all for installation in 1931.

By early 1930, the price of the Company's stock was down to \$50.00, and Frederick C. Adams Company, members of the old Boston Stock Exchange, put out a little four-page circular recommending the stock and soliciting buy or sell orders. This would not be worth mentioning, except for the facts that this bulletin made brief mention of the situation in the newsprint industry in Canada, which we have described; drew rather unfavorable comparisons between Great Northern's earning power and that of several Canadian companies, including the International Paper Company; and was mailed to I.P. stockholders, who began to write letters to its President, Archie Graustein. He was not pleased, and complained through a third party, a friend of Sheldon Wardwell's, who, while the Company had had nothing



to do with the thing, prevailed upon Sherman Adams to desist from further distribution.

At this price, a number of men again requested permission to buy under the purchase plan. This was encouraged by the management, and after a survey to see how much would be required, the Treasurer was authorized to buy up to 2,000 shares on the market, at not over \$50, for sale to employees. Actually, 2,287 shares were bought, at a price averaging about \$49, and this was sold to people nearly all of whom were in the "organization" -- the supervisory and administrative group -- on the same terms as before. The 7-1/2 percent salary dividend was paid to all but 24 salaried employees on July 1st, but as of that date the salaries of these 24, all middle management men, were raised 15 percent, and they were put on a "no bonus" basis. This action places the total number of true salaried employees -- those who were on Salary Records and were paid by weekly or monthly checks -- at 179, excluding officers, in 1930, as the instructions were that the "remaining 155" were to be paid the usual 7-1/2% at the end of the year.

There were some other developments. The Madison "high grade specialty papers" had not been any great success, and there was some discussion of putting the mill on a part-time schedule, and even of shutting it down altogether, but in the end the Company determined that it would be kept going, one way or another, the issue being decided not by the economics of the situation, but by the reluctance of the management to throw the Madison people out of work. It will be recalled that the mill had lost a substantial amount of money the year before and it did not do much more than break even in 1930. Further efforts were made to get rid of Pier 42 in New York

by extending the sub-lease to ten years. The Royal Mail Steam Packet Co. would not buy this, but they did agree to extend through 1931, with an option for one more year.

At the other end of the Company's operations, a 20-year option was obtained from the Madawaska Company and Edouard Lacroix, at a price of \$100,000, on the holding ground, with piers and improvements, on the St. John River near Van Buren. Mr. F.J.D. Barnjum, the conservationist whom we met a long time ago, turned up again this year, claiming that the Company had trespassed on his land in Mt. Abram township twenty years before, and to shut him up, the two lots involved, 640 acres, were bought for \$6,400. It seemed to the writer that the Company had had, and continued to have for a long time an almost continuous difference of opinion with the Internal Revenue Service, which was no great wonder. The reasons in most cases were technical and complicated, and need not be gone into. One such argument was settled during the latter part of this year 1930, when the I.R.S. collected \$636,000 additional taxes for the years 1916 through 1922. This payment was charged against surplus and did not affect earnings.

At that time, the highway from Mattawamkeag turned toward the river just east of Medway village, and ran along close to the bank for some little distance, swinging away again and back on a radius as it approached the old bridge which then crossed the East Branch right at its mouth. The State Highway Department, proposing to rebuild this section of the road, had an appropriation for it, and was about to start work when someone remembered that it would be flowed out when a dam was built at Mattaceunk. There were a number of dis-

cussions of the matter; several unacceptable proposals were made, and the writer finally solved the problem by laying out on paper an entirely new route through the village, which when surveyed was found to be satisfactory, and the Company contributed \$8,000 to make up the difference between the actual cost and the appropriation. The main highway has since been relocated again further inland, but this piece of road remains in use.

Everyone knows about the Baxter State Park, right in the middle of northern Maine; 200,000 acres more or less of wild land which includes the valley of Sourdnhunk Stream and the whole complex of mountains in the Katahdin range -- Katahdin itself, Pomola, Barren, O.J.I. and The Brothers; and the outlying Double Top, Turner, Strickland, Center, and the Traveler -- bought and donated by Percival Proctor Baxter to the people of the State of Maine, but few know that the first positive step toward its creation was taken in the Boston office of the Great Northern Paper Company in the fall of the year 1930.

We treated Percival P. Baxter a little roughly in an earlier part of our story, because it was necessary. That was the man on whom the Bangor Daily News of March 24, 1923 ran the headline:

"BAXTER BOUND WATER POWER SHALL BE IDLE

Hysterically Proclaims His Intention to Ask for Referendum on  
Kennebec Reservoir Act and Proposes to Run for Governor on  
Socialist Platform under Republican Colors

Admits People Opposed to State Going into Power  
Business But is Determined to Keep Private  
Enterprise Out."

It quoted, in the same issue, a statement on Baxter's proclamation calling for support of the referendum, from "a man who is very well informed on the subject":

".....No one but a political poser, cunningly appealing to popular prejudice, would offer such a brazen suggestion that the voters of Maine, men and women alike, could be bought by the water power interests.

Thus, if the people won't have the State go into the water power business, Gov. Baxter, obsessed by his socialist dreams, or by his personal whim or bias, is determined that private enterprise shall have no opportunity, leaving the powers undeveloped and idle."

However, we are now dealing with Percy Baxter as the writer knew him; a kind, friendly man, a world traveler, democratic, considerate and generous, with no political ambitions; his "personal whim" the attainment, single-handed, of an objective which could bring him no personal gain.

In his earlier efforts to further his plan of making Mt. Katahdin into a preserve, he had brought forth the concept of a lot of State parks in forest land, and had tied State control of land into his theme of State control of water. This had brought him into head-on conflict with Garret Schenck, who saw the future of his company threatened, fought back with protective ferocity, and won. All that Percy Baxter had gained was a statute that allowed the State to accept gifts of land for park purposes, at the cost of the enmity of Garret Schenck, among others, but he was a good loser, and his feelings about the exploiters of Maine's natural resources had not

prevented him from buying nearly 1,000 shares of the Company's stock.

William A. Whitcomb harbored no ill-will against him. In fact, he respected him for having the courage of his convictions, and for the battle he had put up for what he believed in. William O. McKay thought highly of him, not only for these reasons, but typically because, as he said: "He is a gentleman. He treats everyone as an equal, and any clerk in the office rates the same consideration from him as the President." This the writer found to be true.

Percy Baxter may not have known just how he stood with the Company, but Garret Schenck and Fred Gilbert were gone from it, and the local atmosphere was favorable to his plans. It will be recalled that in his farewell speech five years before he had said that the Great Northern Paper Company had intimated that it might donate some of the Katahdin land, but hinted darkly at its requiring some outrageous and possibly nefarious consideration in return. After his retirement from politics he had, as far as we know, withdrawn from any controversy about water power, but he had never given up his dream of preserving Mt. Katahdin for the public, although it is quite certain that he did not envision at this time anything of the magnitude of the park which he eventually established, and his ideas about it were quite different from those which he developed later. This is indicated by what he had said in an address to the Annual Meeting of the Maine Sportsmen's Fish and Game Association in January, 1921, in support of the park bill which he had introduced in that year. In this, he referred to his 1919 bill, which he said was defeated by the opposition of the Great Northern Paper Company, and stated that it was his belief that the State should establish

a policy of acquiring waste and burnt-over lands, to make a beginning toward increasing the supply of timber and pulp, and to provide a recreation area in the Katahdin region. He argued that in years to come the State would thus gain ownership of large areas of land considered to be worthless, but which would eventually produce income, the State being able to carry it until it was ready to be cut in a scientific manner. He mentioned the great fire of 1903, which he said had burned some 200,000 acres around Mt. Katahdin, but noted that on the lower ground in the 57,232 acres taking in the mountain and Katahdin Lake, which he proposed to make into a park, there was a good growth of poplar, birch and other species that could be harvested in a few years to the benefit of the State, and that as land alone it was a good investment, adding that future Legislatures could extend the area if they deemed it advisable. He explained that while the proposed park was to be a game sanctuary, roads and trails were to be constructed, camps for rent were to be built, and that "Katahdin then will become a great recreation center for those who seek the woods that are unspoiled by fashionable hotels with liveried attendants, or by costly club houses frequented by the devotees of tennis and golf." All of which does not sound too much like his later "forever wild" concept.

We have told in another place of the fate of his various park bills, the strongest argument against them; and the Company was mentioned in this connection; being that the State should not put land owners in the position of being forced into selling their land at arbitrary times and at arbitrary prices, and after his retirement from the political scene, his socialist approach having failed, Percy Baxter had determined to try to make the Katahdin Park a reality all by himself, using good old capitalist money instead of votes.

What preliminary efforts he may have made in other directions is unknown, but some time in September or October, 1930, he came into the Boston office, and explained to William A. Whitcomb his proposition, which was to obtain title to that part of the Northwest corner of T.3 R.9, W.E.L.S., containing the top of Mt. Katahdin and give it to the State, with the provisions that it must be used for recreational purposes, be left in its wild state, and that no roads for motor vehicles be constructed upon it, and this was to be forever. He displayed a well-worn map, on which he had marked in red pencil the outline of the land in which he was interested -- a square block four miles on a side, in the extreme northwest corner of the town, containing just a little over 10,000 acres. In the parlance used to describe such lots, this was the West 2/3 of the North 2/3, the town being nominally six miles on a side. The Governor said that with this, his dream of establishing a Katahdin Park would be realized, and that he wanted nothing more. He was not interested in the southern part of the town.

The Company's ownership in T.3, R.9 was 3/8 undivided, the other owner being Harry Ross of Bangor. Percy Baxter understood this, and that an undivided interest would not serve his purpose, but he felt that if he had Great Northern's 3/8 of the north 2/3, which figured out to 5,760 acres, it would give him leverage in dealing with Harry Ross for the balance of the 10,000 acres he wanted, and he offered \$25,000 for it.

The upper slopes of the mountain of course had no wood on them, and the lower land on the east side of it had been cut over during the past six or seven years. William A. Whitcomb was impressed by

the Governor's earnestness; William O. McKay supported him; Bill Hilton was a little reluctant, being concerned with rights of way and such, but had no real objection, and on November 12, 1930 the Directors, on the President's recommendation, approved the sale to Percy Baxter of the Company's 3/8 undivided interest in the North 2/3 of T.3, R.9. A deed was immediately passed, and this simple transaction suddenly got very complicated.

The Governor had made a verbal commitment to try to get the rest of that part of the North 2/3 that he wanted from Harry Ross but on November 18th, in view of the uncertainties of the situation, a formal agreement was signed, concomitant with the deed, making it in effect a condition of the sale that the undivided interest sold by the Company would be transferred to the State, for the purpose and with the restrictions noted above, by the Governor during his lifetime, or by his estate after his death. It also provided that he could sell the land back to the Company for its purchase price at any time, and that if his heirs did not give it to the State within five years after his death, the Company could buy it back at the same price. This was well intended, but it was not long before someone woke up to the fact that the Company had no right to impose restrictions unilaterally on undivided property, and on January 8, 1931, this agreement was cancelled and replaced by another which stated that nothing agreed upon would apply to anything but the West 2/3 of the North 2/3; that if and when the Governor should acquire and convey to the State the whole of this West 2/3, the conditions spelled out in the first agreement, plus another -- that the area would be designated a sanctuary for birds and beasts -- would apply; and that should he not be able to buy the Ross interest, and should decide to give to the State only the 3/8 undivided purchased from the Company, he would request the State



to make effective in some manner his wish that these conditions be met.

Harry Ross would not sell his interest in any part of the North 2/3 and the Governor, who upon reflection, had decided that there was no way for the State to enforce the last provision of the agreement, came back to the Company for help. The only answer was division of the town, and as he was interested only in the northwestern part, containing the top of Mt. Katahdin, he agreed that he would be quite satisfied with the 5,760 acres representing the 3/8 interest in the North 2/3 which he had bought, as long as it included the mountain peak. The writer laid out the area on a map, and on June 23, 1931 the Directors authorized the President to arrange for division. Harry Ross agreed to a court partition, and in September, 1931, the town was divided. A block in the northwest corner, measuring 2-1/4 miles east and west and 4 miles north and south, containing 5,760 acres and the top of the mountain, together with a strip of land along the west line to the southwest corner, containing 1,920 acres, was set off to the Company, which paid Harry Ross \$10,000 and gave him its 3/8 undivided interest in the balance of the town. An immediate exchange of deeds gave Governor Baxter his 5,760 acres, which he at once announced that he would turn over to the State. However, it was too late to introduce the necessary legislation, and formal acceptance of the gift was not voted until the next regular session of the Legislature in 1933 (Chapter 3, Public Laws of Maine, 1933). At that time, the area was given the name "Baxter State Park", and a Great Northern crew went up and set the commemorative bronze plaque which the Governor provided. This is how the Baxter State Park came into being.

Although the new park was only one-tenth as large as the one Percy Baxter had tried to get the State to establish, the writer was present when he told William A. Whitcomb that all he wanted was the top of the mountain, and is sure that he was sincere about this at that point. However, while it is quite likely that in the course of time he would have wanted to enlarge it anyway, it is also quite certain that his decision to do so was influenced by what happened next.

Later in 1933, the Federal Government, as one of the New Deal projects, proposed to establish a large National Park, perhaps two, in Maine, the prime sites under consideration being in Washington and Aroostook counties, the latter near, but not involving, the new Baxter State Park. In that year, and again in 1935, the State Legislature passed enabling acts which would have allowed this to happen, these bills being pushed through by land owners who wanted to unload, and by banks holding mortgages on lands, over the opposition of most of the pulp and paper companies. Nothing transpired, as funds for this kind of thing ran out, but Percy Baxter, while a stout advocate of State control of land, was most unhappy about any National Park scheme. He talked frequently about the matter with William A. Whitcomb, who did not like any part of the New Deal; he undoubtedly talked with others; and it is the writer's belief that if he had ideas about a larger State Park, they jelled at this time into a plan to create one, of indeterminate size, but big enough to eliminate any excuse for a Federal project of this kind in Maine. We know that he did not have in mind anything like 200,000 acres, but he began to look at the possibilities.

In 1937, Owen Brewster, the Governor's old political foe, was still in the U.S. Senate, and in that year he revived the National Park scheme by introducing a bill calling for some 300,000 acres of Maine land, including Mt. Katahdin, to be acquired by the Federal Government over a period of time and made into a National Park. Percy Baxter at once issued a statement, published in the Bangor Daily News of May 3, 1937, reminding the State that it was trustee of his gift and could not dispose of it, but that Brewster's bill "seeks as its ultimate purpose to have the National Government take Mt. Katahdin from the State of Maine", adding "if the Federal Government will keep out of Katahdin I have interesting plans for the future that will mean much to Maine." At this time, he had already started to deal for additional land, and some time in this year he announced excitedly to William A. Whitcomb that he had been able to buy from J. Hopkins Smith part of T.5, R.9, on which Traveler Mountain was located. With this purchase, he had the second piece of what he began to call his "picture puzzle". How he put together the solid block of eight townships and parts of two others which make up the Baxter State Park was ingenious and sometimes amusing. The writer was involved in every transaction with the Governor while the old Boston office was in existence, discussed each of them with him and helped him prepare his presentations, and can follow the developments in a general way.

Some of the land came to him almost fortuitously; some because of distress situations; some because the owners were concerned about the sprawl effect of a National Park; some just because they were willing to help the Governor in his project, and some as the result

of plain bargaining. The possession of an undivided ownership, or of some specific lot, was sometimes the wedge which he used to pry loose a common or adjoining interest, and there was much more wheeling and dealing than we can describe. In many instances, deals involving several purchases were made well in advance of the dates of the deeds, and the dates of transfer to the State do not necessarily tie in with the date of purchase, so that it is sometimes impossible to be sure which acquisition may have led to the next, and while Great Northern's sales, beginning with the first, had a psychological effect, the importance of any one of them to the whole scheme of things cannot be made entirely clear here, although reference to a map may help.

Township 5, Range 9 was separated from the existing park by a town which could not be bought at that time. The Governor wanted something which would make a direct addition, and in 1937 the Company agreed to sell him some 4,000 acres, part of the Northeast quarter of T.3, R.10, which adjoined the original purchase on the west, took in most of the slope of Katahdin on that side, and brought the area of the park to a nominal 10,000 acres, his goal at the beginning. This, with what he had in T.5, R.9 allowed him to give 18,000 acres more to the State in 1939, at about which time he acquired the rest of T.5, R.9 from Smith. Now he began to play a sort of game. As he planned out the areas which seemed to him to be of the greatest value in building up the park, he usually found, as far as the Company was concerned, some good excuse for asking to be allowed to buy some additional piece of land, stating in almost every case that this was all he wanted, and that he would not ask for anything more. He was

quite sincere each time. He just kept expanding his ideas of what he wanted. In 1939, for example, he asked for the remainder of the North half of T.3, R.10, all of which was owned by the Company, on the basis that this would extend the park to include O.J.I. and Double Top, which were part of the Katahdin range, and a beautiful part of the Sourdnhunk valley. This was good growing land, and the road from Millinocket to Ripogenus Dam ran through it, which caused some concern. It was finally agreed to let him have two pieces, containing some 6,400 acres, extending to the west line of the town, but leaving a "corridor" of some 3,000 acres along Sourdnhunk Stream, and the right to remove the wood from these two lots for a period of years, to which the Governor had no objection. This was just a face-saving gesture, as what he was up to was now beginning to be evident, and everybody joked about it, wondering what he would turn up with next.

In 1939, he was able to buy from the Eastern Manufacturing Company all of T.4, R.9 containing Turner Mountain. This linked up the four towns in which he had ownership, now amounting to something over 60,000 acres, in an L-shaped area, and before the year was out, he had bought from the Cassidy Estate and/or the Garfield Land Company part of the south half of T.3, R.10 which cut off the Company's "corridor". Now, as he said, "If I could just have that, I would have a solid block here", and it was sold to him, after some good-natured banter. Next, he wanted to extend to the north, into T.4, R.10, to get that slope of Katahdin and The Brothers. The Company sold him the southeast quarter of that town in 1939, and when he gently pointed out that the little 1,920 acre piece in the southwest corner of T.3, R.9 left over from the 1931 division was not much

good, that was sold to him also. These three sales were all in one deed, the Company reserving the right to remove the timber during the next five years. He now had something over 75,000 acres, and told William A. Whitcomb that he was going to try for 100,000, which would be all he wanted. This figure he reached, it is believed, in 1940, when the Eastern Manufacturing Company sold him all of T.5, R.10, and some time between 1940 and 1942 Harry Ross sold him about 7,500 acres in the north 2/3 of T.3, R.9, adjoining the original park on the east. We have a rather obscure memo from which we draw the conclusion that the Company took a hand in persuading Mr. Ross.

Now he had a new objective -- to even up the odd blocks into something which would "look better on the map", and in 1944 explained to the Company that if he could just have the rest of the east half of T.4, R.10. he could join up with the purchase made in T.5, R.10 a few years before. By this time Bill Hilton had begun to feel that the Company was disposing of more acres than it should, but this area was the tail end of the mountain range to the north, and the Governor was told that he could have it if he would find something as good to replace it. He thereupon went out looking for land which he could swap, and a deal was made on the basis of an exchange for about half as many acres which he had been able to buy in T.4, R.8 and T.2, R.9, plus \$5,000. He now had the east line of the park, along T.4, R.9 and T.5, R.9, and the west line from T.3, R.10 up through T.5, R.10 in a straight line, except for what he called the "jog" left because he did not have the west half of T.4, R.10. In 1946, being very anxious to straighten this out, he offered to trade for it fractional interests in T.2, R.8, T.5,R.7, T.7,R.7, T.8,R.7, T.9,R.4, T.3,R.2, T.3,R.3, and T.A,R.2, all places remote from the park area,

which he had picked up for dickering or had had to take as part of some of his other purchases. William O. McKay was now President, and in 1947, after investigation of the land offered, this trade was made, the Company reserving the right to cut the timber on the land sold within five years, holding out an 880-acre lot around the Sourd-nahunk Lake dam, and retaining a right-of-way for the road to the dam and driving rights on the stream. As it is recalled, at about the same time, for some reason, probably on account of the road from Patten into the Trout Brook area, the Governor became very desirous of obtaining a small triangular piece of land between Trout Brook and the north line of T.5, R.9, which belonged to Great Northern, and this was sold to him with little hesitation, giving him a small hold in T.6, R.9, and by 1948 he was able to buy another 7,000 acres in this town from the Eastern Manufacturing Company. He now had given, or agreed to give to the State something over 130,000 acres, and having gone this far, he told the writer, who he called his "helper" in the Boston office, that while he could never seem to come out to even figures, he thought he would try to get 200,000 acres, which should be enough to head off any possible future Federal take-over attempt. He did not make any further purchases, however, until 1953, when he obtained another 13,000 acres from the Eastern Manufacturing Co. in T.6, R.9. At this same time, the Company, actively interested in having him reach what he once more assured it was his final goal, bought from Harry Ross, along with other land that he owned, his remaining 8,000 acres in T.3, R.9 comprising the southeast quarter and what remained of the northeast corner, and sold this at once to the Governor, without its ever being on the books as land, although the right to remove the timber was reserved for a period of years

ending in December, 1973. Within the next year, it sold him a small block of 3,400 acres in T.6, R.9, completing his ownership of that town. In 1955, if for nothing else than to square up the park area so that it would "look good on the map", he bought T.6, R.10 from the Eastern Manufacturing Company, and in 1962, after William Hilton, who had always been reluctant to sell any part of T.2,R.9, had retired, the Company let him have that part of this town north of the Togue Ponds, some 7,700 acres at what had become the southern entrance to the park, again reserving the right to remove the timber for a period of years. In 1972, after the Governor's death, the Company gave eight miles of its private road, from Millinocket Lake to Togue Pond, to the State.

All this land, Townships 3,4,5 and 6 in Ranges 9 and 10, together with the northerly part of T.2, R.9 and a small area around First Grand Lake in T.6, R.8, some 200,000 acres -- any figure is a little uncertain, because deeds are usually "more or less", Percival P. Baxter gave quietly and without fanfare, over a period of thirty years, to his beloved State, to be held in trust by it forever, under his original terms, with some exceptions which allowed scientific management of the most northerly towns. His conveyances to the State carried with them the rights to flowage, cutting and rights-of-way which had been reserved to themselves by those from whom he bought, and which in most cases allowed him to make his purchases at reasonable per acre figures.

All of the Company's sales to him, except the first, were at very low prices - \$2.00 to \$2.50 per acre, and after Harry Ross had been paid off the first did not come out to much more. Of the total of over 200,000 acres which he bought and gave to the State, Great



Northern provided about 60,000, as nearly as the writer can figure. This almost all came from the mountain area, the preservation of which was his real dream, and he always publicly gave credit to the Company for giving him his start.

Before we go any further, it might be as well to expose the Company's vital statistics for the period we have been discussing and are about to discuss, a convenient stretch for this purpose being the years between the accession of William A. Whitcomb to the Presidency and the secondary depression of 1938, which was followed closely by the outbreak of World War II.

<u>YEAR</u>	<u>PRODUCTION TONS</u>	<u>EARNINGS</u>	<u>EARNINGS PER SHARE</u>	<u>DIVIDENDS PER SHARE</u>	<u>NO. SHARES (\$25 PAR)</u>
1928	311,637	\$4,747,177	\$ 4.76	\$3.00	997,200
1929	315,348	3,517,269	3.52	3.00	998,330
1930	322,151	3,986,196	3.08	3.00	"
1931	285,524	2,928,821	2.93	3.00	"
1932	255,839	1,289,715	1.29	2.20	"
1933	238,209	728,596	.73	1.00	"
1934	273,655	783,797	.78	1.00	"
1935	285,307	992,285	.99	1.00	"
1936	310,058	1,198,745	1.20	1.12	"
1937	318,214	2,177,654	2.18	2.00	"
1938	280,785	2,168,809	2.17	2.00	"

These figures are after provision for Federal Income Taxes as follows:

1928	\$711,099
1929	459,736
1930	329,989
1931	167,494
1932	0

1933	0
1934	77,515
1935	103,433
1936	202,850
1937	399,087
1938	437,903

They are also before heavy write-downs in the depression years 1931, 1932 and 1933 to bring inventories, mostly pulpwood, into line with steadily decreasing market value. In these three years, such write-downs totalled nearly \$4,000,000.

We said in an earlier place that the Company lost money in only one year, 1904. This was not strictly true, as these write-downs resulted in lower actual earnings than we have shown -- a loss of 48 cents a share in 1932, for instance (this was the only year other than 1904 that showed a red figure) and earnings in 1931 and 1933 substantially less than above, 1933 showing a gain of only 12 cents a share, for example. However, these conditions were caused by non-recurring adjustments, and we stand by our earlier statement. There were other years when adjustments affected the earnings we have reported to some degree, but they would be most difficult to explain, and we will, unless otherwise stated, use the earnings from operations plus normal other income from investments, royalties and the like.

This was obviously a rough time in the history of the Company, and while we are dealing with statistics, we may as well list here some more figures indicating some of the factors which bore on the situation during this period.

<u>YEAR</u>	<u>NEWSPRINT</u>			
	<u>U.S. CONSUMPTION TONS</u>	<u>U.S. PRODUCTION TONS</u>	<u>CANADIAN PRODUCTION TONS</u>	<u>CANADIAN EXPORTS TO U.S. TONS</u>
1928	3,561,200	1,415,500	2,645,000	2,041,000
1929	3,813,100	1,409,200	2,981,000	2,327,000
1930	3,495,500	1,226,100	2,785,000	2,145,000
1931	3,260,500	1,203,300	2,512,000	1,916,000
1932	2,830,700	1,047,100	2,191,000	1,647,000
1933	2,710,700	928,300	2,293,000	1,640,000
1934	3,176,000	989,700	2,911,400	2,113,000
1935	3,308,500	947,700	3,083,000	2,122,100
1936	3,675,300	938,300	3,535,500	2,550,900
1937	4,275,800	975,900	3,998,000	3,044,700
1938	3,101,300	832,300	2,893,000	1,940,300

This illustrates dramatically the decline in the United States newsprint industry during these years. It also points up the 1937 boom, when every customer, large and small, was screaming for more and more paper, and the precipitous decline in consumption in 1938, when for a short time the Company's production rate dropped below that of the worst days of the great depression. It should be borne in mind that the production figures above are actual production, not capacity, and we will have some comment on the relationship between these as we proceed.

Since the price of newsprint was in itself both cause and effect in the situation, we conclude our statistics with the disastrous price figures for these years, as nearly as they can be determined. These are from Company records, which drew on Royal S. Kellogg's

"Newsprint Paper in North America" and the A.N.P.A. Bulletin for average contract prices.

YEAR	AVERAGE CONTRACT PRICE FOR YEAR	NEWSPRINT PRICE PER TON - DELIVERED NEW YORK		
		GREAT NORTHERN		
		WEIGHTED AVERAGE PRICE	HIGH	LOW
1928	\$ 67.50	\$ 67.30	\$68.80	\$65.80
1929	62.00	62.00	N.C.	
1930	62.00	62.00	N.C.	
1931	57.00	57.00	N.C.	
1932	48.33	48.33	53.00	45.00
1933	41.25	41.25	45.00	40.00
1934	40.00	40.00	N.C.	
1935	40.00	40.00	N.C.	
1936	41.00	41.00	N.C.	
1937	42.50	42.50	N.C.	
1938	50.00	48.00	N.C.	

These prices do not represent the return to the mill. To get that, they have to be reduced by about \$7.00 per ton for freight absorbed in one way or another. We will endeavor, as we continue, to show what conditions and what actions brought about the figures we have listed, and the effect they had upon the industry.

Great Northern had a good year in 1930. The circular issued in April by Frederick C. Adams Company which had so irked Archie Graustein compared the Company's yield of 6 percent at \$50 with that of Abitibi (zero at \$33), Canada Power & Paper (zero at \$16.50), Price Bros. (2.7 percent at \$74.25) and International (3.9 percent at \$61.50), and went on: "we consider it a sound investment at its present market price, and there appears to be every reason to believe

that an investment in the company now will prove profitable, both as to income and increase in principal." Long range, the producer of this was right, but he had not done his homework on the industry, and probably cut his throat later. This was the first year for which Great Northern made its balance sheet public, and while this was not much information, it was better than the iron curtain of the last thirty years. No earnings statement was published until that for the year 1936, but in the meantime the financial analysts made some astonishingly good guesses on earnings, based on the balance sheet and the dividends paid. The Bangor Daily News of March 5, 1931 was fulsome in its praise of the Company:

"The Great Northern Paper Company is an object of admiration on the part of the entire paper industry.... Maine and Bangor owe this great local institute far more than is sometimes realized .... People of Bangor should feel proud of the Great Northern Paper Company; should read with a feeling of gratification the truly remarkable statement published today...."

While the price for 1930 held through the year in a general way, the situation became even more confused than it had been, as consumption began to drop, and the time neared for announcements for 1931. During the year the Newsprint Institute of Canada had begun to come unstuck in the scramble for business, and Col. Price resigned as its Chairman. It was just about this time, as the writer recalls, that something went on between Price Bros. and the Great Northern Paper Company, which, as we have said, had an unusually friendly relationship. Handsome Jack Price visited the Boston office a number

of times, and held closed-door sessions with Company officials. As close as were the communications in the Boston office, nothing leaked out of these meetings as to their purpose. The writer knows only that they were held, and that the Company was furnished with confidential Price Bros. figures, including detailed manufacturing costs, which he and Frank Keenan translated into Great Northern terms, on Great Northern Manufacturing Report forms, and as he remembers, these figures were for the year 1929. There were conjectures about a merger, or some kind of alliance, as there was merger talk all over the industry, but it was only conjecture. At any rate, nothing concrete transpired, and inquiries made of Price Bros. people have produced no one who knows anything about the matter at all.

There was another development in 1930 that illustrates how unpredictable can be the effect of some action on matters having nothing whatever to do with it in the first place. It will be recalled that the Fernald Act, passed in 1909, prohibited the export of power from the State of Maine. In the late 1920's, there arrived on the scene Dexter P. Cooper, the originator of that much-kicked-around scheme, the Passamaquoddy Tidal Power project, which immediately captured the interest of the public, and created tremendous enthusiasm among the people of the State. Of course, under this scheme far more power would be developed than could conceivably be used in Maine. There was a crying need for power in the rest of New England and in New York State that could be satisfied by this project, but how about the Fernald Law?

Well, now. Early in 1929, in anticipation of the possibility

that Quoddy would become a reality, the so-called Carleton Bill was introduced in the Legislature; was passed promptly (Chapter 280, Public Laws of Maine, 1929) coming out as an act which allowed the sale outside the State of surplus power. This was approved by the Governor on April 10th, and went to referendum in September, receiving favorable treatment, upon which, there being no probability of action on Quoddy in the immediate future, the Central Maine Power Company, associated with New England Public Service Co., controlled by Samuel P. Insull, decided to go ahead with a planned large power development on the Kennebec River, near Bingham. In November, 1929, Walter Wyman, President of the Central Maine Power Company, offered William A. Whitcomb \$20,275 for the 1/3 of the power at Caratunk Falls owned by the Company, as this power would be flowed out by the proposed Wyman Dam. There was not much choice but to sell it, but William A. Whitcomb held out for a price of \$66,000, or \$50 per h.p., undeveloped. In February, 1930, a compromise was reached, and the power was sold by the Company for \$40,000. It had cost \$1,753 in 1903. The Central Maine Power Company, having also bought out the other owners of the Caratunk power, proceeded with construction, but by the time they were ready to sell power, there was no demand for surplus. This gave the C.M.P. Co. the problem of finding an outlet for a large block of power within the State, and its answer was to form the Maine Seaboard Paper Company, which built a nice new two-machine newsprint mill of about 300 tons capacity, at Bucksport. This was started up some time late in 1930. In the meantime, to obtain orders for the new plant, Maine Seaboard offered tonnage to anybody at \$2.80 per ton under the price made by any other mill, and while, as we will

see, there were greater forces at work, William O. McKay always maintained that Maine Seaboard was the straw that broke the newsprint camel's back. Just as a matter of interest, the Federal Government finally got around to approving Quoddy as a federal power project, in modified form, in 1935, but the congress made only an initial appropriation, which was spent for three or four small dams, hardly more than dykes, but mostly for the construction of Quoddy Village, near Eastport; a whole new settlement of dwelling houses, a central power and heating plant, an administration building, repair shops and other facilities, with a special separate housing development on Redoubt Hill, a very sightly place, for the big shots. Then the project fizzled out, and all of this was abandoned, was sold to private interests, changed hands several times, and is as this is written, partly occupied and partly falling into decay, a sad monument to another New Deal fiasco.

In April, 1931, Canada Power & Paper, in spite of the fact that it had run several million dollars in the red the previous year, suddenly announced a cut of \$5.00 a ton, retroactive to January 1st. Great Northern followed immediately, and within a month nearly every company had put out the reduced price; \$57.00 delivered New York. This price held through the year, with some chiselling here and there by some of the smaller mills like Maine Seaboard, and there were enough of these to undermine the already weakened structure, because in the aggregate they represented a substantial amount of tonnage, and the big boys could not afford to lose a pound. Things were coming to a head. Of Great Northern, the Boston News Bureau said:



## "STRONG FINANCIAL POSITION

The result of the price cut on earnings of Great Northern Paper Co. cannot be gauged, earnings of the company never having been reported, although in the poor 1930 year the \$3 dividend was covered by a good margin - a better margin than in 1929....Finances have been kept in good shape.... At the close of 1930... cash alone of \$2,426,155 was not far from sufficient to cover a full year's dividend requirements."

Most newsprint companies were not in Great Northern's fortunate position. In a general way, the United States mills were in better shape financially than their Canadian competitors. The decline which had been going on in United States production was only in part due to the actual closing of mills. Many had been shifted to the manufacture of other grades, or, like the Madison mill, were in the midst of this process. Some few had been well established in both newsprint and other grades for a long time, and could swing one way or the other, and most were relatively free of debt. The Canadian mills were for the most part newsprint mills, pure and simple, too big to be readily converted to other papers, which anyway would face a tariff if exported to the United States. They had been financed to run at 100 percent capacity on \$75 paper, were loaded with debt, and were getting desperate. The dire predictions of the provincial premiers were coming true, but in spite of all their concern, conditions had boxed the provincial governments in, so that they were unwilling or unable to use the powers that they had threatened to use, and having delayed, the time had gone by when any punitive action could have

any beneficial effect.

The rapid expansion of the Canadian industry had never allowed it to get close to maximum production, except in the one year, 1926, when it ran at 97.5 percent. Other than that, although some mills, notably those of the International Paper Company, as the result of the Hearst deal, had run full, the industry as a whole had not, since the expansion began, averaged much over 90 percent. The 80 percent controlled operation established for its members by the Newsprint Institute in 1929, when I.P. and some of the independents were counted, resulted in overall utilization of about 85 percent of capacity. In 1930, this had dropped to 71 percent, and in 1931 was down to 61 percent. At this point, the Canadian banks, who were into newsprint up to their ears, became alarmed, and in that year formed a committee, headed by A.W. Beatty, President of the Canadian Pacific Railway, to study the various companies, with the preconceived concept of mergers which would put together combinations of the strongest companies and wash out some of the weaker ones. However, it got no further in this year than the collection of information.

As the end of the year approached, the stuff really hit the fan when in December one of the large companies -- our record does not indicate which one -- announced a price of \$53 for 1932, a further drop of \$4.00, which immediately became general. We have said in another place that Great Northern was always a sort of polite price cutter, but it had no part in the debacle that followed. The Company had no need to initiate price cuts, and did not, but it had to ride down with the rest. Now the chickens really came

home to roost. In 1932, the Canadian industry ran at an average of 53 percent of capacity, and by late in the year most of it was bankrupt, in receivership, or had undergone some form of reorganization with greatly reduced capitalization. Ontario & Minnesota was the first to go under. Abitibi went into receivership, in which it remained for fourteen years. Canada Power & Paper was reorganized into Consolidated Paper Corporation, Ltd., with a huge 30-year bond issue on which there was no interest for five years unless earned. Price Bros. went into bankruptcy, and came under the control of Lord Beaverbrook -- but why go on? The Boston News Bureau of November 3, 1932 listed twenty-three issues of the bonds of Canadian companies, totalling some \$222,000,000 in default on interest, principal or both. As we recall, 70 percent of the Canadian industry went down the tube one way or another.

In the meantime, the bankers' committee had failed dismally to come up with any way out of the mess. Its only answer seemed to be mergers. Late in the year it went so far as to propose that the whole Canadian industry be combined into one huge entity, but the information it had gathered a year earlier was already out of date. Things would not stay put long enough for them to formulate any workable scheme. We should explain that these plans for merger and consolidation in the Canadian industry did not include all the companies operating in Canada. To the United States industry, Canadian plants were all tarred with the same brush, and were all competition, but to the Canadians, the International Paper Company, the Ontario Paper Company, owned by the Chicago Tribune, the Spruce Falls Power & Paper Company, owned by the New York Times, and some few others, were "American" mills, and the hell with them. They could look after themselves, which they did quite well, in comparison

with the "Canadian" industry, which, while it had United States and other foreign capital in it, was controlled by Canadians, and was the prime concern of both the Government and the banks. The bankers' committee did succeed in getting a plan for pooling orders in effect, but it was widely disregarded, for one reason because there was constant switching of orders by the United States publishers, although it must be said that there were many of them, some influential, who viewed what was happening as a disaster. They had not seen anything yet.

In September, 1932, Price Bros., having hit bottom, and in a desperation effort to keep its mills in operation, dropped its price another \$5.50 a ton, to \$47.50. Scandinavian and Finnish paper had also begun to come into the United States market in some quantity by this time. The depression was not confined to North America, and Yankee dollars looked pretty good to the Europeans. International immediately cut \$7.00, and made some other concessions which brought the total effective reduction to \$8.00 a ton; \$45.00 delivered New York, although it too was running in the red. This did nothing for overall consumption of newsprint, which continued to decline, albeit a little more slowly. Everyone, perforce, including Great Northern, cut to meet the new price, and everything was back where it had been, except that everybody except the consumer was poorer. On April 1, 1933, International, having closed down some of its least efficient operations in both countries, being still solvent, and in all fairness because it was faced with under-the-counter concessions by bankrupt and near-bankrupt mills, cut one more time; another \$5.00, bringing the price of newsprint to \$40.00, delivered New York. Everyone again followed suit, and there was a spate of rumors of even further cuts. But that was it. Publishers

could pick up some spot tonnage at still lower prices; \$38.00, even \$36.00, but the general contract price remained \$40.00, with an approximate net to most mills of \$33.00 a ton, until 1936.

While all this was going on, the Canadian and European mills had gained some tonnage at the expense of declining United States productive capacity, and in 1933 the industry in North America operated at about 55 percent, adjusted for the reduction of newsprint producing facilities in the United States, the rate of operation being about the same in both countries. Most of the foregoing information on developments in the newsprint industry at this time comes from a file of clippings from the Boston News Bureau kept by Bryan Seelye, with some interpolation from the writer's records and memory.

Projecting ahead a few years, and by-passing details, of all the Canadian operations International almost alone escaped bankruptcy, receivership or total reorganization; its stockholders almost wiped out, its funded debt fantastic; divested of the power empire it had built, of a number of its mills, and of President Archibald R. Graustein, whose ambition had been a large factor in all this calamity in the first place, and rebuilt itself by sheer good management. There was some merging of Canadian independents with larger companies, but not on the grand scale envisioned. Later mergers are not a part of our story. Most of what was left of the United States industry, much of it represented by very small mills, managed to stay alive up to this point, but could not stand such a low price for long, and was driven into other grades, as we will see.

Now let us go back and see what else was happening with Great Northern. It did not seem so at the time, of course, but relatively, the Company was not in any great trouble during these three years. It did not earn its reduced dividend, but it retained its unbroken record of quarterly dividend payments. It did not borrow any money. It paid out over half a million dollars for new timberlands. It kept almost all its work force employed. Its stock went down, but not out. Its book value dropped because of devaluation of inventory, but since while it kept its plants in shape, only a moderate amount of money was spent on modernization; and you could do a lot for a little in those days; it had nearly \$3,500,000 more in the bank at the end of 1933 than it had at the beginning of 1931. This was not happenstance. Customers, not forgetting the fair treatment which they had received during the hectic price-raising of the 1920's, stuck with the Company. This was no gentleman's war, and the Sales Department missed no opportunity to pick up business. Like in December, 1931, they hired as a salesman one James T. Mix from the Pulp & Paper Trading Company, of New York, which represented a number of newsprint mills, paying him \$15,000 a year. This was a fabulous salary, for a salesman, but he brought with him a contract from one of his customers, which, as the writer recalls, was for 20,000 tons of paper. Jim Mix was then in late middle age. Back 1908 he had been with the H.G. Craig Company, another newsprint sales organization, as he was mentioned in connection with this concern during the Congressional investigation of that year, which we have noted. He remained with the Company in the capacity of a salesman, his salary being gradually reduced, until his death in 1945. Those doing the purchasing of materials, supplies and equip-

ment used every trick in the book to get the lowest possible prices. The work force was loyal and cooperative, and the rest was just plain hard work by everybody, with one cost-cutting program -- "austerity" it would be called now -- piled on top of another; all of which, we suppose, adds up to just plain good management.

Old-timers will say now that Great Northern communities did not have any depression. This was true, relatively, at least. There were two main reasons for this. The first was the high production level which the mills were able to maintain. In our tabulations of Company production, we have included, and will continue to include, the output of the Madison mill. As it will be recalled, Madison did not make much newsprint after 1931, and newsprint is what we are talking about. Nevertheless, in comparing the Company's operating ratio with that of the Canadian mills, it does not seem to us like adding apples and oranges to take in the Madison production, as we are setting total output against total output, and it is just too bad that the Canadian mills for the most part could make nothing but news. Anyway, in 1929, when, as we have noted, the mills north of the border were operating at 85 percent of capacity, Great Northern was crowding out 110 percent; in 1931 it averaged 97.5 percent; in 1932 its ratio was 88 percent, and in 1933, the worst year, Great Northern ran at an average of 81.5 percent of capacity, when the Canadian mills and in fact the whole North American industry was making only 55 percent as much paper as its machines were capable of producing. There are no daily or short-period records available now for those years, but to the best of the writer's recollection, Great Northern production never went below 80 percent

of capacity except perhaps for a day or two at a time. The second reason was that the mill employees voluntarily shared the available time, so that there was no great amount of actual unemployment, although the average work-week got down to around 37 hours. The salaried organization, small anyway, was reduced little if any. There were wage and salary cuts, but the cost of living went down too, and while things were of course not as good as they should have been, there was no substantial hardship around the mill towns. The people who were hurt most were those working in the woods. Of all the foregoing, we will have more to say in other places.

From 1930 on, there are records of the price of the Company's stock. These figures may be of interest here, and while we have a known anomaly in the prices quoted for 1930, we can do no better than accept those given us by the financial people and assume that there are no others. The value of the Company's shares of course went coasting down with the market, and the messy situation in the newsprint industry was no help at all. The prices we have are on the basis of the 1,000,000 shares, \$25 par, then authorized:

	<u>High</u>	<u>Low</u>
1930	33-1/2	33
1931	39-7/8	17
1932	23	13-1/4
1933	27	11
1934	26	19-1/4
1935	27	19-3/4



1936	41	24-7/8
1937	47	27
1938	39-1/2	25-1/2

The anomaly is in the fact that the writer knows from the Frederick C. Adams Co. bulletin the price in April, 1930 stood at \$50.00, and that up until at least the middle of that year it averaged around \$49.00, because he was one of those who bought some of the stock purchased for sale to employees at that time. This was sold at cost, and he paid \$48.55. It may be that prices did not begin to be recorded until later in the year. At any rate, as the price went down, more employees became interested. Some 3,300 shares were asked for early in 1931, and the Treasurer was authorized to buy up to this amount for sale. At the same time, the interest rate under the plan was reduced to 4 percent, extended to all who had loans for stock purchases, but not retroactive. Some of those who had requested stock may have chickened out, as the Treasurer reported in March that he had bought 1925 shares for sale to 17 employees at \$39.37, and there is no mention of any further transactions. However, this is not conclusive.

The situation that had now developed justified William A. Whitcomb's outrage at Fred Gilbert's prepaid stumpage contracts. Less wood was required, and the price of stumpage and purchased wood was going down, but these long-term stumpage agreements had to be honored, whether the wood was needed or not. It had been possible to negotiate some of them out, but at the beginning of 1931 William A. Whitcomb had reported that a quarter of a million dollars would be required to pay off those which it had not been

possible to settle, and that this would be needed during the year. It is not clear from the record whether this amount included settlement with Blin W. Page, of Skowhegan, with whom the Company was already in trouble. The developments connected with this are of interest as an example of how sticky these things could get, and because they raised a point of law which was never settled.

The Blin Page contract was a typical long-term stumpage agreement, made in January, 1926, calling for the cutting of not less than 30,000 cords per season from the N.1/2 of T.9 R.11 and the N1/2 of T.9 R.12, for five seasons, starting in 1926-27, this amount of wood to be paid for, whether cut or not, at the rate of \$4.00 a cord, on May 1st of each year, starting in 1927. Any amount not cut in one season could be carried over and added to the next year's operation. No cut had been made in the 1926-27 season, but a payment of \$120,000 had been made on May 1, 1927. In the following three seasons a total of 127,310 cords had been cut. This had all been paid for on the scale, payment in two seasons having been for more than 30,000 cords. The contract had one more year to run.

In January, 1930, William Hilton had notified Blin Page that it was not intended to cut on this land during the 1930-31 season, which would have been the last year. The latter had said that this was all right "but of course with the understanding that you are to pay me in 1931 for the stumpage, and that the timber be cut during the following season of 1931-32." However, in January 1931, the Company, because of a hauling problem on other wood in the area, asked to be allowed to hold the cut over for another year, to the 1932-33 season. This also seems to have been acceptable.

Now by this time things were rough all over, as we have seen. Stumpage could be bought almost anywhere for \$2.50, and William A. Whitcomb asked William Hilton to try to negotiate a lower price on the long-term contracts. This he was successful in doing in most cases. Mr. Page, however, was not about to do the Company any favors. When William Hilton put the matter to him in a personal interview on April 3, 1931, he agreed to give it consideration, but wrote the next day with the counter-suggestion that the Company buy the land, asking Bill Hilton whether he could make a deal without having to go to the Directors. The reply was that any purchase would have to be approved by the Board, upon which Blin Page offered to sell the two half-towns for \$175,000, arriving at this figure by putting a price of \$75,000 on the pine and cedar and \$30,000 on the land, adding the payment for spruce and fir stumpage, \$120,000, which he considered was due on May 1st, and then knocking off a round \$50,000.

William Hilton wrote that this solution was "just making a bad matter worse"; that nobody wanted the pine and cedar from that area; that if they did, the stripped land would be just a liability which Mr. Page should be glad to get rid of, and again asked that the stumpage rate be reduced. The answer to this was "I received your letter of April 8." Period. On April 22d, the Company received a bill for \$120,000, the stumpage on 30,000 cords of wood at \$4.00 "as per contract", upon which William Hilton wrote Blin Page again, reminding him that his connection with the Company had always been very profitable, that conditions were bad in the industry, and that he did not think it was asking too much to expect a reduction of

\$1.50 a cord in the stumpage rate. Mr. Page's reply to this was the question as to whether the Company would have offered him \$1.50 more if stumpage had gone up, but that since the price of paper had just dropped \$5.00 a ton, he would reduce his price for the land and the timber remaining on it to \$150,000.

This offer was submitted to the Board in May, and the President was authorized to accept it. Bill Hilton, however, still feeling that he could make a better deal, went to Blin Page personally, and told him that he would give him \$120,000 -- that is, that he would pay the bill submitted in return for a deed to the land, but that otherwise the Company would pay for only 22,689 cords, which would complete payment for a total of 150,000 cords. Blin Page's reaction to this was like "So what else is new?" Bill Hilton returned to Bangor, and on May 1st sent a check for \$90,757, representing prepayment on 22,689 cords of wood. Blin Page immediately wrote: "Your company knows as well as I do the contract calls for a payment on 30,000 cords. I would be glad to wait until Monday next for the balance, otherwise as I told you over the 'phone this morning, I shall have to start suit." Which he promptly did, in Penobscot County Superior Court.

One has to strain his mind a bit to understand the issue. The Company's position was that it had agreed to cut and pay for 150,000 cords of wood, at \$4.00 a cord; that it had already cut and paid for 127,310 cords; intended to take another 22,689 to make up the 150,000, and that it had prepaid the stumpage, \$90,757, on this balance. Blin Page's contention was that the Company had agreed to pay him \$4.00 a cord for not less than 30,000 cords each

year for five years; that this was the fifth year, and that the Company owed him \$120,000.

William A. Whitcomb was furious. The Company's lawyers were at a loss, finding no precedent for the situation, and waffled about whether to fight or find some way to settle. The "if" and "but" correspondence between Sheldon Wardwell and Louis C. Stearns is almost laughable. Mr. Page's lawyer seems to have been just about as confused. He voluntarily non-suited the case in Penobscot County, and prepared to file in Somerset County, where the action had taken place. On May 15th, Blin Page had, at the Company's request, intended to hold down claim for interest if things went the wrong way, cashed the check for \$90,757. Meanwhile, the whole thing was complicated by the discovery that there was probably not 30,000 cords of pulpwood left on the land anyway. Sheldon Wardwell saw this as a way out, and made the proposal that the Company cut all there was left, up to 30,000 cords, and pay for it. William A. Whitcomb rejected this as weak-kneed. Page's attorney then suggested that the contract be submitted to the Law Court for interpretation, and a statement of fact was made up, in which Page claimed not only the \$120,000 payment, but interest on this amount from May 1 to May 15, and on the disputed difference of some \$30,000 until he received payment. This statement, as far as the writer can determine, was never filed, nor was suit initiated in Somerset County, as Page was digging back into the history of the operation, having some thought of making the claim that cutting had not been properly conducted, which might be reason for claiming higher damages.

It had now got along into August, and Bill Hilton was getting

his fall operations organized. Having paid for some 23,000 cords of wood, he had to harvest it, and Sheldon Wardwell finally convinced William A. Whitcomb that the only thing to do was to cut up to 30,000 cords, if it was there, which would justify paying Page's claim, and if it was not there, to pay for what was cut and let Page raise the issue again. This was a pretty weak argument, but Page's attorney was so advised. In the meantime, however, Lou Stearns, relying more on reality than legality, had been working on a deal for settlement by purchase of the land, and while detailed information as to how this was reached runs out at this point, Page accepted the \$90,757 as payment for the N.1/2 of T.9 R.11, and the Company paid another \$70,000 for the N.1/2 of T.9 R.12, a total of \$160,757, which William A. Whitcomb reported to the Directors in September, 1931, and the transaction was approved. Bill Hilton should have accepted the April offer.

At this same time, at least one other settlement on a similar contract was made on the basis of applying advance stumpage payments to the purchase of the land involved, but this deal was concluded without any fuss.

Further specific appropriations by the Board are not recorded, but by late in 1931 the installation of the four-foot grinders at East Millinocket was completed or nearing completion; the new No.8 generator unit at Dolby was on the line, and all the grinders at that location had been removed, with generators installed on all but No. 7 line. This generator, incidentally, was not put in until 1934. William O. McKay had been itching to get at the Millinocket grinder room, plans for which were all ready. This was a much bigger

job than the changeover to four-foot wood at East Millinocket, of course, but this was an opportune time to do it, with labor available at low rates, the cost of equipment dropping, and reduced paper production allowing grinders to be shut down for replacement.

It had been figured out that 18 grinders, with the necessary motors, new pressure pumps and other auxilliary equipment would be needed, and the cost was estimated at \$386,000. A "President's Report" was carefully prepared and discussed with William A. Whitcomb, who was again hard to convince, under the economic conditions prevailing, but finally agreed, reluctantly, to put the job up to the Board of Directors at the November 1931 meeting, with a specific request for authorization to install one line of four grinders at once. William O. McKay was not at all sure that this job would be approved, nor that this would not be one of the times when William A. Whitcomb would hold back for another look before allowing the job to be started. He had the writer arrange with Bob Hume, the Superintendent of the mill, to have a crew lined up and an air compressor, jackhammers and everything needed to start work moved into the grinder room by the day of the November meeting, and for him to stand by for orders on that day. The report was presented in New York, and the Directors approved the installation of the first four units. William O. McKay quietly left the meeting, telephoned the writer, and said, without preliminaries: "They've approved it. Tell Hume to get started before they change their minds"; and in less than an hour the first old grinder on the line was scrap, and the floor was broken out for the first new foundation. Funny way for a big corporation to start a big job? Sorry about that, but that's the way this one started. The circumstances were similar to those surrounding the installation of the super-calender stack at Madison, which happened later, but which we told

about earlier. It was not standard procedure!

There was a little good news in 1931. The Company's proportionate ownership in the Brassua storage had been reduced by reason of the increased developed head on the Kennebec River created by the Wyman Dam, and this was compensated for by payment of \$79,000 by the Central Maine Power Company. A refund of \$90,000 was also received from the Internal Revenue Service on account of overpayment of taxes for the years 1923 through 1928.

An obscure event of 1931 was an incipient move to establish a subsidiary to be called the Great Northern Power Company. This really began late in 1929, when William A. Whitcomb inquired of Louis C. Stearns whether such a corporation could be formed under the laws of Maine without a special charter. On November 26th of that year Lou Stearns wrote that it could be done under the General Laws. Nothing further seems to have been done until 1931, when it was put on the fire again, and on August 8th Lou Stearns sent to William A. Whitcomb and Sheldon Wardwell drafts of Articles of Association for the purpose of organizing a corporation to "engage in the business of making, generating, purchasing, selling, distributing or supplying electricity for lighting, heating, manufacturing, transportation or mechanical purposes, and to do all things necessary, appropriate or pertaining to said business"; calls for meetings; by-laws for the corporation; a stock subscription form; and dummy minutes of a meeting of the associates to form the corporation, and of a first meeting of the Board of Directors. These papers had been revised following a meeting in Boston.



During the next ten days, the proposed capitalization was reduced from \$100,000 to \$5,000; Lou Stearns raised a question about the use of the name "Great Northern", but felt that the Attorney-General would allow it if William A. Whitcomb would write a letter saying that the parent company had no objection to it, and on August 18th he wrote to William A. Whitcomb, in part:

"You did not state how soon you desire the organization meeting held. I am assuming that it is to be done in the near future and I will arrange to hold meetings early next week unless I hear from you to the contrary."

He must have heard to the contrary, as to the writer's knowledge no such corporation, whatever its purpose may have been, was ever formed. Indeed, he had never even heard of it until he excavated the above information from Sheldon Wardwell's old files.

In this day and age we are awash in anti-pollution laws, and ecology and environment are household words, but some may be surprised to learn that at least as far back as 1917 the State of Maine had laws against dumping polluting matter into rivers and streams, but the Penobscot, Kennebec, Androscoggin and Saco rivers were excepted, and as we understand it, the "mill waste, shavings or fibrous material" mentioned meant the waste from sawmills. An amendment offered in 1929 which would have added pulp and paper mill effluent, including process water, and which would have limited the exemption on the above rivers to tidewater, had been defeated. However, the paper industry had set up a committee and chipped in \$10,000 for a study of the effect of materials being discharged on fish and plant life, and the findings were said to be most favorable, the conclu-

sions of a Cornell professor who headed the study being that it showed "a most satisfactory condition." These conclusions were said to be indisputable since it contained the only information ever gathered on industrial wastes in Maine rivers. Nevertheless, a new and tougher amendment was introduced early in 1931. This got the industry all shook up, and it prepared for another fight. The first thoughts were to try to get the paper mill rivers exempted, but in a letter to Lou Stearns on January 31st, Sheldon Wardwell pointed out that this would be only a temporary victory, adding: "I hope the matter can be defeated entirely. It is a most unfortunate time to be further handicapping our industries in Maine. The lumber industry has gone, the pulp industry is going and it is certain that some of the paper mills will move. I cannot understand how anyone with any sense can consider placing further handicaps on industry, particularly at this time."

This is another episode which as far as our record goes has a beginning but no ending. We have made no effort to follow what happened, but whatever it was, and whatever subsequent legislation may have been proposed, we do not know of anything that caused Great Northern to change any procedures until the adoption of the stream classification program many years later.

As a last note on the year 1931, the State surveyed for the "Greenville-Tarrantine" road from Greenville Junction to Kineo, and it was discovered that Fred Gilbert had promised to deed for free the necessary land for this road, which was done.

Of this year the financial comment, all based on the balance

sheet, still the only financial information made public, was again highly favorable. From the Boston News Bureau of February 15, 1932:

".....the accomplishment of last year, in view of contracted demand for newsprint on all sides and lower prices for the product....can be considered very good; particularly so in view of the small earning power, and in many cases, losses of the other large newspaper factors.

The action of Great Northern Paper directors Wednesday in reducing the annual dividend rate....suggests the conservatism of the management...."

Standard Corporation Records (Standard & Poor's) put out what appears to be its first analytical report on the Company; and from "The Paper Mill" of February 20, 1932:

"GREAT NORTHERN'S-FINE SHOWING

One of the most remarkable financial statements rendered by any industrial company in New England and certainly one of the finest examples of good management is that submitted by the Great Northern Paper Company, and indicated that the rate of current assets had risen during 1931 from 20 to 1 a year ago to 30 to 1 on December 31st last.... This in the face of the conditions in the paper industry in general, newsprint in particular, and the depressed state of industry everywhere, is a tribute to conservative management...."

And the Boston News Bureau, which it will be recalled had put down the stock in 1929, published another letter and reply:

No. 7744

Natick, Mass.  
July 13, 1932

I hold Great Northern Paper Stock which I purchased at much higher levels. What do you think of this concern? Should I dispose of my stock here?

F."

The answer, too long to quote in full, was to the effect that the Company was well managed and conservative; was in a well-fortified financial position; that its properties were in splendid shape; that capital consisted solely of 998,330 capital shares, contrasting strongly with the heavy funded debt of its Canadian competition, ending:

"The success of the Great Northern management....in coping with past trying conditions, and the favorable position of the company, suggest that this stock be held through the present difficulties."

Commodore Ledyard died in January, 1932. He had had a long and distinguished career, during which he had been involved in legal and financial problems of huge corporations beside which those of Great Northern were peanuts. We mentioned a few of his activities earlier, but he was engaged in many others, notably as intermediary between the elder J.P. Morgan, Henry Clay Frick and Elbert H. Gary in the affairs of the United States Steel Corporation, and in the solution of the problem of the dissolution of the old American Tobacco Company, which controlled about 80 percent of the tobacco industry, and which was ordered by the United States Supreme Court in 1911 to be broken up and its assets divided among its subsidiaries, but he gave as careful and thoughtful consideration to the problems of the Company as he did to those of these

giants. He had been a member of the Board for thirty years. The Directors' memorial reads, in part:

"We.... hereby inscribe upon our records this tribute of admiration and respect for his extraordinary mental qualities, his scrupulous integrity and his thoughtful consideration of the rights of others. He has had a very great influence on the affairs of the Company over a long period of years. The Company has lost a great leader and the members of the Board have lost a considerate friend."

Commodore Ledyard's place on the Board was taken by Eustis Paine (1893 - 1953), a grandson of Col. Augustus G. Paine. The writer's understanding is that the Directors, including Garret Schenck, had always desired to have a Paine on the Board, and that after old Col. Paine died in 1915 his son, A.G. Paine, Jr. had been invited to serve, but had refused to do so as long as Garret Schenck was on it. With the third generation, the animosity had died out, and the continuity was restored. There was no other change in the Board, and the same officers and counsel were elected as for the previous year, with H.M. Joyce authorized to act for the President, but the Executive Committee was left one man short.

Eustis Paine was born in New York City. He entered Columbia University in 1911, but after his freshman year left college to go to work for the Everett Pulp & Paper Company in Everett, Washington; served in the United States Army during World War I, and upon his return from the service went into his father's New York & Pennsylvania Company, working up to Vice-President and Treasurer at the time he became a Director of Great Northern. Upon A.G. Paine Jr.'s

Operations were tightened up all along the line. There had been a wage cut of approximately 5 percent in 1931, but salaries had not been adjusted at that time. In January, 1931, all salaries which had not been revised to eliminate the salary dividend had been raised 15 percent, and the "bonus" which had been in effect for so many years was eliminated. This did not actually amount to a raise, because the salary dividend had been paid for so long that it had become built in, and most of the salaried people would have preferred it to remain as it was, having faith that the management would continue to pay it. The management, on the other hand, believed that it would remove an element of uncertainty to put it into the salary scale, and it did away with the calculation and processing of an extra payroll twice a year, which was an economy. In June, 1932, all salaries were cut, those over \$3,000 per year being reduced between 7-1/2 and 8-1/2 percent. Below \$3,000, the reduction was left to the discretion of the officers, not to be more than 5 percent, and the reduction was perhaps not more than 4 percent average for this group, those \$2,000 and under not being cut at all. This move followed a negotiated wage reduction of 8-1/2 percent in May. At the same time, interest on employee loans for the purchase of stock was reduced from 4 percent to 3 percent.

Inventories were written down nearly \$2,000,000 in this year, accounting for nearly half the write-down for the 1931-1933 period, noted previously, and was mostly in the pulpwood account. There had been too much wood on hand when William A. Whitcomb took over in 1928, but with long-term stumpage and operating contracts in effect, it had not been possible to do much about this immediately. A full cut of nearly 400,000 peeled cords had been made in the

1929-30 year, and the 1930-31 cut had been 338,000 cords, but with the long-term stumpage agreements out of the way, 1931-32 operations had been reduced to 230,000 cords. In spite of this, the President reported in 1932 that there was still nearly 200,000 cords more wood on hand than normal, and the 1932-33 operations were drastically curtailed, to just over 100,000 peeled cords. These reductions had tremendous leverage on stumpage and operating costs, and the charge to the mills, which had been \$18.50 per peeled cord in 1930 was down to \$15.00 in 1932, and to \$12.50 in 1933. The perennial effort to hold down the percentage of sulphite pulp in newsprint was intensified. Low water conditions had been experienced in 1930, and it had been necessary to use an average of 20 percent of long fibre, which was a very high figure. The year 1931 was worse, as far as water was concerned, but sulphite was held down to an average of 18 percent. In 1932 it was down to 17 percent, and in 1933 to 14.5 percent. All of these figures were high compared to those reached later, but both water conditions and poor wood quality were a handicap to the effort at that time. Much of the wood being received at the mills was very old, some cut rough as long as seven years back, and this did not do anything at all to improve the quality of the pulp made from it. This was the time when our old friend Lester Smith drew a little sketch of a stick of pulpwood going into the mill with blueberry vines growing on it. This was not much of an exaggeration. The mills did receive wood            in which grass and little bushes had taken root. The effect of this old wood was in part offset by purchases of new peeled wood at depressed prices, but this resulted in the use of vintage pulpwood over a longer period.

As the conditions of 1932 prevailed for a number of years, let us anticipate a little. Continuing with the situation on pulpwood, only a small cut, 161,000 cords, was made in the 1933-34 season, but in 1934-35 a large cut, the biggest, 425,000 cords, until after World War II, to take advantage of the depressed prices. From then on, except in the 1938-39 season, when only 189,000 cords were harvested, quantities cut were normal. Through 1933, and even 1934, things were tough in the woods. Pitiful, men, desperate for work, many elderly, many unfit for any kind of manual labor, walked into the camps in droves, looking for employment, and could only be given a meal, a place to sleep for the night, and turned away. Woods labor would work for almost any wages. Men cut ties for a few cents apiece, and carried them out of the woods on their backs. Every little town along the railroad in Aroostook county had its welfare recipients cutting little lots of wood for wages as low as \$1.50 a cord, and most of these men could not put up a cord in a day. The Company bought a lot of this, but the management was distressed by the situation which made it necessary to take wood produced at such starvation wages. The Company's own cord-cutting rates of course never got down to this level, but they were depressed more than mill rates, and remained low much longer. The cost of pulpwood charged to the mills continued to go down -- to \$12.00 in 1934; to \$11.75 in 1935; back to \$12.00 in 1936 and 1937, and in 1938 it was still only \$12.50. These were the figures for the Penobscot mills. Madison figures varied a little one way or the other. In both cases, charges represented the average cost of all the wood used in the mills, put into the piles, or delivered into the mill holding grounds, regardless of the year it was cut, and



included up to some \$4.00 a cord overhead -- taxes on timberlands, forest management, fire protection costs and other expenses charged to no particular operation, but spread over the whole cut. The "last in first out" procedure had not been adopted at that time. We give these wood costs here because they were a big factor in Great Northern's ability to survive the low newsprint price of the period.

Now that we have mentioned newsprint price again, there was some optimism about it in spite of the discouraging situation which we have described, as when International announced its \$8.00 cut to \$45.00, in September, 1932, a special meeting of the Executive Committee, voting to meet this price, rolled it back to June 1, and guaranteed customers that it would be the maximum for 1933, but at the same time it instructed the Manager of Sales to try to extend contracts through 1934, 1935, 1936 and 1937, with provision for possible increases, limited to \$7.00, \$8.00, \$9.00 and \$10.00 in these respective years, just in case things picked up. As we have seen, there was no such luck. There was one small windfall, a rebate of \$2,324 in Federal excise taxes assessed for the year 1909 under the 1913 Income Tax law, with interest amounting to \$1,880; a total of \$4,205!

Some of the most drastic measures adopted in 1932 to meet the challenge of cost reduction were in purchasing. We have described in some detail the way this was handled in the old Company before the point in time we have reached. This was clearly not the way to buy in the new marketplace.

Fred Dolbeare was in disfavor. The last lot of natural pulpstones which he had personally picked out on a trip to Ohio were of uniformly poor quality. While artificial stones were being used in the new four-foot grinders, there were still a lot of natural sandstones in use in the old grinders at Millinocket in 1932; the mill complained bitterly that they were nothing but mud, and William

O. McKay was not pleased. The situation was fortuitous, but it gave him a reason at an opportune time to implement a change in buying procedures. The procurement of practically all mill equipment was taken out of the Purchasing Department and turned over to Dick Caspar and the writer. Ashton Gourley was given more responsibility in the remaining area. Inventories of supplies and materials for use in the mills were reduced to a bare safe minimum; and what constituted a safe minimum was debatable and debated. This meant more frequent requisitioning, with practically everything on a rush order basis. The orders were to get competition on everything. Great Northern made a complete about-face, and became one of the most hard-nosed buyers in history.

It became necessary to hire more clerical help for the Boston office, because all of this meant writing more letters, making a lot more telephone calls, typing many more specifications and orders, much more follow-up to get quick deliveries, and seeing a lot more people. "Obtaining competition" did not mean just accepting the lowest bid. It was a ruthless process of using one bidder against another, with the aim of buying from the regular source, if possible, to avoid getting the mills filled with untried equipment, requiring special parts and unfamiliar maintenance, although the policy did not preclude buying from new sources, under the right conditions, after making sure that the material or equipment offered was suitable. However, this hard-hearted buying was sometimes carried to the extreme of making a take-it-or-leave-it offer to a selected supplier, carefully calculated to be within what little profit he might have left after having been worn down by whip-sawing tactics. It was dirty pool. It was not like Great Northern, and it was rough

on those who had to play it that way, but those were rough times. It was a species of hand-to-hand combat, because one usually wound up dealing with a very persuasive and resourceful sales representative or engineer, who had no illusions about what he was up against, and was adept at putting the buyer in a bind. Under these conditions, decision as to who would get the business was often agonizing, and it hurt to see a good man, who had done his best, go away disappointed when an order meant much to him, but that was the name of the game. On top of this, hordes of salesmen, from firms previously unknown to Great Northern, descended on the mills in their search for business. They were screened to some extent, but many, with interesting propositions, were referred to Boston, where they appeared with tears in their eyes and sharp pencils in their pockets. They had to be dealt with, and turned away or listened to as conditions indicated -- and listening sometimes turned up something of advantage, but this meant seeing and talking with many more than the usual number of people. There is really no way to adequately describe this experience, but it left scars. On the other hand, it was possible, by and large, to work things around so that the mills did not end up with a lot of miscellaneous motors, pumps and such, because this went on for quite a while, and a number of new sources were developed for things like fabricated pipe systems, weldments, structural steel and certain mill supplies. These sources became regulars, and after some years -- and it was not too long -- when the shoe was on the other foot, and it was the Company that had to go begging for what it needed, it was in much better position than it had been, and the purchasing operation was never the same again.

The 1929 Federal Trade Commission investigation, mentioned earlier, appears to have been wound up in November of that year, but the Interstate Commerce Commission had got into the act, we suppose through the freight allowance provisions, and its case, Docket No. 21095, had not been closed when in 1931 the railroads petitioned for a 15 percent increase in rates, starting a series of battles over freight rates on newsprint that went on for almost ten years.

From the nature of the information available, it is utterly impossible to write anything about all this that makes very much sense; there are too many questions without answers; but we should attempt a general outline, and can note a few points of interest particularly about the time at which we have arrived.

A brief on behalf of the Great Northern Paper Company, the St. Croix Paper Company, the Pejepscot Paper Company and the Chambers of Commerce of Millinocket and Madison -- Ex Parte 103 -- protesting the requested 15 percent increase, was presented to the I.C.C. by A.P. Lane and Sheldon Wardwell on September 14, 1931, and there were probably other protests, but from what we can make out of the changes in freight allowances around this time, we have to guess that it was allowed. In 1932, however, Docket 21095 was still open, proposing adjustments in rates on newsprint, some upward, some downward, in various freight territories east of the Mississippi River, petitioned by the railroads on July 6th.

The newsprint manufacturers were unanimous in **opposition** to the proposals as they stood, and were joined by the American Newspaper Publishers Association. The manufacturers divided themselves

into groups, representing Maine, New York State, and Wisconsin mills respectively, Minnesota & Ontario, in receivership, acting for itself, for the purpose of filing replies; the burden of their protest being that the I.C.C. and the railroads were using 1929 data, which did not take into account the drastic changes in the industry's situation since that time.

Replies were filed by the various groups during the summer, the Maine group, made up of Great Northern, Pejepscot, St. Croix and the Cushnoc Paper Company making their submission in August, the presentation for the Maine manufacturers being by Judge Arthur C. Hayes, a Washington lawyer, hired by Sheldon Wardwell. We are not able to figure out exactly what happened, but apparently a re-hearing was set, and at a joint meeting with the A.N.P.A. in New York on September 20th it was decided that the protest should be carried on. The problem at this point, however, was where to get the money.

Pejepscot and Cushnoc had already backed out. Counsel for some of the other newsprint groups had been dismissed, Sheldon Wardwell commenting: "Their clients have no money left and intend to leave it to others to fight the present report." William A. Whitcomb was determined to put up a battle, and wanted Sheldon Wardwell to prepare the new case and handle the re-hearing himself. The latter was willing to do the first, but not the second, and made an agreement with Judge Hayes to present the case, after it had been prepared in collaboration with the New England Traffic Association, at a rate of \$75.00 a day, which was peanuts for a Washington lawyer, even in those hard times. However, he had not cleared this with William A. Whitcomb. On September 23d he wrote Judge Hayes

that he and A.P. Lane would try to get approval later, saying: "You probably saw in this morning's paper the second cut in newsprint. I was on my way over to see Whitcomb but on Lane's advice ducked as he is wild about it."

This "second cut" was the \$5.00 per ton slash announced just at this time by Price Bros., which we mentioned earlier.

William A. Whitcomb did approve however, and the case proceeded. No clear decision had been made when our file on Docket 21095 ends on March 19, 1934, when Lester Smith, who was still Assistant to the President, but had taken over the handling of traffic matters wrote to the General Freight Agent of the Boston & Maine Railroad; at the end of a long letter discussing the possible outcome:

"It would be a great injury to us to have all the reductions cancelled and all of the increases allowed to stand.

If the whole thing can be killed, it will be entirely satisfactory to us. If it cannot be killed, then we hope for delay. The period of delay that would be satisfactory to us would be about one hundred years."

It is our vague recollection, however, that changes in the rate structure eventually resulted in the company's losing some business in the south and west.

With this case still open, the carriers petitioned some time in 1934 for a 10 percent increase on freight on newsprint shipped from United States mills. This was contested jointly -- Ex Parte 115 -- by the Association of Newsprint Manufacturers of

of the United States (the association set up under the N.R.A.), the Great Northern Paper Company, which as we have noted had withdrawn from that organization, and the International Brotherhood of Pulp, Sulphite and Paper Mill Workers, on the ground that it gave an advantage to the Canadian mills, and would destroy a large part of the remaining U.S. Industry. The first printed brief was dated December 28, 1934. The A.N.P.A. also objected, its statement being dated January 3, 1935. However, the best that could be done was to get the increase reduced to 7 percent.

We are not sure, but it would appear that this was granted as an "emergency charge" or "surcharge", which early in 1936 the railroads sought to have made permanent, filing a supplemental petition, still under Ex Parte 115, on January 24, 1936. The Association of Newsprint Manufacturers, Great Northern, the Pulp and Sulphite Union and the A.N.P.A. of course protested again, using the same arguments as in 1934, their printed briefs being dated May 15 and May 14, 1936 respectively, and they were successful in getting the surcharge removed as of December 31st of that year.

Some time in 1937, however, the carriers filed for a 15 percent general increase, Ex Parte 123, widely known at the time as the "Fifteen Percent Case". This petition was probably presented late in the year, as the usual brief of reply by the Association and Great Northern -- the Pulp & Sulphite union did not appear in this one -- is dated February 4, 1938. The A.N.P.A., which had backed up the Association consistently, also filed. The decision,

handed down on March 8, 1938, represented a victory of a kind, the railroads being allowed only a 10 percent increase. In the face of that year Sheldon Wardwell saying "while it may appear visionary" made some motions at getting this figure reduced, but we do not know that there was any result.

All this is greatly over-simplified. The details were highly technical and much too complex to go into. The protests were a joint effort of the parties we have named, who presented a united front, whether their submissions were made jointly or severally. The Company and Association briefs themselves were short, and were put together by Sheldon Wardwell, but there is just no way to explain the effort that went into coordination and into the preparation of the mass of supporting material behind each one, worked out by Ed. Black and Frank Keenan, under the direction of the Traffic Manager, with help from the Sales and Auditing Departments and the New England Paper and Pulp Traffic Association.

Even if the incomplete records went further, which they do not, we would stop here. What we have written is in no way the whole story of the freight rate wars. There were many more battles, some started by the Company itself, but those of this period probably represent the most intense and most sustained activity in this area in the time of the old Company, and were on top of all the other depression difficulties.

Early in 1932, the President had reported that the Company owned 90 shares of stock of the Heron Lake Dam Company, and was voted permission to acquire any or all of the remaining 40 shares.



Let us then take this opportunity to tell what we know about this company, which was mentioned earlier in our story in connection with the Telos Cut. It had been chartered in 1846, and the purpose of the dam built at that time was to back up Allagash River water so as to facilitate the transportation of logs southward into Chamberlain Lake and thence down the East Branch of the Penobscot. In 1891, this dam was in disuse, and the charter was amended to allow it to be rebuilt so that it could be used to assist in driving logs northward down the Allagash to the St. John, with the provision that if were needed again for its original purpose it could be raised to the necessary height. Fifty shares of the stock had been transferred to David Pingree in 1847, and had been passed down to his heirs. While other means, which we have noted, had been found to move Allagash wood southward to the Penobscot, the Great Northern Paper Company was now interested in moving wood northward, as evidenced by its concern with sites for loading plants on the St. John River, and by 1925, according to a memorandum found in the Company's files, Garret Schenck had in some manner acquired this 80 shares, which were turned over to the Company. At that time, the Heron Lake Dam Company owned a lot of about 714 acres at the damsite, but the dam and other improvements were long gone. Over the years another 50 shares had been issued, making a total of 130, of which 10 had in some way been added to the Great Northern holdings by 1932. From this point on, information is scanty, and is pieced together as best we can. In 1946 another 20 shares were acquired, at a price of \$100 a share, but Great Northern never did get all the stock. In 1964 or 1965 the Heron

Lake Dam Company was owned by the Company and the K.C. Irving interests in New Brunswick, the latter, by difference, holding 20 shares. At that time, according to information which we have not checked, the charter was amended again to allow the development of power, for what reason is not known. At about the same time, the Allagash Waterway was established, and the State wanted a dam built at the old site for the control of water. Great Northern hired a contractor and supervised the building of a new dam, at an expense of about \$100,000, and sold it to the State at cost. The State also bought a portion of the dam lot. Great Northern had by this time no further interest in driving wood down the Allagash. Some time before 1925 it had advanced about \$17,000 to the Dam Company for payment of taxes, and in consideration of this, probably with a small payment to the Irving interests, it acquired title to the balance of the land, which was put into the timberland account, and the Heron Lake Dam Company was liquidated.

There was no change in the Board of Directors, or in the officers elected for the year 1933, except that Eustis Paine was added to the Executive Committee. However, Eugene Hale, Jr. died in March, the Directors' minutes noting only the fact, and in May, Williamson Pell was elected to replace him. The Board of Directors was now made up of H. Merton Joyce, Lewis Cass Ledyard, Jr., Eustis Paine, F.S. Rollins, Hilbert Schenck, Sheldon E. Wardwell, William A. Whitcomb, John Hay Whitney and Williamson Pell. There was no further change until 1936.

Williamson Pell (1881 - 1949) was a native of Goshen, N.Y., a graduate of Princeton in 1902, where he was captain of the

football team for two years, and of the New York Law School in 1904. He practiced law in New York until 1912, when he joined the United States Trust Company, of which he was First Vice-President at the time of which we write, becoming its President in 1938, and Chairman of its Board in 1947. Like so many of the Company's prominent New York directors, he was active in support of hospitals, in his case the New York Hospital, and was a Trustee of the Greenwich Savings Bank and the James Foundation. His interests seem to have been directed toward the financial aspects of the insurance business, and at the time of his death in 1949 he was a Director of no less than ten insurance companies, but of no industrial corporation other than Great Northern, as far as our information goes. The staff magazine of the United States Trust Company called him "A good friend, a great executive, a man's man"; and said of him "Under his direction as President and Chairman, the Company, despite the dislocations of depression and war, added substantially to its business and greatly enhanced its already high reputation in the financial community. He was a sound and understanding administrator, enjoying always the loyal support and affectionate regard of the officers and the staff." He loved the Maine woods, and had a camp near Eustis, which he called "The Chimes", where he visited often, and he was greatly respected by both William A. Whitcomb and William O. McKay.

In the spring of this year, a wage reduction of a little over 7 percent was negotiated, and this was followed immediately by an equivalent cut, right across the board, in all salaries. In two years, the hourly mill payrolls, through lower wages, a shorter

work schedule for some jobs, the elimination of overtime and some reduction in the work force, had been cut almost exactly in half, from \$2,353,000 in 1930 to \$1,370,000 in 1933, without, as we have said, producing real hardship. This may not seem credible, but it is true. Based on the known hourly rates and the fact that there had been nothing to cause any essential change in the work force after 1917, this was without much doubt the smallest dollar payroll since that year, and it has gone nowhere but up ever since.

This was the time when the thrust of a great deal of advertising was "Buy American". Great Northern did not do much advertising, but in such as it did do, it worked in a little propaganda about its being a Maine corporation, operating entirely in Maine and employing Maine labor. Although its greatest competition was foreign, it did not go for the "Buy American" slogan, the management somewhat wryly acknowledging the specious Canadian claim, then popular, that the United States did not have exclusive right to the use of the word "American". Most newsprint mills, in addition to the label pasted on the side of the roll, used a head printed in color with the name of the company and its trademark, if any, and a truckload of their newsprint being transferred from the freight yard to the pressroom, when on a flatbed with the rolls "on the bilge", the ends showing, was a huge moving billboard, whereas Great Northern labels were inconspicuous brown, printed in black, and its heads were just plain old brown, not printed at all, so if anyone happened to see "Great Northern" on a roll of newsprint, it was by accident. At this time the suggestion was made that the Company should also use a printed head -- brown, of course,

which could hardly be printed in anything but black. This suggestion might possibly have been adopted, but the Company had no trademark, and no attractive design made up entirely of letters could be devised, particularly in view of the range of roll diameters for different customers. Besides, it would cost. However, simple brown and black "Made in U.S.A." stickers were pasted on the rolls. This gave certain customers a chance to show their patriotism, and it was not long before the mills were using stickers reading "Made in U.S.A." for Louisville Courier-Journal", or whoever. For some reason the Boston Post insisted on its sticker reading "Made in New England". This, when partly obscured by the way the roll sat on the truck, gave rise to the rumor that the Post was buying paper from England, offending a strangely large number of people.

Apart from fighting for business and holding down costs, the management devoted most of the year 1933 and part of 1934 to the obligations imposed upon the industry by the well-intentioned but unrealistic, unworkable and unconstitutional National Industrial Recovery Act, an epic waste of time and energy as far as the newsprint industry was concerned. The writer approaches his subject with somewhat the attitude of the schoolboy who, faced with the necessity of discussing the reign of the Emperor Caligula, wrote "The less said about Caligula the better", which was a good answer, but we cannot get away with it, and as long as we have to write about this subject, we will have to write quite a lot.

For the benefit of those who have forgotten or who never knew about this aspect of the New Deal, the National Industrial Recovery Act (N.I.R.A.) was one of the more far-out efforts of F.D.R.'s

Brain Trust. The effect of it was to set aside many of the provisions of the various anti-trust and restraint of trade laws, and to require those in each industry, or in related sub-divisions of each industry, to organize and establish "Code Authorities" to establish rules, or "Codes of Fair Competition", embracing trade definitions, sales practices, prices, labor rates, working hours and the like, all in a spirit of cooperation in the interest of the common good. After such codes had been approved by General Hugh S. (Ironpants) Johnson, Administrator of the National Recovery Administration (N.R.A.), the bureaucracy set up under the Act, with its famous Blue Eagle symbol and its motto "We Do Our Part", and had been signed by the President of the United States, everybody was to live under them in peace and harmony, guided and policed by the all-wise in Washington, and prosperity would follow. While the government had advisors from each industry, it is impossible that definitive studies could have been made of the histories of and the relationships between the elements within them. Certainly there was no such understanding of the newsprint industry. There was not much recognition of the fact that all industries did not have the same kinds of trouble, and of the more unpleasant fact that some industrialists were not white-hat guys, and never would be.

In April, 1933, William A. Whitcomb advised the Directors of "legislation in Washington affecting the industry", and on June 14th he reported the organization, at a meeting in Boston on May 26th of the Association of Newsprint Manufacturers of the United States, under the provisions of the National Industrial Recovery Act; presented the minutes of this meeting, and was voted authority to pro-

ceed as might be required to carry out the purposes of the N.I.R.A. This action preceded the actual legislation, which was not approved until June 16th.

The writer was present at many of the executive meetings of the Association. He and Frank Keenan kept the notes for the Company, but his mind retains only impressions, rather than definite memories. He also kept the Company's official file on the proceedings, which he knows was destroyed, and there were few other Company records, practically all the action being handled by the Boston office. There is some written history surrounding the evolution of the newsprint codes, which would perhaps lead us no further afield than some of the other material used in this story, but the writer finds in it so little pertinent to Great Northern's role that he will stay with what information he has himself, mostly copies of papers from the Boston files found in other places, and believes that his highly compacted account will be reasonably accurate in the essentials.

We have noted the decline of the United States newsprint industry. In 1926, at the point when Canadian production first surpassed that of the United States, there were, according to testimony given during the Celler Committee 1950 investigation, 39 United States newsprint mills. In 1933, from the same source, there were 28. This would have meant maybe 20 companies, several, including Great Northern, International and Crown-Zellerbach, having more than one mill. There are all kinds of figures on the number of newsprint mills at one time or another, and these are probably as good as any. All except a few of the smaller companies

sent representatives to the organization meeting and to subsequent meetings of the Association, those few delegating others to represent them. William A. Whitcomb was elected Chairman and Edgar Rickard, President of Pejepscot Paper Company Vice-Chairman. An Advisory Committee, constituting the Code Authority which was to formulate the code, was appointed. William A. Whitcomb was Chairman and Edgar Rickard Vice-Chairman, these, and Arthur Hubson of the St. Croix Paper Company, representing the eastern mills. The other members were Isidore Zellerbach, President of Crown-Zellerbach, representing the West Coast, A.R. Graustein, President of International Paper Company, representing the New York State mills, with R.M.H. Robinson, Receiver of the Minnesota & Ontario Paper Company and C.K. Blandin, President of the Blandin Paper Company, representing the mid-west mills. There were some changes later, most of which we will ignore, as they are not important to the story. Royal S. Kellogg, of the Newsprint Service Bureau, was appointed Secretary to the Association and the Code Authority.

This was Great Northern's first participation in any industry group, except for its earlier very short-time connection with the A.P.P.A. It was under duress, and worse, was as a part of the New Deal program, which William A. Whitcomb resented with his whole being. He was convinced that the N.I.R.A. was conceived in error, contravened history, interfered with free enterprise, and that, given the situation and the personalities in the newsprint industry, it could never work. Nevertheless, he gave it a fair try.

The Code Authority started work on the formulation of a Code



of Fair Competition. Obviously the objective of the N.R.A. was to increase wages and shorten working hours to allow of employing more people, which would spread more money around and establish more buying power, with the necessary raising of prices to pay for this, and the concomitant elimination of questionable competitive practices, under some sort of control. As applied to the newsprint industry, there were two troubles with this concept. One was that producers in the Dominion of Canada, which was outside the jurisdiction of any United States law, were the source of more than 60 percent of all the newsprint used in the United States, although the hope was that they would see the advantages of the brave new order of things south of the border, and that this would encourage them to halt their throat-cutting and get themselves out of difficulty also. The other was that the United States publishers, who would have to pay the bill eventually, would hold still for all this -- they never had. These things did not concern the Washington planners. They did concern William A. Whitcomb.

The entire summer was spent in the preparation of the Code. The necessary inclusion of A.R. Graustein on the Code Authority presented a problem, because while nominally he represented United States mills, he could not escape the fact that his big interests were in Canada. The two most important factors were International and Great Northern, and many of their views were diametrically opposed. Simplified, A.R. Graustein was in favor of leaving wages where they were, or at best raising them a token amount; he was for a substantial price increase which would help salvage his higher cost mills and reflect to the advantage of his Canadian operations, and he wanted a broadened definition of newsprint for import purposes.

William A. Whitcomb was paying the highest wages in the industry outside the West Coast -- 36 cents an hour minimum -- and wanted to raise this to 40 cents. He recognized that the publishers had their own problems, and was for moderation in price adjustment, each company basing on its own cost increases, and he was opposed to any change that would allow light-weight or colored newsprint, or the clay-loaded super-news being developed for newspaper supplements, into the United States duty-free. However, the Authority went to work, presenting ideas, as we will show later, to full meetings of the Association.

The writer's recollection of any specific event taking place at these meetings is poor. His strongest memory is of William A. Whitcomb, tall, rugged and taciturn, with William O. McKay -- Dick Caspar usually stayed home to mind the store -- H. Merton Joyce or Jack Marshall, neither in very good health, and Sheldon Wardwell or Tom Allen from his office, and Archie Graustein, short, rotund and full of business, always surrounded by an entourage of vice-presidents and officers; some combination of Mr. Weaver, Mr. Fearing, Mr. Hurlbut, Mr. Charlton, Mr. Friend and Mr. Doane, with a couple of lawyers to boot, facing each other across a long table in a private room at the Parker House in Boston; Frank Keenan and the writer sitting back in a corner taking notes or running to the office a few blocks away to type up draft clauses; two I.P. secretaries in and out continually from a nearby private room; white-haired Royal S. Kellogg intent on every word, and the room filled with the top brass of the entire industry and their associates.

In view of the background, of which we have written what happened

was not surprising. There was no beautiful spirit of cooperation. In the Code Authority, there was no love lost between William A. Whitcomb and Archie Graustein. Edgar Rickard cautiously supported Great Northern. R.M.H. Robinson was in a spot, as he too represented both United States and Canadian interests. Wise old Mr. Zellerbach, after a meeting or two, turned over his duties to his son, J.D. Zellerbach, a very level-headed man, who, since the West Coast was almost another world at that time, was in position to be the most objective, but there was not much agreement among the members, and they brought to the Association more alternatives than solid recommendations. In considering the suggestions of the Authority, the Association itself tended to form cliques which really had little common interest except fear. The small companies were suspicious of the big ones, and the big ones were suspicious of each other. There was a lot of conferring outside the general meetings, which were reasonably restrained, and perhaps for that very reason remarkably unproductive. They might have been even less so if it had not been for Mr. Blandin, who was an independent man of great common sense, and did much toward keeping the discussions in the ball park.

The publishers were not involved, at least not officially involved, in any of the festivities. Almost immediately after the formation of the Association of Newsprint Manufacturers, the A.N.P.A. had been invited to confer with the Code Authority, and had refused, but the writer is sure that there were private talks between individual manufacturers and individual publishers which did nothing to produce unity among the former. There were conferences in Washington with W.W. Pickard, the N.R.A.'s Deputy Administrator for Newsprint and his staff, and with their labor advisors. As the weeks went by,

it became apparent that the code was going to be written by a committee of the whole and the N.R.A., not the Code Authority, and that nothing that would be of any meaningful assistance to the industry was going to be developed. Great Northern influence, strong at first, gradually lessened. William A. Whitcomb, whose position on open competition and labor were not popular, became disgusted with the interminable and sometimes deliberate quibbling, and with the general cynicism, of which he himself was of course not free, about the ability of the United States tail to wag the Canadian dog, and practically withdrew from personal participation, allowing Edgar Rickard to become spokesman for the eastern mills, including Great Northern, keeping touch with developments and expressing his views through him.

On September 13, 1933, he reported to the Directors that a Code had finally been approved by the Association, and had been submitted to Washington. There had already been a public hearing on it in Washington by that date, this having occurred on September 6th. The writer does not have a copy of this Code. The earliest draft had contained a provision that the minimum price for 1934 would be the current nominal \$40 per ton, delivered New York, but this had come to grief because some of the mills were already below this figure, and it was stricken. It is generally recognized that there were three Codes written. That on which the public hearing had been held on September 6th we would say was the first. As submitted, it did contain a proposal to study a standard method of costing, and an agreement not to sell below cost, which was the beginning of a move toward stabilization.

There was, however, no such provision in the Code that was sent by General Johnson to the President for approval. The American Newspaper Publishers' Association was out in strength for the public hearing on September 6th, although it had refused to have anything to do with the preparation of the submission. As the writer remembers, much of the hearing was argument about what kind of paper should be considered to be newsprint, and most of the rest to violent objection by the A.N.P.A. to the costing provision, on the ground that it could be juggled by the manufacturers to justify almost any price. Such was the spirit of confidence and cooperation. Between September 21st and September 26th, following this public hearing, there were a number of conferences in New York between representatives of the industry and representatives of the A.N.P.A., which was now in the act, William A. Whitcomb reporting to the Directors that "the publishers objected to certain points", and between October 4th and October 24th there was another series of meetings between the manufacturers and representatives of the N.R.A., that of October including members of the Canadian industry. The writer's recollection is that General Johnson himself conducted this meeting, and extracted a promise that no new prices for 1934, the time being at hand for announcements, would be below the \$40 figure. Out of this meeting there also grew an agreement to form an association in Canada which would cooperate in implementing the aims of the National Industrial Recovery Act as it applied to the newsprint industry. It therefore would appear that the second Code, the one which General Johnson sent to the President, under date October 26, 1933, was, as the result of industry disarray, publisher opposition and N.R.A. insistence on arriving at something, an emasculated version of the one submitted by the Association of Newsprint Manufacturers of the United States for the public hearing on

September 6th, and that had been none too virile.

This sad document, presumably the second Code; and the writer has a Government Printing Office copy of it before him; was hardly more than a gesture to meet the requirement that something called a Code be drawn up. The "Code of Fair Competition for the Newsprint Industry" proper is printed on five and one-half pages, one of which is devoted to definitions and organization; one to the usual bafflegab requisite to anything in which the Government has a hand, and three to provisions regarding labor, leaving half a page having anything to do with the problems of the newsprint industry. Except for the benefits it conferred upon labor, it was almost wall to wall nothing.

Summarizing, it of course applied only to United States manufacturers. It threw the issue of what was newsprint back to the tariff law definition, specifying only that it be white or nearly white, and 32 lb. basis, give or take 5 percent. It allowed the N.R.A. to designate three additional members to the Code Authority, advisory, without vote. Paper machine operation was limited to six days a week (144 hours). A 40-hour maximum week was established for most mill workers, averaged over different periods of time for different occupations; a 42-hour week for a few, mostly truck drivers and employees in steam plant and power house operations. These might work a ten-hour day. In all cases, the averages could include a limited number of 48-hour weeks, for convenience in scheduling. Time-and-one-third over 8 hours in any day was provided for day workers.

The minimum wage for mill labor was set at 38 cents an hour for men; 33 cents for women. In reference to the latter rate, it

contained the following clause:

"The minimum wages hereby proposed shall not in any way be considered as a discrimination by reason of sex, and when, in any case, women do substantially the same work or perform substantially the same duties as men under the same conditions as men, they shall receive the same rates of wages as men receive for doing such work or performing such duties."

Ah, there, women's lib! Executives, private secretaries, supervisors and salesmen could work 24 hours a day, 365 days a year, as long as they were paid at least \$35.00 a week. The minimum rates for all other employees, not specifically classified, ranged from \$15.00 a week in cities of 500,000 population and over to \$12.00 a week in towns of less than 2,500 people. Rates above the minimum rates were to be equitably adjusted. The Code made provision for piecework, set rates for handicapped workers, and minimum age limits for hiring and for work under hazardous conditions. It gave employees the right to organize and bargain collectively through representatives of their own choosing, "free from interference, restraint or coercion of employers of labor in the designation of such representatives or in self-organization or in other activities for the purpose of collective bargaining or other mutual aid or protection", and made it illegal for an employee to be required to join a "company" union as a condition of employment.

It then had a lot of general labor provisions like "Employers shall comply with the maximum hours of labor, minimum rates of pay and other conditions of employment approved or prescribed by the President", which seemed kind of superfluous; and several under

which the Code Authority was to set standards for health and safety and submit them to the Administrator; study and report on the feasibility of a shorter work day; make a study and report on the "stabilization and regularization of employment", whatever that meant; establish rules relative to work on Sundays and holidays, a weekly "day of rest", overtime work generally and rates of wages therefor, for submission to and approval by the Administrator, and forbade the changing of employee classifications "to defeat the purposes of the Act." The labor section, and much of the rest, was clearly of bureaucratic origin.

It made mandatory the study of a standard method of accounting and costing, which was to be used by all members after approval by the Administrator. There was a clause about cooperating with the Department of Agriculture, other Government agencies and the Code Authority of the Lumber and Timber Products Industry, in the interest of forest conservation. It provided for the inevitable mountain of paperwork by requiring reports on like everything, and ended with the interesting provision that the President could cancel or modify it at will, this power being given him under the Act.

In an appendix of industry authorship, it covered in detail core and tare allowances; terms of payment, requiring the charging of 6 percent interest on bills unpaid after 30 days; differentials for paper cut into sheets of different sizes, and differentials for skid loads. The burning question of price and ruinous competition, too hot to handle, were relegated to the future by two paragraphs which may have been of industry authorship, but were permissive only. One, quoted in full, read:



"The Code Authority may confer with members of the industry and the consumers of its product in respect of the stabilization of the industry and the elimination of unfair practices and destructive competitive prices and may formulate and submit to the Administrator its recommendations to that end. Such recommendations when approved by the Administrator shall have the same force and effect as any other provisions of this Code."

The second provided that if the Code Authority found that newsprint was being imported in substantial quantities in increasing ratio to domestic production on such terms as to endanger the maintenance of the Code, it could complain to the President and petition for restriction on such importation. There was little in the Code to maintain, except the labor provisions, and the conditions outlined in these two clauses already existed, so they were just a cop-out. However, they did establish a foundation of a kind for some future action.

While the Code had failed to deal with the real problems of the industry, these had had plenty of exposure during the many conferences with the N.R.A. people, notably with the Deputy Administrator for Newsprint, W.W. Pickard, and General Johnson's letter of transmittal to the President made a lot more sense in this respect than the Code he was transmitting. In this, he said, in part:

"The newsprint industry is in a very serious condition. Consumption has fallen from 3,800,000 tons in 1929 to 2,800,000 tons in 1932..... The price has fallen from \$65 per ton delivered in 1929 to \$40 in 1933.

It is doubtful whether even the most efficient mills can produce paper at this price in either Canada or the United States. In fact, five out of eight of the largest

producers in the United States are in receivership, as well as practically all of the Canadian mills which are not supported by their affiliates.

As newsprint is imported duty free, the United States and Canadian branches of the industry are practically one from a competitive standpoint, and consequently the manufacturers in the United States can obtain no reimbursement through increased prices for any additional costs which may be imposed upon them by this Code.....

Newsprint contracts are generally made for the calendar year, and offerings for 1934 are now being made. Some offers as low as \$30 to \$35 per ton, delivered, have been made by some Canadian mills. The paper industry as a whole is in something of a panic for fear that a lower price for newsprint will be established and that this will result in the inability of the industry to meet its increased costs under the National Industrial Recovery Act....

The real problem of the Newsprint Industry is not to increase employment, but to maintain employment....Under the circumstances, I am of the opinion that the Industry has offered the maximum of which it is capable....."

This last, of course, referred to the wage and hours provisions, which, after all, were what really mattered to the N.R.A. All the other things, like price, which might be covered in a "Code of Fair Competition" were only to provide the means of arriving at more employment and higher wages.

Some time between October 24th and November 17th, the Canadian mills formed the Newsprint Export Manufacturers Association of Canada, to help implement the purposes of the N.I.R.A. as agreed, after the Provincial premiers had given their blessing. As we have already seen, they had been trying for several years to get the Canadian industry to do just this sort of thing. On November 17th, President Roosevelt signed the code we have described, with the proviso that the Administrator of the N.R.A. hold further hearings within 90 days to determine the adequacy of the minimum wages which it established. William A. Whitcomb immediately resigned as Chairman of the Association of Newsprint Manufacturers of the United States, and was replaced by Edgar Rickard. He, however, remained a member of the Advisory Committee.

The Newsprint Code became operative on November 27, 1933. On November 22d, William O. McKay wrote to all the International Officers and International Representatives who had signed the Labor Agreement negotiated in the spring, sending each a typed copy of the Code, drawing attention to the pertinent provisions, and advising that as of November 27th the Company's minimum rate would be raised from 36 cents an hour to 40 cents -- the figure William A. Whitcomb had fought for, and two cents above the Code minimum -- and that the rest of the wage scale would be restored to that in effect before the cut which had been negotiated in the spring. There were a few changes to be made in work schedules to conform to the Code, and he indicated that if the Internationals or the locals wished to discuss these in Boston he would arrange a conference. He also offered an extension of the 1933 Labor Agreement -- with the new rates, of course -- to May 1, 1935,

with provision for termination on July 1, 1934 by either party. No general conference was asked for, but neither did the unions accept the offer to extend the contract.

Great Northern was already on a short work-week. However, the necessary revisions in schedules put over 100 more men on the mill payrolls, according to an item in the Bangor Daily News of November 23, 1933, plus an additional 950 men in the woods. There was another Code for lumbering operations, but the writer has no information on what part, if any, the Company had in its preparation. The increase in the number of woods workers was largely due to the bigger cut made in the 1933-1934 season, and the figure for additional men employed may have been a little inflated. "Officials of the Company" were quoted as endorsing the Code "because it has been designed for the purpose of creating fair practices in the newsprint industry, and because the principles thus established are worthy of receiving the enthusiastic support of every American citizen". This does not sound anything like what anybody the writer knew would have said, but no matter.

The typewritten Code attached to William O. McKay's letter to the unions must have been the third one. It is marked "Official" in William O. McKay's handwriting. The writer has no printed copy of it, and we have no way of knowing when or how the changes from the second, which we have described, were made. It includes the same statement, signed by President Roosevelt and dated November 17th, which is in the printed copy, and had the same effective date. The changes were all in the labor section -- there was not much else to change -- and were mostly deletions. The allowance for a

ten-hour day for some workers was eliminated, the section on the hiring of handicapped workers was simplified, and all the clauses which we have called "general labor provisions" were removed. The only addition was the provision that office boys or girls might be hired at 80 percent of the minimum rate.

The questions of price and destructive competition having been left unresolved, but Canadian cooperation having been promised, the Association of Newsprint Manufacturers of the United States, under Edgar Rickard, now approached these matters, under the two provisions which we have noted, with a study titled "Proposed Recommendations In Respect to the Stabilization of the Newsprint Industry and the Elimination of Unfair Practices and Destructive Competitive Prices". This document, as lengthy as its name, came to be called the "Supplemental Code". Basically, it reverted to a temporary freeze of the \$40 price by both United States and Canadian producers, formalized the zoning system, and suggested a joint United States - Canadian committee empowered to adjust price after studies of costs and other conditions. The Great Northern Paper Company, while not in favor of this concept, participated in the discussions for its own protection, particularly in the area of establishing the zones and zone differentials. The writer recalls making a great number of hand-colored zone maps for use with drafts of the Supplemental Code during the preparatory period. On January 6, 1934, Edgar Rickard submitted it to General Johnson, mailing a copy to the A.N.P.A. and various regional publisher associations. The A.N.P.A. at once turned it down, on the ground that it violated legal and economic principles, and advised the Association of Newsprint Manufacturers that it would oppose it at the public hearing, called by the N.R.A. for February 1, 1934, and presided

over by W.W. Pickard.

Edgar Rickard presented the United States manufacturers' case in an emotional statement, virtually a recapitulation of what we have written about the state of affairs, beginning: "We come before you, Mr. Deputy Administrator, as an industry in desperate need". He went on to say that the Code approved on November 17, 1933 had increased the production costs of the United States industry without affording any protection from unfair price competition or from imports, actually putting it in greater jeopardy. He dealt briefly with the reasons for the destructive price cutting of the past few years, stating that the \$40 level which had been reached was below the cost of production for nearly all mills, submitting figures to prove that actual cost of newsprint, without any return to investors in the industry, was \$7.00 a ton above the \$40 delivered price, with costs still going up; that contracts had been made at figures as low as \$30 a ton and that in other cases newsprint had been offered at a guaranteed \$8.00 a ton below any price quoted by the leading United States producers and that this vicious type of price cutting, with consumers unsympathetic to the problems of the industry could force the whole price structure to still lower levels.

He pointed out that some 60 percent of the Canadian industry and 40 percent of the United States industry had already gone into bankruptcy, receivership or some form of reorganization before production and price had dropped to their present levels, that if present conditions continued the situation could only worsen, and that whereas, because of the difference in financial structure,

the Canadian companies could reorganize, the United States mills would collapse and disappear, wiping out not only investors but employment, and leaving United States publishers at the mercy of foreign producers. We quote the next section of his speech, as it sums up the wholly frustrated attitude of the industry at this time:

"The general theory of these Recommendations is that the newsprint industry accepts for the present the existing situation - ruinous as it is - as a basis for stabilization of the industry.

We accept the present exceedingly low price - \$40 at New York and Chicago. We accept the zoning system and the method of quoting f.o.b. mill, freight allowed to destination, which has been in existence for many years.

For the future, we hope that this Code will result in the elimination of unsound practices and in fair and non-discriminatory treatment to all.

This step toward the stabilization of this industry is not price-fixing -- it is only salvage. It is merely putting a bottom to what seemed to be the bottomless pit into which this entire industry was disappearing.

It is not even salvage -- for no permanent salvage can take place unless prices shall be ultimately adjusted to a fairer level -- but that is for the future. We recognize that any such adjustment must take into consideration not only our own needs but the needs of the publishers who are our customers. We are willing to be patient and to ask for relief only when it is justified by the conditions affecting both the newsprint industry and the publishing industry.

But we do most earnestly ask to be saved from financial suicide. We do ask to be saved from trampling each other to death in a panic.

It is obviously impossible for the manufacturers to help themselves as individuals. They can do so only through cooperative methods such as are contemplated by the National Industrial Recovery Act.

Moreover, it is also impossible for the United States mills to act alone. The Administrator in his report to the President on October 26, 1933 submitting the Newsprint Code recognized that "the United States and Canadian branches of the industry are practically one from a competitive standpoint."

This is the program which we present to you. We have attempted honestly and sincerely to make this program so fair -- so reasonable and so moderate -- that no one could reasonably object to it.

There is no reason why the newsprint industry should be singled out from all the other industries of this country to be denied relief which we so sorely need. There is no reason why we alone should be denied the protection of the National Industrial Recovery Act.

We have discussed this matter with the Canadian manufacturers, and find that they are willing to comply with these recommendations if they are approved by the Administrator...."

He exhibited the correspondence with the A.N.P.A. to show the reasonable attitude taken by the newsprint industry toward its customers and the intransigent position of the latter; rejected their



proposition that the remaining United States industry was over-capitalized, obsolescent, inefficient and should be allowed to die a natural death, and waxing nautical, ended:

"The newsprint industry is foundering. Our signals of distress have failed to bring relief, but we have managed to keep afloat. We have not sufficient power of our own to keep us from drifting on the rocks and becoming a total wreck. These Recommendations will tow us to safe waters where we can repair the damages incurred in years of cruising in a sea of commercial upheaval. We ask the N.R.A. to stand by and convoy our frail craft until we can again assume an even keel".

This heart-rending plea did not impress the American Newspaper Publishers' Association. Its attorney, Elisha Hanson, argued that while the N.I.R.A. allowed certain liberties to be taken with the anti-trust laws, the adoption of these recommendations would create a true monopoly, and he placed the publishers squarely against it. The Great Northern Paper Company, represented at the hearing by Jack Marshall, alone among the manufacturers to the best of our recollection, also spoke against the plan, still maintaining its position that there should be free competition, and refrained from voting on it. Edgar Rickard's speech was printed and widely distributed by Royal S. Kellogg under date of February 6th, pending decision by the N.R.A.

The latter recognized the predicament of the Newsprint Association and its obligation to do something about it, but having politics and the power of the press to consider, decided, rather than accept the manufacturers' plan, to man the lifeboat and pull

to the rescue with one of its own. On April 11th, William A. Whitcomb submitted to the Directors a letter from Royal S. Kellogg reporting on a meeting held in Washington on April 3d between the Code Authority and the N.R.A., represented by W.W. Pickard and Major George Berry, the Division Administrator, to consider its proposal.

This was issued under the same title as the manufacturers' "Recommendations", and was also known as the Supplemental Code. It was a complicated thing, but again summarizing, it called for a "Newsprint Planning and Adjustment Board" of nine members, three from the newsprint industry, to be nominated by the Industrial Advisory Board of the N.R.A.; three from the publishers of daily newspapers, to be nominated by the Consumers' Advisory Board of the N.R.A.; two representing labor in the newsprint and publishing industries respectively, and one "disinterested person", meaning an N.R.A. man, to be known as the "Administration Member", and to act as Chairman. A price zone map, Schedule A, likely the one which had been prepared by the industry, provided for ten zones plus a number of "port cities". Zone differentials ran by the numbers from \$1.50 to \$.50 under the Zone 4 base price, and from \$1.00 to \$5.00, by increments of \$1.00, over the Zone 4 price, with a more complicated formula for Zone 10, which included the states of Washington, Oregon, California, Nevada, Idaho and Montana. The differential for "Ports" was \$1.00 under the Zone 4 base, whatever it might be, but no base price was established. There was a Schedule B, covering differentials for paper cut into sheets, identical with the Appendix of the existing Code. The Planning Board was in effect to control the newsprint industry, price and everything else, in the United States, and, under a written agreement with the Newsprint Export Manufacturers Association of Canada,

in that country as well, to all intents and purposes. The United States industry was to report to the Board through its Advisory Committee (Code Authority); the Canadian industry through an Executive Committee; and there was a Joint Committee of four representatives of the industry from each side of the border, to sort of watchdog the whole operation. All decisions of the Board were subject to the approval of the Administrator of the N.R.A.

Discussions and the preparation of this document took up most of the summer. The Association of Newsprint Manufacturers of the United States accepted it; the Canadians said nothing for the record, although it was understood that they would go along. The A.N.P.A. rejected it, though some of the smaller publishers, for a change, were in favor, but called for a public hearing under the auspices of the N.R.A., and this was set for August 3d.

William A. Whitcomb, who was so independent that he had painted his house a weird shade of pinkish purple, when that kind of thing was not done in Dedham, and so conservative that he considered zippers on trousers to be immoral, was against the whole idea as **Socialistic** and unethical, in that order. He was not about to give up his marketing advantage as probably the lowest-cost producer in North America, in spite of the handicaps of old paper machines and recurrent power shortages, by submitting to any such discipline. On June 13th, he brought the matter to the Board of Directors as a report on "the latest developments in connection with the Newsprint Code and the Recommendations of the Newsprint Association to the N.R.A.". He stated that an agreement between the Association of Newsprint Manufacturers of the United States and the

Newsprint Export Manufacturers of Canada was an integral part of the new plan, which had been proposed by officials of the N.R.A.; that the Great Northern Paper Company had from the first been opposed to such an agreement and had gone so far as to speak against the plan at the Washington hearing on February 1, 1934, Mr. Marshall, representing the Company, reserving the Company's vote until the matter could be taken up with the Board.

The Directors went on record: "It is the opinion of the Board that our Company should not cast its vote in favor of the recommendations, which leaves us no alternative but to withdraw from any further participation with the Newsprint Association of the United States". The President and Lewis Cass Ledyard, Jr. were authorized to so advise Edgar Rickard, and on June 20th the President wrote:

"Association of Newsprint Manufacturers of the U.S.

122 East 42nd Street

New York, N.Y.

Gentlemen:

The Great Northern Paper Company hereby resigns as a member of the Newsprint Association.

It will continue to pay its dues for the balance of this month and the following month. Thereafter, it will, of course, comply with all provisions of the Newsprint Code, and will pay its proportionate part of the expense and maintenance of the Code, -- but not of the Association as such .

Yours truly,

Wm. A. Whitcomb

President "

In the hand-written official minutes of this meeting of the Board, the important word "not", used above, reads "now" but this was clearly an error.

The August 3, 1934 hearing was the February 1st hearing all over again. The big publishers were damned if they were going to have the Government dictate the terms under which they could buy their raw material, this being what the proposal amounted to. They thus put themselves in the posture of adversary to the N.R.A. which had fathered this scheme. On its part, the N.R.A. wanted no open war with the powerful press, as the Act under which it operated was already under fire; put the whole thing on the back burner, and the quo remained status. In May, 1935, the Supreme Court of the United States ruled the National Industrial Recovery Act unconstitutional; the Blue Eagle joined the dodo, and things remained just as they had been in 1933 in the newsprint industry. Nothing had come of all this blood, toil, sweat and tears except hard feeling and an incidental formalization of the zone price system.

We have made no effort to explore the history of the Codes which affected the manufacture of other grades of paper, some of which were being made at the Madison mill. The Company had little to do with them, being a very small factor. The Madison plant operated under the Newsprint Code provisions as far as wages and hours were concerned, and the writer recalls nothing that had any material effect on the production or sale of Madison products.

Going back to 1933, there was one small matter, anti-climactic to the foregoing great events, which is worth noting. This was

that it was discovered that the deeds to land for cemeteries, given to the Town of Millinocket in 1908 had never been recorded, had been lost, and it was necessary to issue new ones. As we have said, there was no change in the Board of Directors or in the officers of the Company for 1934, but Charles O. Small, who had handled its legal work at Madison from the earliest days, having reached an advanced age, resigned, and was not officially replaced.

Comment in the financial press on 1933 results (Boston News Bureau, February 16, 1934), under the head "Great Northern Paper Had Profit in 1933", was confined to a factual analysis of the balance sheet, still the only published information, from which an accurate deduction of earnings of 12 cents a share, after inventory write-off of \$656,728, was made. These tiny earnings represented more of an accomplishment on the part of the management than it was given credit for, even in view of the miserable condition of the industry, because 1933 was a low water year, as we will see, a situation which added materially to the cost of operation.

In view of what we are going to discuss next, this might be an appropriate place to say something about the storage system on the West Branch, which at this time was probably at its peak capability. The two main basins, Ripogenus (Chesuncook Lake) and North Twin (the Lower Lakes) would hold between them 45 billion cubic feet of water -- roughly 30 billion and 15 billion respectively. We have spoken of the many dams maintained for small stream drives, and a large number were in shape to hold water. These, with the Seboomook and Canada Falls dams on the West Branch itself, were known collectively as the "Small Pond Storage". We list them as they were about this time, for the record. There

were 34 of them:

<u>WATERSHED</u>	<u>MAXIMUM CAPACITY</u> <u>B.C.F.</u>
<u>SOUTH BRANCH</u>	
Penobscot Lake	.469
Cheney Pond	.035
Canada Falls Flowage	1.018
Seboomook Lake	3.180
<u>NORTH BRANCH</u>	
Frost Pond	.079
Dole Pond	.234
Long Pond	.160
Hurricane Pond	.015
<u>CAUCOMGOMOC</u>	
Bear Pond	.004
Loon Lake	.490
Shallow Lake	.216
Daggett Pond	.068
Poland Pond	.297
Caucomgomoc Lake	1.660
<u>UMBAZOOKSKUS</u>	
Longley Pond	.112
Umbazookskus Lake	.446
<u>RIPOGENUS STREAM</u>	
Harrington Lake	.474
Brighton Deadwater	.056
<u>COOPER BROOK</u>	
Pleasant Pond	.075

Yoke Pond	.030
Crawford Pond	.293
Cooper Pond	.036
<u>SOURDNAHUNK</u>	
Sourdnahunk Lake	.454
Toll Dam	.012
<u>PINE STREAM</u>	
Pine Pond	.105
Pine Stream Deadwater	.323
<u>DEBSCONEAG</u>	
2d Debsconeag Lake	.065
3d Debsconeag Lake	.107
<u>NAHMAKANTA</u>	
Rainbow Lake	.461
Nahmakanta Lake	.402
Pollywog Pond	.053
<u>OTHER</u>	
Ragged Lake	1.088
Chesuncook Pond	.055
Cuxabexis Lake	<u>.135</u>
TOTAL	12.707

This made a nominal total storage of 57.7 billion cubic feet, but many of the very small dams were coming to the end of their time, and could not hold their rated capacity for any extended period, although they could be used to sort of delay the run-off



in the spring. During the next few years the small ponds were all evaluated, capacities were corrected, and more than half of them were written off as storage. The dams on these were allowed to deteriorate, and some time, as it is recalled in the late 1940's the bottoms of the gates in almost all of them and of other old dams on every stream in Great Northern territory were blown out to allow clear passage for fish.

By 1938, the number of "Small Pond Storage" reservoirs had been reduced to sixteen:

	<u>FULL HEAD</u>	<u>MAXIMUM STORAGE</u> <u>B.C.F.</u>
Penobscot Lake	9' 0"	.371
Canada Falls Flowage	26' 6"	1.018
Seboomook Lake	32' 0"	4.650
Dole Pond	13' 0"	.213
Long Pond	7' 0"	.160
Bog Pond	9' 0"	.152
Loon Lake	8' 0"	.459
Shallow Lake	4' 0"	.216
Poland Pond	12' 0"	.297
Caucomgomoc Lake	7' 0"	1.415
Umbazookskus Lake	6' 0"	.378
Harrington Lake	8' 6"	.400
Sourdnahunk Lake	6' 0"	.334
Pine Stream Deadwater	10' 0"	.285
Rainbow Lake	5' 0"	.326
Ragged Lake	18' 6"	<u>1.088</u>
TOTAL		11.762

This reduced the total available storage to 56.7 b.c.f. Most of these dams have been maintained or rebuilt, and current (1974) maximum storage is not far from this figure. Storage in Millinocket Lake was recorded, but not included in the total available, as at that time the water could be used only at Dolby and the East Millinocket mill.

There was a tremendous fall of snow during the winter of 1933-1934, as we remember. Snow, however, was no help, and on March 27, 1934, water storage reached zero, although there had just been a rain, the brooks had begun to flow, and with everything wide open, the flow at Millinocket was about 1,600 c.f.s.

The drought of 1933 brought the problem of power into sharp focus. The need, of course, had been evident for some time, but the opportunity to build at rock bottom cost, with plenty of labor available and money on hand turned thinking into action. During the summer and fall of 1933 there was a re-evaluation of the Mattaceunk project, but this looked like too much money. However, out of the discussions, the Engineering Department came up with the idea of developing the head at the North Twin Dam, which when examined proved to be a relatively simple matter, although it was recognized that it was an expedient; a low-head power on a storage dam which was pretty well drawn down every year not being the most dependable power in the world; but it could be provided quite cheaply. There was a brief flap about the legality of such a development, since the dam was owned by the West Branch Driving & Reservoir Dam Company, but someone remembered about the 1917 amendment to the W.B.D. & R.D. Co. charter, which cleared this point. It

is the writer's recollection that no formal agreement was made between the two companies at the time the station was built, but that some time later this act of omission was discovered, and an agreement was made, covering what had already been done.

Design of the North Twin development was started in February, 1934, by the Company's Engineering Department. Hardy Ferguson was not involved except as a consultant to pass on the viability of what the Engineering Department proposed. William A. Whitcomb was heartily in favor of this project, and in April, after discussing water conditions, he submitted to the Directors a proposal to proceed with the construction of a 7,500 h.p. station at this location, with a transmission line to Millinocket, at an estimated cost of \$925,000, and was promptly given authority to proceed with the job, on a two-year basis. This was one time when the appropriation for a large project was not doled out in installments.

Work was started on May 24, 1934 by the H.J. Deutschbein Company, of New York, before the plans were completed, which was usual, and this might be the place to explain as best we can the contractor arrangement which was in effect for a great many years on major construction and on certain important modernization jobs, such as the changeover of the grinder rooms, and going back at least as far as the time the Aberthaw Construction Company left or was taken off the Ripogenus Dam job.

The policy was to make a written agreement each year with a general contractor for any work that might be required of him during the year, on a percentage fee, based on the cost of labor and

materials, excluding machinery installed. The contractor provided a resident Construction Superintendent, recommended the necessary construction equipment, helped to decide what should be done when on the job, and gave it the benefit of his expertise generally. He hired non-union labor, at rates approved by the Company, and his crew was paid by the Company. His jobs were supervised by a Company engineer, usually the designer. The Company supplied the construction plant which he recommended, and it specified and furnished or purchased construction materials, and made its own deals with subcontractors, like roofers. In short, the general contractor was a sort of consultant-cum-labor-pusher. Large jobs were often covered by a separate agreement, so as to have a record of the work to be done, and there was such an agreement for the North Twin job.

We do not know whether this arrangement went back as far as J.B. Mullen & Co., the original contractors, or to J.A. Greenleaf & Sons, who did much of the Company's construction work after James Mullen's death, but we believe that it was in effect with the old Foundation Company of New York, which had the contract, to our knowledge, at least as far back as 1922, and probably earlier. In 1928, this company had an internal row of some kind. Harry Deutschbein, whom the writer believes was its President, left it, taking with him a Vice-President, George V. Sallé and some others, including Charlie Eklund, who had been Resident Construction Superintendent at Millinocket for a number of years, and was one of the best-known and best-liked people in town, and set up his own business under the name H.J. Deutschbein Company. In 1929, the Great Northern

Paper Company shifted its yearly contract to him. Tall, spare, Roman-nosed and ramrod-straight, physically and otherwise, he was almost one of the family until his death thirteen years later, in February 1942. His business was continued by his son, Harry D. Deutschbein, and the Deutschbein Company did Great Northern's work in 1943. However, the management did not have much confidence in young Harry's ability, considering him a playboy type, and in 1944 did not renew his agreement. This brought a flock of construction people looking for the connection. The choice fell on Wyman & Simpson, a small Waterville, Maine, outfit which had done some work for the Company in connection with the Mattaceunk power development, and some jobs at Madison during the war years, while the Deutschbein Company had been heavily involved in a consortium building a military installation for the U.S. Government in Trinidad. Wyman & Simpson came apart in 1947, but A.P. Wyman set up his own firm, and continued to do such contract construction work as was required by Great Northern until the expansion of the early 1950's brought in a new type of general contractor.

The use of non-union labor on construction work went back to the time of the padrones, and although Great Northern strongly supported organized labor, there were good reasons for continuing the practice; lower wages, for one thing, as construction jobs were temporary employment, but more important, less jurisdictional wrangling, and more freedom in scheduling work. In general, the organized mechanics from the mill and the non-union people on construction worked together remarkably well, but there were disputes as early as the 1920's, which had their origin in one group or other,

depending upon what the beef might be. At the time of which we are writing there was no problem, as work was scarce, and the Company was providing jobs for a lot of people on construction. Later on, when a pension plan was adopted, a man who by choice or necessity had left a mill job to work for the contractor or company construction was not considered to have had any break in his employment record. However, as things got better the friction got worse, and in the late 1940's, as best we can remember, an agreement was made that no less than mill union rates would be paid on contractors' non-union jobs. In the early 1950's, again from memory, and over the writer's violent objection, the Engineering Department was permitted to organize a Company construction crew, for which the International Brotherhood of Pulp, Sulphite, and Paper Mill Workers was given bargaining rights, as the non-union contractor concept was no longer viable. It generated grief to no end. Some years later, this crew became known as the Engineering Services Group, and jurisdiction was given to the various trades involved, but this made the friction even greater, and after everything had been tried to make the concept work, without success, the construction crew was broken up and incorporated in the regular maintenance organization, where it should have been in the first place. We are now away ahead of ourselves again, but that's the way this story seems to go.

The North Twin development was simple in concept. The old dam, it will be remembered, was really a series of piers and waste gates, set on an apron foundation, with no spillway. Essentially, what was done was to build a power house in the river bed below Nos. 2 to 9 gates, at the south end of the structure; No. 1 having

been closed up for some reason; short walls from the ten piers involved to the power house making forebays into which water passed from the nine old gateways, the gates removed from them, the openings deepened, and fitted with trash racks, each three gates supplying one of the three generating units. The old concrete fishway, which happened to be just about where the north end of the new power house was located, was remodeled, and a new steel log sluice was built adjoining it. This was four-foot pulpwood sluice, designed to use as little water as possible. To gain head, it was necessary to excavate a tailrace canal all the way to Quakish Lake -- about half a mile -- and of course it was also necessary to build about five miles of transmission line from North Twin to Millinocket. While there had been a blanket approval of the job, the estimate was set up as four separate jobs; the power house building and related work; the generating equipment; the excavation of the tailrace and the construction of the transmission line. When figured over, the total estimate came out to \$856,000, somewhat less than the preliminary figure, which made everybody happy -- for a while.

North Twin was a rush job and a depression-type job. The construction equipment used is an indication of what we mean by the latter. The construction plant was located at the south end of the dam, of course, and the first move was to run a short spur from the main line of the Bangor & Aroostook to the site, and put up a stiffleg derrick at the siding to handle materials. An office, blacksmith shop, oil house, compressor house, sand and stone storage bins and a few other small buildings were provided. As we recall, there were no barracks or commissary. Two old boilers from the old steamer "F.W. Ayer", laid up nearby, were reconditioned

to provide steam for hoisting engines. Two guy derricks, one belonging to the Engineering Department and the other borrowed from the East Millinocket mill, were set up on the dam, one at each end of the power house location. An old steam-driven exciter set was brought over from Madison to provide current for lighting. A second-hand gasoline engine driven 1,000 cubic foot air compressor, a real old monster, was bought for the job, along with two 2-yard shovels. These, at Harry Deutschbein's insistence, were the old Bucyrus-Erie steam shovels on crawler treads; some of the last in use. They were no longer being made, but they were rugged. A miscellaneous assortment of pumps and engines for drying out the cofferdams and a number of steam and air drills, were all secondhand, as the writer recalls, and the mills provided most of the small tools, but an electric welding outfit was probably new, although we are not sure of this. Trucks were from the mills, or were hired from nearby areas. Two diesel shovels were rented from time to time from the State Highway Department to load sand from the pit, fill for the cofferdams and what not. Work went on around the clock, seven days a week. The crew ran between 250 and 350 men, and the base labor rate, from memory, was 36 cents an hour.

While all four jobs were going on at once, it would be confusing to follow them concurrently, and we will take the power house job first. The concrete, steel and brick building was 114 feet long and 69 feet wide, and was set with its upstream face 35 feet or so from the upstream face of the dam. The water passages and scroll cases were cast concrete, as were the Moody draft tube cones under the wheels, although these were provided with steel caps and bells. The tailrace flumes and apron were also of



course cast concrete. The nine old gateways were bulkheaded, and the gates and hoists were stored, the latter to be used later, with new gates, at the entrances to the water passages to the wheels in the power house itself. A sheeted crib coffer was built around the power house site and was pumped down, exposing the ledge, the last week in July. While this coffer was being built, a channel was excavated just below the dam on the north side of the river, to divert as much as possible of the flow of water to that side. As there was practically no overburden in the power house area, drilling and blasting were started at once, and the ledge was down to grade and formwork started by the end of August. Meanwhile, it had been necessary to remove a mass of bark from the bottom of the pond in front of the gates so that supports for the racks could be placed. An effort was made to drag this away with a weighted boom, but it finally had to be taken out by a clamshell bucket on one of the derricks. The old gateways had to be deepened several feet. This work was started with paving breakers, but James Mullen's thirty-year-old concrete was hard, and progress was slow. An Ingersoll-Rand stope hammer was found to be much more effective, and three of these were bought, but it was the middle of October before the enlargement of the gates could be completed. Along with this work, the downstream faces of the dam piers involved were roughened to bond better with the new walls to be built, and about two feet of concrete was chipped off the wall of the existing fishway.

Sand was trucked from a pit in Millinocket over what passed for a road. This ran to the north end of the dam -- there was no highway bridge across the West Branch at this location at that time -- and across the narrow deck of the dam, a hair-raising operation.

No truck went off the dam, as we recall, but there were some narrow escapes, and if the driver were not on the ball he left bits and pieces of the gate hoists all along the deck in his wake. Crushed stone was purchased and delivered by rail. The first pour of concrete, the pedestal piers for No. 3 draft tube cone, was made on September 2d. The scroll cases and the intermediate piers between the wheel pits and the dam required some fancy formwork, and the flumes were not poured until the middle of November. The steel supports and rack bars in front on Nos. 2 to 9 gates were placed by a diver after the bark had been cleared away. While the flumes were being built, the foundation walls of the power house had been completed, and erection of steel and brickwork started on November 13th. Steel was all up by December 5th. The crane was set in place at the north end of the building as soon as enough crane beam to hold it was up. By this time there had been some very cold weather -- down to 15 degrees below zero, but they kept at it, the roof deck being poured starting December 2d. This, and all the brickwork, was finished by January 8, 1935. Insulation and waterproofing of the roof was started January 15th and was all done by February 7th.

Most of the parts for the generating units had been received by the middle of December. The three turbines, bought from I.P. Morris Co., which before they had been delivered became Baldwin-Southwark Corporation, so that the records refer to Baldwin-Southwark wheels, were vertical propeller type units. Two were rated 3,050 H.P. at 171.5 r.p.m. and 28 ft. head. These fixed-blade wheels were Nos. 1 and 2, starting from the south end. No. 3 was of the Kaplan variable pitch type, rated 3,250 H.P.,

so that the station was actually rated 9,300 H.P. instead of the 7,500 H.P. authorized. Nos. 1 and 2 General Electric generators, 40 cycle, 2,400 volt, were rated 3,250 KVA, (2,600 K.W.) and No. 2 was self-excited. No. 3 was rated 3,750 KVA (3,000 K.W.) and was separately excited, two 125-volt exciter sets, in addition to a standby battery system, being installed.

The first wheel, No. 2, was placed starting about December 10th, as soon as the crane was operable. This generator and the switch structure were going in before the roof was on the building, and work on switchgear and wiring was under way before it was waterproofed. This unit was ready to turn over on January 21, 1935. At that point the 33,000-volt transmission line was ready to take power, and the transformers at North Twin and Millinocket had been placed but not hooked up. In the meantime, new steel gates had been installed, using the old hoists; the bulkheads had been removed from the old gates, the flumes had been cleaned out and waterproofed, and the end of the coffer-dam below the power house had been removed, although excavation of the canal for the tailrace had not been completed. This unit was turned over on January 25th, and ran drying out until February 3d, when it was opened up at 25 feet of head, delivering 2,500 KW to the line, which by that time had been connected to sufficient transformer capacity to handle it. Installation of No. 1 wheel was started on January 21st, and this unit was put on the line February 24th, by which time the head had dropped to 20 feet. The last parts of No. 3 wheel did not arrive until February 9th, and installation was started at once. So desperate was the need for power than Nos. 1 and 2 were running with temporary floors around them, and temporary lighting in the power

house. Pouring of the main and basement floors was not started until March 4th, and was completed on the 14th. In spite of the large amount of snowfall in the winter of 1933-34, the reservoirs had not filled by about 10 b.c.f. in the summer of 1934, and while there was some fall precipitation, storage was again down to about 25 percent on December 31st; everything was empty again on April 8, 1935, and the station had been shut down the previous week for lack of head. At this point, work on the power house was discontinued, except for washing down the brick and doing some painting, and was not resumed until May 5th.

Nos. 1 and 2 units were started up again about the last of April, and No. 3 shortly thereafter, although we do not have an exact date for this one. There were some troubles with this unit which required correction before it went into full service. On May 5th, work was resumed on the fishway and the new steel log sluice abutting it on the north. This meant coffering on both sides of the dam, and the building and removal of a temporary log sluice to let the 1935 drive through. The new log sluice had a feature called the "bear trap", worked out by the Engineering Department -- a false floor at its entrance, hinged in the middle, so that it could be raised or lowered to suit the height of water, and went into service on August 9, 1935. In the meantime, wiring, painting, removal of the construction equipment and all the odds and ends that go with cleaning up such a job had been done, and with the completion of the log sluice the power house part of the project was completed.

The unwatering of the dam had disclosed severe erosion at the days-work joints in the piers and around the gate-ways all across

the structure. They did not make it a practice to clean the top of one lift before pouring the next one in the old days. About April 1, 1935, a crew, working under one of the engineers, was put on to repair this damage, and they got the log sluice piers completed before the water came up on them. This work was then turned over to the H.J. Deutschbein Company. Grading around the power house was put into this job, and little was done on the dam repair until the middle of June, when two movable bulkheads were built, each wide enough to seal off two gates, a diver was employed, and work was started on the two gates at the north end, Nos. 27 and 28. In the course of this work, it was found that a passageway had been built into the north end of the dam for a possible future small generating plant for lighting in the area, and this was plugged. This job, including repairs to the gates, and working on four openings at a time, ran all through the summer. Along with it, the downstream faces of the piers were patched, and a coffer was built along the lower side of the dam and a wall was poured under the apron, which had been undermined for a considerable distance. All this work was finished on September 30th, and by October 14th everything was cleaned up around the entire project, and the crew was laid off.

There was never any question, as far as the writer knows, that the 33,000-volt transmission line would be of the wooden pole type, considering the short distance involved. Clearing of the right-of-way was done by a Spruce Wood Department crew, starting in July, 1934, and was completed by the middle of September. The poles and cross-arms were purchased; the writer does not recall the sources, but they were not local. These were all received in August and distri-

buted along the line. Erection of poles was started at once, and they were all up, with insulators in place, by late October. Stringing of the two circuits of copper conductor, with ground-wire on bayonets, was started at that time, and was finished by the end of December. In the meantime, installation of the six single-phase step-down transformers (33,000 to 6,600 volts) and their steel bus structure on the east side of Millinocket Stream had been completed, the line having been run along the top of Shack Hill, crossing Millinocket Stream at a point well south of the mill yard and returning up the east bank of the stream to where the transformer station was located, across from the grinder room, so that there would be no high-voltage conductors crossing the mill yard itself. It had been necessary to remove some of the construction plant at North Twin to place the transformer structure there, and the first three transformers -- the first step-up equipment to be used by the Company -- were not ready for use until January, 1935, just in time for the start-up of No. 2 generating unit, using one circuit. All work on the line and transformer stations was completed about the first of March, 1935.

The tailrace excavation proved to be the most troublesome part of the whole operation. The shovels did not arrive until the middle of July, 1934, only one of them equipped with a dragline boom, and went to work at once on the diversion channel on the north side of the river, which was finished the first week in August. The equipment was then moved over to the main canal, the dragline working along the south bank removing overburden, the shovel stripping in one of two cofferdams built just below the power house cofferdam, where it was known that a lot of ledge would have to be blown. The Bangor & Aroostook railroad bridge had been

moved downstream some years before, leaving two stone piers of the original bridge standing in what was to be the channel, and these had to be demolished. An old cofferdam, probably dating back to the time when these piers were constructed, also had to be removed. Boring around the center pier of the new bridge disclosed that it was five feet or so off the ledge and would have to be underpinned, as the excavation was to go beyond it. This proved to be quite a job. A cofferdam built around it could not be made tight, and it was necessary to drive steel piling inside this. In order not to disturb the footing, excavation to ledge was done within "pockets" of steel piling driven from the coffer to the pier; each pocket being about five feet square; and digging in two at a time, one on each side of the pier. Concrete boxes were poured within these pockets and backfilled with stone and earth. The whole thing was then capped and pressure grouted. This job was started August 1, 1934, and was finished in late October. Meanwhile, work on the canal had to be kept out of this area.

It would not be particularly productive to follow in detail the steps in the excavation of the canal, which, was 90 feet wide on the bottom, with the sides trimmed to slope. However, there were a few interesting points. A hole was made in the old coffer near the original railroad bridge piers, to begin with. The remainder of this structure, and the bottom of one of the old piers were left in place until near the end of the job, and during 1934 the dragline worked mostly along the south side of the river, casting overburden up on that side, and the shovel uncovering and removing blasted ledge in the two cofferdams below the power house, a wing coffer having been built between the power house coffer and the island left in the middle of the river by the digging of the

diversion channel, for the purpose of keeping as much water as possible out of the excavation area.

It was necessary to truck away the material cast up on the south shore, and the big shovel had to crawl up out of the hole every so often to load trucks. This was a highly inefficient procedure, delaying the work badly, and late in August, Harry Deutschbein, who had several times requested another piece of equipment for loading, without getting any action, came stomping into the Boston office and told William A. Whitcomb flatly that he could either get himself another shovel or another boy. On September 11th, a 3/4 yard diesel job owned by the Spruce Wood Department arrived, and from this point on the big units worked in the canal, sitting on ledge, of which there was a lot -- trap-rock, very hard stuff -- or on islands of unexcavated material, or on dykes thrown up to make four separate sections between the power house and Quakish Lake, Section D being below the new railroad bridge. The 3/4 yard shovel was used almost entirely for loading trucks, which in some cases could be driven right down onto the ledge. Pumps were used in each section to keep the water down and the ledge uncovered for blasting. Sections A and B were completed by the middle of December, 1934, at which time a dragline boom was bought for the second shovel, and both worked down near the railroad bridge, one digging and the other pulling the excavated material up on the bank before it could freeze. By the latter part of January, 1935, Sections A, B and C had been completed except for cleaning up the banks, the draglines having removed the dykes and taken up their "islands", and were widening the channel and trimming the slope on the south side. Due to the



bad weather, one unit was laid down the middle of February, the other early in March.

Work on the canal did not start again until May, when all three shovels were overhauled and went at it again; one dragline below the railroad bridge -- a lot of boulders but no ledge in this area -- the other still trimming the south bank, and the Spruce Wood shovel grading around the power house and yard. Late in May, the dragline below the bridge was moved to the north side of the canal and started working up-river, casting ashore. It crossed the railroad the middle of July; was moved up to the power house, where it tore out the remainder of the cofferdams; then back down to the location of the old railroad bridge, to take out the rest of the old coffer and the bottom of the stone pier left there. It then finished trimming the north slope, and the canal was completed on August 9, 1935. Harry Deutschbein had found a buyer for the big shovels somewhere, and they were shipped out, after one had been used experimentally, for a short time, dragging wood from the pile at the Millinocket mill.

When all the figures were in, the North Twin development had cost \$1,009,000 -- not including the repairs to the dam, which were a separate job -- an over-run of a little less than 20 percent; not too bad under the conditions encountered in the tail-race canal, the over-run on this part of the job being nearly 50 percent. It began to pay for itself at once. The year 1935 was another disaster as far as water was concerned. There was very heavy snowfall again during the winter of 1934-35, but the run-off was very poor, and storage peaked at 13 b.c.f. below capacity on

July 1st. By December 31, 1935, there was only 10.0 b.c.f. in storage, and this had all been drawn down into the Lower Lakes, enabling the North Twin station to deliver a decreasing but important amount of power to Millinocket right through the winter, and helping to hold down the discharge required at Millinocket, so that there were still a couple of billion feet of water left when the break-up came in early March, 1936.

Turning back to the events of 1934, A.P. Lane died in March of that year, and the fact was simply noted by the Directors, with no special comment. His place was not filled officially until January, 1935, when Lester Smith was made Traffic Manager, along with his duties as Assistant to the President, and we have noted the effect of this. Frank Keenan, who had always been very much involved in traffic matters, had several times been more or less given to understand that he would have this position, but William O. McKay was loath to break up his smoothly working administrative group. He had a way of invoking the loyalty of his people to him personally by subtly making his wishes known, but leaving the decision to the individual involved, who of course, because he was loyal, really had no choice. So Frank Keenan remained "Stenographer and General".

We have pointed out that while the Company's stock was not listed, it had been bought and sold in one way or another from an early date. It will also be recalled that in 1927 it had been split four for one, and that not long afterward it had been adopted by the Curb (American) Exchange. In 1921, the Commonwealth of Massachusetts had passed a blue sky law requiring the filing with the Department of Public Utilities of certain information

on any stock being traded in Massachusetts. No attention seems to have been paid to this until 1931, when Frederick C. Adams Company, which had become a member of the Curb, decided to specialize in Great Northern. It had filed a notice of intention, and Bryan Seelye, at its request, and with the President's approval, had provided the required forms for the P.U.C., carefully avoiding any mention of the Boston office. Both filings, of course, listed the par value of the stock as \$25.00.

On March 26, 1934 the Massachusetts P.U.C. wrote a letter to Frederick C. Adams Co. which is a classic example of technical nit-picking, to wit:

"Dear Sir:

On February 12, 1931, you filed a notice of intention to offer for sale in this state the capital stock, par \$25, of the Great Northern Paper Company. In the statement which you filed to accompany this notice of intention you said 'that the common stock of the Great Northern Paper Company had been purchased and sold in this Commonwealth for many years prior to January 1, 1921.' You did not, however, say that this common stock had a par value of \$100. In view of this fact it now appears to me that it is somewhat doubtful if the stock of this company is now or ever has been qualified for sale in this state...."

Sheldon Wardwell dashed into action, and by April 4th both the Company and Adams had filed revised information, and the Secretary of the P.U.C. advised on that date in typical bureaucratic reverse English, that the new information "appears to

comply with the requirements....and we know of no reason why you should not offer this security for sale in this state".

In June, 1934, the interest rate charged employees who had bought stock from the Company, and who at this time owned a total of \$260,000, was reduced to 1-1/2 percent for those who had bought at \$60 or more; 2 percent for purchases between \$40 and \$50, and 2-1/2 percent for those whose stock had cost \$39.35 or less. This had a certain logic to it, as hardly anyone was paying anything on his stock, depending entirely upon the dividend to increase his equity, and at the current dividend rate those who had bought at the higher prices were actually going behind.

It will be remembered that Percy Baxter's Katahdin Park scheme was dormant at this time, following his first gift to the State, but that there was some talk in Washington about a National Park in the State of Maine. In 1934 a move was started by a private company, the Atlantic Seaboard Corporation, and some independent associates, to establish a "Moosehead Lake Park and Camping Reservation", which was announced some time in August in an article published in the Kennebec Journal. This concerned Sheldon Wardwell, who wrote Lou Stearns on August 28th, calling attention to the article and asking: "What is this all about anyway and I would suggest that you keep Mr. Whitcomb informed." What it was all about is best described by Lou Stearns' reply, dated September 6, 1934:

"Dear Mr. Wardwell:

I have yours of the 28th. No one has taken very seriously Mr. Hinckley's project. In its inception

it was based on the procuring of donations throughout the country for funds to carry out its purposes. These purposes in general are to develop as a state park and camping reserve about 100,000 acres of combined lakes, forests and mountains, extending eastward from Moosehead Lake to Katahdin Iron Works and Lake Onawa.

From your letter it appears that possibly it is now hoped to procure a fund from the Federal Emergency Administration of Public Works. I would doubt very much the feasibility of procuring money in such a manner; on the other hand, no venture is now too ridiculous to have consideration at least under the New Deal....."

We did not mention this in discussing the Baxter State Park, as we do not recall that it came into that picture. There was apparently no substance to this scheme, and as far as we know it never got any further off the ground. We include the episode, however, to make the point that even forty years ago, there were moves afoot which, had they all been implemented, would have turned most of northern and eastern Maine into a recreational area.

Earlier in the year, Great Northern had acquired by purchase 139 shares of the stock of the East Branch Improvement Company, which we mentioned in a previous chapter. We will have more on this a little later. We also mentioned earlier the completion in this year of the conversion of the old Dolby grinder room into a hydro-electric station with the installation of the 1,800 KW generator in place of the old No. 7 grinder line. We should say

here that back in 1931, after the new No. 8 vertical unit had gone into service, money for the purchase of new turbines for Nos. 5, 6 and 7 generators had been held up, although it was clear that additional generating capacity had to be added. This created almost a panic situation, bringing Frank Bowler to Boston to plead for additional funds, which did not get him anywhere, and the writer was sent to Millinocket for further consultation in an effort to find an answer to the problem. Out of this huddle came the suggestion that the generators be installed on the old wheels, with new governor equipment, a fairly obvious solution, which had not occurred to the Engineering Department, conditioned by their program of installing new equipment, and, after a study of the resulting overall efficiency of the station, the suggestion was adopted. The results were good enough so that the last generator, No. 7, was also installed on the existing turbine, and these three units were still being driven by the old grinder wheels in the early 1970's.

Demand for newsprint picked up some in 1934, of benefit mostly to the Canadian mills, which in this year ran at nearly 70 percent of capacity while the United States industry showed little improvement, operating at only 56 percent. It might be thought, given the background which we have discussed at some length, that this would have allowed the manufacturers to make a beginning, at least, of climbing out of the "bottomless pit" by increasing the price of their product, but not so. The St. Lawrence Paper Company, a Canadian independent, for whatever reasons it may have had, jumped the gun and killed any chance of this by announcing in September or very early October that it would maintain the \$40 price for the year 1935. William A. Whitcomb reported this to the Directors on October 10th, but as contracts did not require a

price to be set for the next year until December 1st, no action was taken. November came, and while no decision was made on the larger, long-term contracts, it was agreed to try for an increase of \$2.50 a ton, to \$42.50, for the first six months of 1935, and another \$2.50 increase, to \$45.00, for the last half of the year, on small contracts. The Company had contracts at prices higher than \$40, but since May, 1933, had been granting discounts. In 1934 these were being extended thirty days at a time, awaiting developments. As a practical matter, St. Lawrence was not big enough to swing the price for the industry, but while a few others made motions at a \$42.50 price, most everyone seemed to have been hypnotized into acceptance of the proposition of meeting the lowest bona fide contract figure; the industry fell into line, the projected increase did not take, and the price of newsprint remained at \$40 for the year 1935, with the zone differentials which had been set up under the N.R.A.

Financial comment on the results for the year 1934 contained no bouquets, the increase in earnings was again backed out of the balance sheet figures, but it was pointed out that cash and surplus had declined, due to the Company not having earned its dividend.

One reason for this was that low water conditions had compelled the Great Northern to purchase large quantities of ground-wood pulp from other mills, notably from the St. George Pulp & Paper Company of St. George, N.B., but also smaller amounts from the A.P.W. mill at Sheet Harbor, N.S. and from Finch Pruyn at Glens Falls, N.Y., and we might say that it was also necessary to

purchase a substantial quantity of groundwood, all of which came from the St. George mill, in 1935 and 1936.

Business improved a little more in 1935, but as far as this part of our story goes, there are not too many items to discuss. Although the \$40 price for newsprint had been announced for the first six months, the Directors voted on it at the beginning of each quarter. Negotiations with the unions produced an agreement extending the existing wage rates for one year, and there was no general adjustment in salaries. Although the Company had withdrawn from the Association of Newsprint Manufacturers, it had agreed to pay its share of the cost of the old Code Authority's expenses. Several customers were in financial difficulty at this time, the most serious problem being the old Boston Transcript, a publication devoted largely to financial news, which bought all its paper from Great Northern, and owed quite a little money. This situation had begun to be of some concern. A minor event of this year, which became important later, was the sale to the Town of Millinocket, for \$1.00, of land for improvements to the local airport to be made as a W.P.A. project. The W.P.A., for those who do not remember, was the Works Progress Administration, the New Deal agency famous for its "leaf-raking" projects. Late in the year, a lot on Penobscot Avenue in Millinocket was sold to the Federal Government as the site for a new Post Office building.

H. Merton Joyce died on June 24, 1935. He had attended no meeting of the Board since December of the previous year, his duties as Assistant Clerk being taken over by Jack Marshall, and William O. McKay being delegated to act for the President. There were no meetings of the Board in July or August, and his death



was not formally reported by William A. Whitcomb until September 19th. We have said that he did a good job for the Company. The Directors' memorial of that date reads:

"Resolved that the members of the Board of Directors of the Great Northern Paper Company, feeling the loss which we have sustained through the death of H. Merton Joyce, for 35 years in the service of the Company, successively Treasurer, Manager of Sales and Vice-President, and a member of the Board of Directors, hereby inscribe upon our records our admiration of his integrity and faithfulness. The Company has lost a valuable officer and the Board of Directors an esteemed associate."

This was heartfelt, but trite. More meaningful in relation to our comment that he did a good job for the Company was an editorial by W.T.Anderson, President of the Macon Telegraph, published on July 9th, under the head "His Works His Monument". Only a small part is quoted:

"H. Merton Joyce recently died in New York City.

That would be a very commonplace announcement if it were about a commonplace man.

But H. Merton Joyce left behind him a record of good work and fair dealing that eclipsed anything ever attempted by the N.R.A.

He had been at it for nearly 20 years and therefore the praise is all the greater. It was a voluntary work on his part.

He and his company touched more newspaper men and their welfare than any other agency. In 1916 he became vice-president and sales manager of the Great Northern Paper Company,

the second largest producer of newsprint paper in America....

The Great Northern has made many reductions in the maximum price named in its contracts after they were executed, but it has never sought to raise one.....

The newspaper world has lost a great asset through the death of Mr. Joyce. He was not only a man of high character, intelligence and ability, but he made a distinct contribution to the uplift of the newspaper world by becoming a beacon light of all that was worth emulating, being a mainstay and source of faith among those with whom he came in contact and with whom he dealt. He demonstrated that it was possible to be a good business man and remain a good man - a good man in every sense that the word may be used.

Through his works he left behind him a monument that will be more enduring than stone."

An article in **The Paper Mill** of June 22, 1935, reporting on his death, contained this statement:

"The famous policy pursued by Great Northern Paper Company during war times when the late Mr. Schenck refused to take advantage of his customers and skyrocket the price of News is one of the sales traditions of which Mr. Joyce was proud. Publishers who purchased Great Northern paper then have never forgotten the fair treatment accorded them during that difficult period."

H. Merton Joyce had been in failing health from a heart condition for quite a while. The matter of his successor, in view of the esteem in which he was held by the Company's customers

had been the subject of a great deal of agonizing. Jack Marshall, while somewhat abrasive and not particularly popular with William A. Whitcomb, was well regarded by the publishers -- the Macon Telegraph article, part of which has been quoted, speaks favorably of him -- but he had renounced the promotion. In older days, the Company might have gone outside for a man, but this was not its policy at this time. Anyway, in view of what had been going on in the industry there were few sales people for whom the Company's management had any very great regard, and none of these were available. Other than Jack Marshall, there was no one in the Sales Department who was considered to be Vice-Presidential material, but a choice, at least a tentative choice, had already been made from within the organization.

At the September meeting of the Board, 38-year-old Dick Caspar, Assistant Manager of Manufacture, was appointed Acting Manager of Sales. Actually, he had been holding down this position since July. He had no experience in the sales field, but as we have noted in the story of the Boston office, he had worked closely with the sales people; had been exposed to sales techniques through purchasing experience, and had taken part in head office decision-making which affected sales policy during the recent trying years. However, this was one of the most critical positions in the Company right at this time, and the Directors were cautious. While it was only a short time before Dick Caspar had demonstrated that he could handle the job, he was kept on Acting basis for a full year, despite William O. McKay's open exasperation at the delay in giving him full status. However, in June, 1936, he was elected Vice-President and made Manager of Sales, at a salary of \$12,000 a year.

Until 1952, his office was in New York, and his home on Long Island. Early in that year, the head office of the Company was moved from Boston to Bangor, Maine, and he was re-located there, along with all the other Vice-Presidents, making his home in Orrington. In 1956, his title was changed to Vice-President in Charge of Sales, a separate Manager of Sales being appointed to head up the New York operation, and in 1958 it was changed again, to Vice-President, Marketing. He retired in 1961, after which he divided his time mostly between the camp which he built on Ambajejus Lake and a winter home in Fort Myers, Florida.

Albin Reinhard Caspar (1886-1970), always called "Dick", was a native of Lisbon Falls, Maine; graduated from Bowdoin College in 1919, after a short interruption in his education for service in the U.S. Navy, and from college came directly to the Company as an Apprentice under the Bureau training program. He worked in various supervisory jobs at the Penobscot mills. He was Groundwood Foreman at East Millinocket and Dolby in 1923, was made Night Superintendent at East Millinocket in 1925, and was transferred to Millinocket in the same capacity in 1927, but within a few months was moved up to the day job of Assistant Superintendent of that mill. In the two years that he served as Night Superintendent at the Lower Mill, the writer followed him around the plant most of the night, several nights a week, asking stupid questions about the processes. Dick Caspar answered these patiently, but very seldom volunteered anything. Forty years later, the writer had the same experience with him in trying to obtain information about the Sales Department for this story. We have said that he was moved to Boston

in 1928 as Assistant Manager of Manufacture, but actually, for the first few months his title was "Assistant, Manufacturing Department". However, he shortly became the first Assistant Manager of Manufacture, and it was his able handling of this job that made him the prime candidate for the sales position. He proved to be a competent successor to H. Merton Joyce, carrying on the latter's policies without ever having had the benefit of his instruction.

Dick Caspar was over six feet tall, blond, blue-eyed, his expressive face deeply lined, even as a young man. He carried his athletic figure erect, his head always tilted a little to one side, as though listening. He was very strong, and loved to work with his hands -- he was building stone walls eight feet high, single-handed, when he was 70 years old. He did not have Merton Joyce's cosmopolitan flair. Naturally friendly, but reticent, a characteristic heightened by his Boston office training, it seemed to the writer that he cultivated a protective air of reserve, which to those who knew him very well was artificial, and to those who did not know him so well was dignified, and did not in any way affect his popularity with either. He was a tireless worker and a firm leader, respected by his associates for his sound judgment, by those who worked under him for his patience and fairness, and by the Company's customers, large and small, for his honest dealing and his sincere interest in their problems. In private life, he and his wife Bernice, an East Millinocket girl, lived modestly, bringing up two sons, Richard and William, the former working for some time as a salesman for the Company. He fitted

into any situation and any company, had many friends socially, and we literally do not know of anybody who did not like him. And this is an inadequate description of Dick Caspar, by one who was associated with him for more than forty years as a friend, a neighbor and a co-worker.

We have noted the appointment of Jack Marshall as Assistant Clerk. He served in this capacity only until October, when deteriorating health forced him to give up this duty, and Dick Caspar took over for him unofficially.

Perhaps the most important event of 1935 was Great Northern's price announcement for the year 1936. Business had continued to improve. For the year 1935, the Canadian mills operated at an average of over 72 percent of capacity, in spite of the fact that one additional unit, capable of producing about 100 tons per day, had been added to their number. This was the mill of Donohue Brothers, Ltd., at Clermont, P.Q. containing two machines moved up from the old Tidewater Paper Company mill at Brooklyn, N.Y. in 1934 -- duplicates, incidentally, of the machines originally installed at the East Millinocket mill. While this plant added to productive capacity, it did not make any paper until 1936. However, toward the end of 1935, the Canadian industry was probably running at near 80 percent of capacity. The United States newsprint industry was up to about 61 percent of capacity for the year, but this represented the lowest tonnage since 1933, due to the rate at which mills, especially the smaller ones, had been shifting to other grades. With the rate of consumption accelerating rapidly, there was talk of a seller's market, with higher prices,

but everybody dragged their feet on price announcements, mindful, we suppose, of the several abortive efforts to get a better price, particularly that of the year before.

As far as our record goes, the Company had never up to this time led off with a higher price, but it was conservative Great Northern that reversed the trend of the previous thirteen years, putting out on December 1st its price for the year 1936, with an increase of \$1.00 a ton, across the board, in all zones. This was a very nicely calculated figure, big enough to begin to turn things around, small enough not to disturb the publishers unduly; big enough to be meaningful economically, heading off the possibility of somebody putting out an irresponsible higher raise to which resistance would be automatic, and not big enough to make it worthwhile for anyone to undercut to get business. The Company's management had decided that the time had come. Its importance in the industry -- by this time it was making 30 percent of all the newsprint produced in the United States -- and its respected position versus its customers, were enough to make its move viable, and the new \$41 price, representing the first effective increase since 1923, stuck; an historic turning-point. The usual bulletin issued on Great Northern's balance sheet by the Boston News Bureau made no mention of this, however, containing only the now standard comparison of statistics from the balance sheet, with an interpolation of increased profits.

William O. McKay was elected to the Board of Directors for the year 1936, replacing H. Merton Joyce. Only two vice-presidents, the other being William Hilton, were elected following the Annual

Meeting. Jack Marshall was re-elected Assistant Clerk, but as he was still incapacitated, Dick Caspar was officially appointed Acting Assistant Clerk. There were no changes in the Executive Committee, or in counsel. However, Lewis Cass Ledyard, Jr. died on May 1st. His career had had much in common with that of his father, and he was a tower of strength to the management. The portion of the Directors' memorial quoted below was pure Management:

"During the years we have worked together he has shown to each of us unfailing courtesy. He thoroughly understood the principles of our business and his leadership was wise and far-seeing."

This was followed by the Directors' tribute:

"Resolved that we, the members of the Board of Directors of the Great Northern Paper Company, knowing well the loss which we have each sustained, desire to have inscribed upon our records this tribute to his character, his industry and his unfailing loyalty, and we wish also to record the irreplaceable loss which our Company has suffered by the untimely death of so wise and unselfish a leader."

The death of L.C. Ledyard Jr. left vacancies on the Board and in the Executive Committee. The latter was immediately filled by Williamson Pell, and at the same time the Directors elected to their body Edwin de T. Bechtel, a member of the Ledyard firm. However, he never did take his seat, as we will see.

On June 16th, A.R. Caspar was elected Vice-President and Manager of Sales. William O. McKay had become more and more important in the council, and his salary, which had been cut along



with the rest, was raised to \$18,000 at this time. In April, the position of Assistant Manager of Manufacture, vacated by Dick Caspar the year before, had been taken over by Creighton B. Stanwood, who had been Superintendent of the Bureau of Economy since 1928, when Charles Carrier was transferred into the mill organization. There will be more about Creighton Stanwood later. In October, again due to Jack Marshall's illness, Fred Mears, whom we have already met, was made Acting Assistant Manager of Sales, remaining in Acting status until August, 1938, when he became Assistant Manager.

There were again no meetings in July or August. Edwin Bechtel attended the two fall meetings, but as counsel, not as a Director. In December, he "declined to qualify", his name was withdrawn, and Benjamin Strong, an officer of the United States Trust Company, at this time or sometime later its President, was elected to the Board. The writer knows very little about Ben Strong, except that as a financial man he was particularly active in this aspect of the Company's affairs, and exhibited a strong interest in the management's plans for the future. We should say here that in this year the liquidation of the Northern Finance Company, which we have mentioned many times, was started. Its functions were gradually transferred to the United States Trust Company, and Northern Finance was dissolved in 1938.

The writer believes that the Company had had occasional audits and examinations of accounting procedures made over the years; we have noted an early audit; Price Waterhouse & Co. had done some work in 1924, and there had been a rather comprehensive

study, date and content unknown, by Charles (?) Fuestel & Co., but to the best of the writer's knowledge it had not up to this employed any outside firm to audit the books on a regular yearly basis. This circumstance brought on a minor flap in 1936. We are not capable of explaining it in detail, but will cover it to the best of our limited understanding of such matters, since it resulted in a change in policy.

Early in April of that year, the President was voted authority to engage a firm of accountants to "audit the Company's books", but the terms of reference were apparently confined to a study of the content of the balance sheet of December 31, 1935 and to an examination of accounting and reporting procedures. The firm of Gould McIntosh & Co., of New York, who it appears had at one time or another done some work for the Company, was given this job, which seems to have been done very quickly. Their report, dated May 8th, being submitted to the Directors on May 20th, could hardly have included an audit. No official action was taken on it at this meeting or the next, and again no meetings were held in July or August. In the meantime, it was referred to the Company's Auditor for his study. The writer has not found the original report, but from a September revision and interim correspondence, it would seem that in addition to criticism of the balance sheet and presentation of the figures in new form, it went up one side of Bryan Seelye and down the other on certain aspects of his operation, which brought him to Boston with fire in his eye for a conference with Gould McIntosh, William A. Whitcomb and Sheldon Wardwell. As a result of this, Nelson Felix, the Chief Accountant, was named Assistant Auditor early in June, and there was some minor

change in the Auditing Department organization. On June 13th, Bryan Seelye wrote William A. Whitcomb, to the effect that the Gould McIntosh report laid particular stress on two points; the absence of segregation of surplus items in the balance sheet, and the amount of detail kept in his records, particularly in connection with the Spruce Wood Department. As to the first, he pointed out that he had the segregated figures, but that they had been purposely condensed, and as to the second, he expounded on the huge scope of the Spruce Wood Department operations, which covered, as he said, an area larger than the entire states of Rhode Island or Delaware, with accounts for over 200 contractors, 520 active structures, 3000 active pieces of equipment at 130 different locations, and 2500 items of supplies, and that information needed for the administration of all this could not be made available without a lot of detail. He did make some concessions, saying that he was adopting some of the suggestions, and that he would prepare, for consideration at the September meeting, a balance sheet which would be revised, but not exactly in the manner recommended.

William A. Whitcomb at once wrote to F.S. Rollins, who was the Board's expert on such matters, sending him Bryan Seelye's letter, which he apparently endorsed. F.S. Rollins, as he said, took it upon himself to discuss these letters with Gould McIntosh, who reacted in turn. In a letter to F.S. Rollins dated June 25th, he wrote: "As these letters impress us as indicating a lack of understanding of our recommendations.....it appears necessary in answering them to state our views in greater detail." He went on to say that Bryan Seelye had missed the point; that it was the

failure to disclose the whole basis of the published balance sheet, which he asserted was open to serious criticism throughout, and not merely the failure to segregate surplus items, which concerned him. He also declared that his stress was not on "the amount of detail kept, "especially as to the Spruce Wood Department", but on the unusual number of detailed accounts and records on everything, and on objection to the system of quarterly financial statements and the weekly and quarterly Manufacturing Reports which we have described. He summarized this part of his argument:

"The accounts maintained for the general, spruce wood and manufacturing departments are cumbersome and not properly standardized"

"Duplication of records under the present system"

"The financial exhibits which are prepared quarterly are to some extent inaccurate and misleading."

He indicated that he had expected that the Directors would give Nelson Felix authority to collaborate with him in wiping out the whole existing system of record-keeping and reporting, and replacing it with a modern one which would include machine accounting and reports on a uniform monthly basis, and stated that Bryan Seelye's letter explaining the large amount of detailed data required only served to prove his point.

F.S. Rollins sided with Gould McIntosh, forwarding his letter to William A. Whitcomb on the same day it was written commenting:

"I like Mr. Seelye and I appreciate his efforts to revise the accounting system, but you can readily understand that anyone who has continued a system for such a long period

cannot change it and, furthermore, being isolated up in Millinocket it would be impossible for him to be familiar with the latest accounting and modern methods used by first class public accountants.

I believe we should face the facts and any statements submitted by Mr. Seelye at the September meeting cannot possibly remedy the present defects. We are only losing time, and in my opinion we should take advantage of the Summer months and have our system revised by a public accountant and new statements based on such revision submitted at the September meeting."

As the system which was in effect had evolved to furnish the top management in the Boston office with information which it felt it had to have to exercise from that place the kind of control we have described, Mr. McIntosh and Mr. Rollins were hitting a lot of sacred cows right between the horns. Bryan Seelye was burned. William A. Whitcomb did not buy either the McIntosh criticism or the Rollins endorsement of it, and brought in Sheldon Wardwell, who on July 9th wrote to Bryan Seelye:

"Do not let this audit situation get under your skin. I think it wise to have an audit, as most companies are doing it, and the S.F.C. may require it at any time. I think when Mr. McIntosh goes over your accounting system he will not be so aggressive in making changes as he appeared to be at our conference. He will find that it is absolutely necessary to have most of the detailed accounts that you carry. Of course he may be able to work out some simplification....but if he gets to the point of eliminating detail

which we have found so necessary for presentation of tax cases, you can rely on me to go to the mat. .... I know from experience that you have the best records of any company that I have ever been connected with....

McKay and Whitcomb I am sure are in absolute agreement with what I have said. They have absolute confidence in you and your organization. They will wish to cooperate with Mr. McIntosh in simplifying and correcting, but not to the extent of eliminating detail which you find necessary....

Please treat this as confidential. Someone might think I was exceeding my authority, but I wanted you to know that we did not agree with the criticism of your accounting system."

Bryan Seelye was grateful for this expression of confidence, which cooled him down a little; said he would cooperate in the audit, and that perhaps McIntosh could assist in speeding up improvements which were already in progress, but that he would call for help if it looked as if anything which he felt was necessary was endangered.

At the September meeting, it was voted to have Gould McIntosh continue to supervise the activities of the Company's auditor in improving the accounting system, Gould McIntosh proceeded to make a revised report which again criticised the balance sheet, specifically the treatment of the \$2,500,000 mentioned in an earlier chapter, which had been floating around since 1922; the status of the account covering stock sold to employees but held by the Company,

and of a few hundred shares of Treasury stock; and the fact that there was no reserve for bad debts, offering suggestions with which Bryan Seelye generally agreed, except for the proposed disposition of the \$2,500,000 item, which was really the important point as far as the balance sheet was concerned. Gould McIntosh also raised some new questions on the method of charging out pulpwood and the treatment of investments in subsidiary companies, but made a little peace offering by complimenting the Auditing Department on making headway in its studies of mechanization and reporting.

This new report was discussed at the October 14th meeting of the Directors, but they were apparently not too happy about the controversy. The upshot was that they voted to submit the whole thing to George May, of Price Waterhouse & Company "for his recommendations as to the proper method of handling the points in question; persons selected by the President to appear before Mr. May to furnish necessary details." In other words, he was to referee the arguments, the whole substance of which, from this distance, is not clear. William A. Whitcomb directed William Hilton and Frank Bowler, with the assistance of Hardy Ferguson, to prepare figures on the value of lands, timber stand and water powers, and to attend the meeting, which was held in New York on November 5th, and was concerned with the balance sheet data rather than with the nitty-gritty of Auditing Department operation.

As nearly as can be determined from notes made by Mr. McIntosh, which do not cover all the points which we have mentioned, Mr. May by and large agreed with the Company's position, it already having recognized the validity of some of the criticism, and on his

observation that discrepancies in one account should not be offset by setting up discrepancies in another, the \$2,500,000 wound up in the Mill Sites and Water Powers account, as defensible appreciation, justified by the studies made by Frank Bowler and Hardy Ferguson. Gould McIntosh, somewhat subdued, finished his assignment of revamping the form of the December 31, 1935 balance sheet, in line with the agreements arrived at, but at the November meeting of the Board, held on the 14th, it was not Gould McIntosh & Co. but Price Waterhouse & Co. that was engaged "to examine the Company's accounting system and methods and make an audit for the year 1936." What changes may have been made in accounting procedures as the result of all this the writer does not know, but as far as he can remember, the Boston office continued to receive its weekly Manufacturing Reports and other information as usual. The change in policy we mentioned was that from this point on there was an annual audit of the books, Price Waterhouse & Co. continuing to perform this service for many years.

In other action of this year, the Bangor & Aroostook Railroad presented plans for changes in their yard and trackage around the old Millinocket railroad station built in 1899. These included moving the station from the west side of the main line track to land owned by the Company on the east side, and the President was authorized to negotiate this transaction, which resulted in a complete rearrangement of the yard, a change in the location of the Lake Road, the construction of an underpass and a new entrance to the Spruce Wood Department buildings on the east side of the tracks near the station.



In October, it was voted to purchase from the American Realty Company a site for another pulpwood holding ground and loading plant on the St. John River thirteen miles above Fort Kent. In December, an appropriation of \$150,000 was given the Manufacturing Department to put new fourdriniers with longer wires on Nos. 7 and 8 machines at Millinocket; two new boilers were authorized for Madison; and as one of the last acts of the year, the Directors voted to restore the salaries of the officers and attorneys to the rates which they had received before the 1933 cut, and it was left with the President to also restore all other salaries to the pre-1933-reduction level, taking into account any individual increases or promotions which had taken place in the meantime.

We noted that in 1934 the Company had acquired 139 shares of the stock of the East Branch Improvement Company. This purchase was intended to give Great Northern some voice in the control of water on the East Branch, anticipating the eventual construction of a power station at Mattaceunk Rips. As the next development in connection with this stock occurred at this time, it might be the place to tell what happened with this company.

The East Branch Improvement Company was chartered in 1903 by Samuel Jones, F.W. Ayer, Halpert Gardner, Herbert W. March, James Sewall and George Hamlin, and as has been noted, was empowered to take over the earlier Grand Falls Dam Company, East Branch Dam Company and the Telos Canal Company, of which some history has been given. It also took over the East Branch Dam & Improvement Company, another log driving corporation, formed under a charter granted in 1871 to make improvements on the East Branch below the mouth of Seboeis Stream. This last little

company, incidentally, had no less than sixteen incorporators.

In 1933, the charter of the East Branch Improvement Company was amended to allow the use of its water storage for power development, the legislation of this amendment no doubt being inspired by the Bangor Hydro-Electric Company. At this time, the company was controlled by 361 shares of stock held by the Eastern Manufacturing Company and the Penobscot Development Company, the timberland subsidiary of Penobscot Chemical Fibre Company, representing 56.7 percent of the total. Neither had any over-riding interest in the use of water for the development of power. but the Bangor Hydro-Electric Company did, and it knew that it would only be a matter of time before Great Northern developed the head at Matta-  
ceunk, and would then be interested in control of the East Branch. Edward M. Graham, President of B.H.E. Co., discussed the matter with William A. Whitcomb and William O. McKay, and finding them receptive, arranged a meeting of representatives of the four companies in Bangor on February 14, 1934, at which it was proposed that Bangor Hydro and Great Northern be allowed to buy a controlling interest. Eastern and P.C.F. had no objection; the price of the shares was set at \$10 each, and it was agreed that a tentative 40 percent of the water could be used for log driving if necessary. It was as the result of this meeting that Great Northern bought its 139 shares, Bangor Hydro making a purchase at the same time, and in 1935, an operating agreement, of which we do not have a copy, was made.

In December, 1936, the point we have reached, the Great Northern stock was deposited in trust with the Merrill Trust Company for 50 years, to be voted as a block with that owned by Bangor Hydro,

Eastern and P.C.F., in the interest of water control. At that time, the ownership was as follows:

American Realty Co. (I.P.)	270 shares
Great Northern Paper Co.	139 "
Bangor Hydro-Electric Co.	115 "
Penobscot Development Co.	59 "
Eastern Manufacturing Co.	48 "
F.W. Ayer Est., Herbert Marshall, H.P. Gardner, J.H. Hinman, Geo. H. Hamlin and Irving Lord, 1 share each	6 "

The East Branch Improvement Company had some bonds out, and over the next few years these were retired by Great Northern and the B.H.E. Co. By this means and by additional cash payments, these two companies had by 1941 negotiated total ownership. In October of that year, a special meeting increased capitalization from \$100,000 to \$250,000, new \$100 par stock being issued upon surrender of the old certificates. Great Northern paid Bangor Hydro-Electric Company \$6,550 to bring its proportionate ownership to 40%. Additional stock was also bought by each company at that time. More has been issued since, for cash, on the 40 percent-60 percent formula, to provide funds for improvements to the properties, and capitalization has since been further increased.

Meanwhile, some time between 1936 and 1941, Great Northern had acquired, probably through a purchase of land, 16 shares of the stock of the Godfrey's Falls Dam Company, still another log driving corporation, chartered in 1872. This charter, amended

in 1876 and 1881, gave this company the right to build dams on the ponds and streams in T.6 R.7 and T.7 R.7, and on Godfrey's Falls, all on Seboeis Stream. At one time it had the right to build dams on Shin Pond Stream also, but this was revoked. In 1941, Bangor Hydro began buying up the stock of this company, obtaining all of it except the 16 shares owned by Great Northern. In December of that year it was reorganized, and new stock was issued. In 1943, the charter of the East Branch Improvement Company was amended to allow it to take over the Godfrey's Falls Dam Company, which disappeared from Great Northern's records. The Company also owned some interest, which seems to have been acquired about 1934 -- it first appears in that year in the list of stock to be voted -- in the Sawtelle Brook Dam & Improvement Company. In 1946 it was negotiating with the Eastern Manufacturing Company for what appear to have been the remaining 12 shares. Nothing much is known about this company, which had rights on this tributary of Seboeis Stream. The stock was apparently sold to the East Branch Improvement Company, as a 1954 memorandum found in the Company's files notes that Great Northern had a 40 percent interest in the "East Branch Improvement Company and its subsidiaries Godfrey's Falls Dam Co. and Sawtelle Brook Dam & Imp. Co." There is no readily available information as to how this transfer came about, and it has not seemed worth while to explore this minor company further.

The ownership of 60 percent of the stock of the East Branch Improvement Company technically gave control to Bangor Hydro, but operation is under a renewable agreement, first made between Bangor Hydro and Great Northern in July, 1942, for a term of five years,

which remains in effect, with some revision. The company maintains storage dams on Telos and Grand (Matagamon) Lakes, but while there was some discussion of it in the 1930's, no storage has been restored on the waters covered by the Godfrey's Falls or Sawtelle Brook charters.

There was a more important development in the area of water storage in 1936. This was the building of the new dam at Seboomook mentioned in an earlier chapter. The immense timber structure which we described at that time had begun to deteriorate, sagging badly in places, mostly due to the damage to the floors which had occurred during construction. It had reached the point of being unsafe, and as the storage was substantial and was needed not only for power purposes but for driving, it had to be replaced. The new gravity-type concrete dam, designed by the Company's Engineering Department and built by the H.J. Deutschbein Company, was located about 125 feet below the old one. It was 426'6" long between abutments, with short earth fills at each end, its axis more or less northwest and southeast. The ledge was bad at this point, and considerable rock excavation had to be done, the whole base of the dam and a sloping apron some 215 feet long and 30 feet wide below the gate section being keyed more than ten feet into the ledge in some places. The apron had walls at each end, making it in effect a huge sluice.

There was no spillway. Sixteen piers, surmounting the crest and making seventeen bays between the abutments, carried a 20-ft. wide roadway at about El. 1076 (U.S.G.S.) four feet above maximum water level at El. 1072. Those piers in the gate section, which

was 220 feet long and began at the sixth bay, 160 feet from the southeast abutment, were extended below the face of the dam as buttresses. The sixth and seventh bays each contained two cylindrical deep-gate passages, 6'0" diameter, their bottoms at El. 1040. The next six bays were flood-gate openings. In five of these, the gate sills were at El. 1056, and in the sixth, which was used for sluicing wood, the sill was at El. 1062. The 20-foot-wide gates, of the ordinary vertical lift type, did not have individual hoists, but were raised and lowered by a traveling gantry, on a track elevated a few feet above the roadway and upstream of it, powered electrically from a small diesel generator unit in a little power house on the shore near the southeast end of the dam.

While there were no plans for developing power at this site, two 8'0" diameter steel thimbles were built into the fifth bay, with arrangements for trash racks, just in case something came up in the future that would make the small amount of power that could be generated useful. This feature really had its origin in the oversight, if it might be called that, in not making some such provision in the construction of the Ripogenus dam twenty years before, and the idea was that if the need should arise, penstocks could be run downstream from these thimbles to obtain the maximum head from Seboomook Falls.

It has not seemed necessary to cover the progress of this job, which cost approximately \$560,000, in detail. Construction equipment, some of it from the North Twin project, was moved up Moosehead Lake to the Seboomook wharf by water; living quarters were provided for the crew, and the Spruce Wood Department set up the commissary. We might note one uncommon circumstance. This was that

Frank Bowler and William A. Whitcomb had been having one of their periodic differences of opinion, which came to a head just about the time work was to begin. We have no recollection of what this was all about, but the President was so angered that he took the unusual step of writing a special order placing Roy Weldon in charge of the work, with the writer as liaison and Creighton Stanwood to do the purchasing. This did not produce a very happy situation, especially for Roy Weldon, but he and the writer, by finding reasons to consult Frank Bowler and ask for his advice, sort of kept him in the picture, and he even visited the job a few times, but technically he had no part in the construction of this dam, although it had been designed under his supervision.

As time went on in the year 1936, everything began to point to a boom in the aftermath of the depression. By the middle of the year, Canadian production was up to around 90 percent of capacity. The United States industry as a whole did little better, tonnage-wise, than the year before, because its mills were still getting out of the newsprint business one way or another. A number of the large Canadian outfits were still not out of financial trouble, and with the improvement in business the Provincial governments began to put the heat on the industry in that country to take advantage of the situation and raise prices. The publishers' need for raw material was becoming so great that they did not declare the usual pre-emptive war. By this time some people were beginning to take Dr. Charles Herty and his southern pine ground-wood seriously, although it was still only a laboratory success,

and there was surmise that a big rise in the price of paper might start somebody thinking about starting to manufacture newsprint in the south, where there was a large market. William A. Whitcomb was not a believer in southern newsprint, but his action, forestalling everyone by announcing early in August that Great Northern's price for 1937 would be \$42.50, an advance of only \$1.50, was another calculated move to keep newsprint price inflation under control and allow the customers to condition themselves to the new situation. It succeeded, for the time, the other producers falling into line on contract business as they had before. As a matter of fact, many contracts at this time had a provision that the price charged would not be higher than that offered by a substantial producer, some naming Great Northern specifically. The publishers, some of whom had been consulted beforehand, and who had been expecting much rougher treatment, heaved a sigh of relief, although some who had not covered themselves were already paying spot prices several dollars higher. The A.N.P.A. Bulletin of August 3, 1936, No. 251, B special, contained a number of letters from publishers, all in the same vein on this price announcement. We quote only one as typical:

"American Newspaper Publishers Assn.

New York, N.Y.

Gentlemen:

The action of the Great Northern Paper Company is characteristic of their far-sighted leadership in the newsprint industry.

Scripps-Howard Newspapers have agreed to this price



and extended their contract with Great Northern another year.

Yours very truly

SCRIPPS-HOWARD NEWSPAPERS

W.G. Chandler

General Business Manager"

Since 1933, the Company had not earned the dividend of \$1.00 a share which it had paid, as a matter of pride, and was able to pay because of its cash reserve and its policy of keeping capital expenditures within the amount of funds provided by depreciation. In 1935, its earnings had just about covered what was paid out. In 1936 it had paid \$1.12 by the year-end, and had a few cents left over. The management figured that in line with the President's creed the customers were getting rock-bottom price, the wages of the employees were better than most, and that the stockholders ought to have all that was left, or all that could be spared after keeping the plants maintained and equal to the competition under the circumstances. During that year, due to its strong financial position relative to that of most of the rest of the industry the market value of its stock had gone up out of all proportion to earnings. On January 11, 1937, before the 1936 report had been published, the Boston News Bureau had this to say:

"Great Northern Paper Co., by many regarded as the aristocrat of the newsprint industry.....is believed to be earning at the rate of between \$2 and \$2.25 a share on its 998,300 shares. It has set a price of \$42.50 per ton for its contracted product during 1937 and while this price is \$1.50 a ton above that of 1936, it is still

well below the spot market for newsprint, which is quoted somewhere between \$45 and \$46 a ton. At the former \$41 contract price the company made more than enough to cover with a good margin its 1936 dividends. Incidentally, it has the unique record among paper makers of coming through the depression without omitting dividend distribution to shareholders... At its current price of \$42.50 a ton, Great Northern Paper should be able to bring down substantially all of the gross increase to net profits.....A factor making for a strong newsprint market is that consumers have for years underestimated their requirements. One of the largest newspaper chains is understood to be committed to only a fraction of its 1937 requirements.....Company has no funded debt and according to last report had \$13,659,000 of current assets and but \$630,000 of current liabilities. The stock which sold early in 1936 at 24-7/8 is now quoted 38-1/2 to 39-1/2.

It was not true that consumers had underestimated their requirements for years. They had for 1936, but it would have been hard to forecast the demand which was developing even as this was written. Whether or not Great Northern's price action had any part in delaying the manufacture of newsprint in the south is open to question. It did not hold up the start of construction by the Quebec North Shore Paper Company of a big new mill at Baie Comeau, P.Q., the first really new newsprint mill in Canada for a long time, and the last for a long time, but Quebec North Shore was a captive outfit, controlled by Ontario Paper Company, which was

controlled by the Chicago Tribune, which was controlled by that bumptious publisher Col. Robert McCormick. This mill started up in 1938.

We should perhaps say that by this time the United States newsprint industry had reached its nadir in terms of productive capacity. Of the 28 mills represented by the Newsprint Manufacturers Association of the United States, only eight or ten were still making newsprint, and the writer can name most of them with reasonable assurance from memory. All the eastern mills that were left were in Maine -- Great Northern's two plants at Millinocket and East Millinocket; the Pejepscot Paper Company at Brunswick; the St. Croix Paper Company at Woodland and the Maine Seaboard Paper Company at Bucksport we believe was still on news. All the rest were on the West Coast -- Crown Zellerbach had two mills making news, one at West Linn, Oregon, the other, the writer believes at Camas, Washington, at that time; the Publishers' Paper Company at Oregon City, Oregon, the Inland Empire Paper Company at Millwood, Washington, and the Hawley Pulp & Paper Company. Altogether, they represented yearly capacity of not much over 1,000,000 tons, and as we have said, Great Northern accounted for about one-third of this. The others had closed down, or, like Madison, had been converted to other grades. International was out of the newsprint business in the United States, at this point.

The existing Board of Directors, Executive Committee, officers and counsel were returned for the year 1937. We will list them again here, because there had been a number of recent changes, but there were no more for five years. The Directors were William O.

McKay, Williamson Pell, F.S. Rollins, Hilbert Schenck, Benjamin Strong, Sheldon Wardwell, William A. Whitcomb, John Hay Whitney and Fustis Paine. The Executive Committee consisted of Fustis Paine, F.S. Rollins, Williamson Pell, Sheldon Wardwell and William A. Whitcomb. The President was William A. Whitcomb, William O. McKay was Vice-President and Manager of Manufacture; William Hilton Vice-President and Manager Spruce Wood Department; A.R. Caspar Vice-President and Manager of Sales. Burt C. Ward was Treasurer, Bryan Seelye Clerk, and A.R. Caspar Assistant Clerk. Carter, Ledyard & Milburn of New York, Wardwell, Ranney & Allen of Boston and Louis C. Stearns of Bangor were counsel.

Price Waterhouse & Co. submitted their report to the March meeting of the Board. In a way, the Company had been carrying two sets of books since the stock split of 1922, because of the way the surplus account had been handled. As a result of this report, there was a belated vote approving the action of that time, and authorizing an appropriate adjustment as of December 31, 1936 to give it effect. The transfer of the \$2,500,000 from the Timberland account, where it had been left as a sort of appendage following the tax dispute of the 1920's, to the Mill Sites and Water Powers account was also approved, and it was voted, for the first time in history, to add an earnings statement to the balance sheet to be put out for the year 1936.

The previous published Balance Sheets had been neat little affairs, printed on a single sheet of paper which when folded once measured 5-1/2" x 7", with the name of the Company, the title "Balance Sheet" and the year-end date well-placed on the

front page and surrounded by a single rule. The figures were on the two inside pages, and the names of the Directors, Executive Committee members, officers, Transfer Agent, Registrar and the addresses of the General Offices at Millinocket and the Sales Office and Treasurer in New York on the back -- the Boston office was of course not mentioned. The 1936 document was a monstrosity, again a single folded sheet, a little larger, measuring 7" x 9" when folded, to provide space for the explanations and footnotes which had to be added to the balance sheet items. The front page was headed with the name of the Company, and no other identification. Under this was the same information about Directors and so on that had been on the back of the old form, but there was no ruled margin. The back page held the statement of profit and loss, without comparison with any previous year, and with no figure for sales; and the statement of the independent accountants. There was no President's letter or any other information. This same ungainly thing was used for the next nine years, except that comparative figures for the previous year were added to the profit and loss statement in 1943. The inclusion of an earnings statement created no great stir, because, as we have noted, the analysts had been able, due to the Company's simple financial structure, to determine earnings with uncanny accuracy anyway.

As business climbed out of the depression, the increased demand for newsprint, which had really started in a small way in 1934, continued in 1935 and accelerated in 1936 was in 1937 little short of phenomenal. Total United States consumption in that year was a new record high of 4,275,000 tons, a figure not reached again for the next ten years. The first half of the year was frantic. There was just not enough paper to go around.

Customers, large and small, besieged the Sales Department, pleading for more paper, and the latter made deals right and left, juggling orders and delivery dates, sometimes by arrangement and sometimes arbitrarily, stealing a carload here and there from somebody who had a little paper on hand to give to somebody who was really in distress, doing their best to spread available production equitably, risking and sometimes bringing upon themselves the wrath of a big customer by putting him on short rations for a few weeks in order to keep some of the small ones going.

This was about the time when the size of newspaper pages began to get smaller. The size of type used in mastheads and headlines began to shrink. The inch-wide margins and gutters were cut to half an inch, and column widths were reduced by the same amount or more. Printers, we suppose, would express these changes in "points". This did not take place all at once, and may have started a little before this time, but it was quite generally effective within the next year or so, and there were further column width reductions later. All this allowed a newspaper to get more copies out of a ton of paper, but it resulted in narrower rolls, and tended to reduce the tonnage which could be obtained from the paper machines. This may need a little explanation, which we will make as simple as possible.

While as far as we know, there was never any standard width for newsprint rolls, paper was ordered in full, three-quarter and half size rolls, and it was necessary, in designing a paper machine, to make some educated guesses as to the roll sizes which would be ordered, and the overall ratio of full to fractional

lengths, in order to come as close as possible to a width that would average optimum "trim", in this sense the width of salable paper the machine could turn out. When Great Northern's machines were installed, 72" was the prevailing roll size, full length, and the machines were designed to make two full rolls -- in other words to trim 144 inches. Of course, full trim was seldom realized, so there was almost always a certain amount of loss, but when a full roll size got down to where it was only 64 inches, 16 inches of width, nearly 12 percent of the capacity of the machine, was lost. To make matters worse, this amount of paper actually had to be made on the fourdrinier, dried, and wound into a side-roll, which cost money, and which there was not much use for. It was possible to narrow up the sheet on the wire, or the width coming through the dryers by various means, but this could be carried only so far, as too narrow a sheet raised havoc with the calender rolls. A further complication was that too much broke upset the quality of the paper, and there was no adequate broke storage tank system, so that these side-run rolls had to be accumulated and worked back into pulp a little at a time, which also cost. Some of these narrow rolls could be sold to be used in one way or another in converting operations, but often the machine rooms were piled up with side-run waiting to be put back into the beaters. In the course of time, as full width rolls got down to 62 inches or less, combinations of sizes could often be made which eased the situation, but this did not develop at any particular point in time, so that for quite a while loss of trim was a real headache.

There were a lot of important developments in 1937. Early in the year -- and this is not one of the important developments --

a strong rumor circulated to the effect that Great Northern was making plans to build a new paper mill in Rockland, Maine. This arose from an article published in the local newspaper stating that "strangers" had inspected several sites for a mill, and whoever these strangers were, if indeed there were any, the conjecture was that they were Great Northern people, perhaps because of the Company's Knox Lime Company interests in that area. There was no truth in this rumor at all, but it caused a commotion for a short time.

It should now be evident that Sheldon Wardwell, although not an officer of Great Northern, had become very important, and because of his high visibility during the I.C.C. hearings had also become known as a sort of front man. In the course of these proceedings, he had become acquainted with Thomas W. Martin, President of the Alabama Power Company, which was promoting expansion of the pulp and paper industry in that state. As early as 1934, he had been talking with Sheldon Wardwell about the possibility of Great Northern establishing itself there, and on January 4, 1935 he wrote him a letter on the subject, mentioning the work done by Dr. Charles Herty, and stating that he was firmly of the opinion that in a few years a white paper industry would be established in the south.

At this time, Sheldon Wardwell was not impressed, arguing that at the prevailing prices a southern newsprint mill could not compete with the Canadian industry, and that anyway Dr. Herty's theories about making groundwood from southern pine had not been proven.

In June, 1936, the Alabama Power Company sent T.D. Johnson,



Manager of its New Industries Division to Boston to discuss the matter further. Sheldon Wardwell, for some reason, did not bring him to the Boston office to meet any of the officials, and upon his return to Birmingham he wrote that he felt that Great Northern was passing up an opportunity.

Meanwhile, in January of that year the Forester for the Missouri Pacific system visited Sheldon Wardwell in an attempt to interest the company in building a kraft mill in Texas, Louisiana or Arkansas. This time the writer represented Great Northern in the discussions, but this proposition was quickly disposed of, as it was felt, for one thing, that pulp prices would not support the required investment.

A year later, on April 7, 1937, T.D. Johnson wrote, saying that a newsprint mill was definitely going to be built in Texas; that he had surveyed the Southern publishers and found that Great Northern had a great many genuine friends among them, and that with this situation and an inevitable increase in newsprint price it was "sitting on top of the world", and inviting officials of the Company to visit his area for a look-see. I.P. had just raised price, as we will see shortly, and Sheldon Wardwell suggested to William O. McKay that this might be a good idea. T.D. Johnson followed up his letter with a visit in early May, at which time he talked with William O. McKay and William A. Whitcomb, being very impressed by the latter, writing Sheldon Wardwell on May 17th: "I certainly like Mr. Whitcomb. He shoots straight from the shoulder. No wonder the Great Northern Paper Company has been such an outstanding success". However, nothing materialized.

As we said, William A. Whitcomb was not convinced even at this time that groundwood could be made from pine, nor was there any indication that the Directors had any enthusiasm for a move south.

The International Paper Company, not to be beaten to the punch again, had announced some time in March, 1937, according to L. Ethan Ellis (Print Paper Pendulum) that its price for 1938 would be \$50.00 a ton, a whopping \$7.50 increase, and most of the other leading Canadian producers followed. The writer is not sure whether this announcement was for the year, or for the first six months only. This was not an unexpected development, but was unusual in timing. The publishers, still desperate for paper, again did not reach for their guns as they would have done in the past, but appealed to Great Northern, through its customers, to do something, having in mind the moderate position it had taken on price during the past two years. William A. Whitcomb and Dick Caspar made no commitments, and just let everyone sweat it out until fall.

In May of this year, an appropriation of \$75,000 was made to rebuild the Ragged Lake dam, near the Grant Farm, which, by reference to the table, provided one of the larger "Small Pond" storages, tributary to Chesuncook Lake. There was a Ragged Lake Dam Company, which belonged to Great Northern before 1920, but which like a number of others was not carried as a separate subsidiary, for some reason. This company had been chartered in 1874, one of the incorporators being Henry M Prentiss, who, as it may be recalled, was first President of the Northern Dev-

elopment Company. According to Alfred G. Hempstead ("The Penobscot Boom") their original dam, built by the then owner of the Grant Farm, John Morrison, was a timber structure 264 feet long, with three gates, holding 9 feet of head. Several hundred feet of timber "runaround" was built with it. In 1920 a new dam was built by Jim Sargent, the Company's master dam builder, somewhere between 200 yards and a mile, depending upon the informant, below the original one. This dam lay roughly north and south. The north end consisted of a crib wing and gate section about 250 feet long, ending at a concrete abutment from which an earth embankment with a rubble core extended southward some 800 feet. The head, because this dam was considerably downstream from the old one, was about 17 feet. The new dam, built in 1937 under the above appropriation, made use of the existing earth embankment. The old timber construction was removed, and a new concrete gate section, about 50 feet long, with two deep waste openings and a log sluice, all fitted with steel gates, was built northward from the old abutment. A new earth embankment, containing about 8500 cubic yards of material, 20 feet wide on the top and some 90 feet on the bottom, with a steel piling core and rip-rap on the upstream face, was constructed from this to the north shore to complete the dam. A 12 ft. wide deck carried a roadway across the gate section, and as the gates were south of the natural course of the stream, a short channel was excavated below them to the stream bed, and a reef of ledge above the gates was removed. The statistical head on this dam is 20 feet, the deep gate sills being at El. 1101 U.S.G.S. and high water level at El. 1121, but for practical purposes is carried at 18'6", no measurable additional storage being created.

This job was started the first week in June, construction equipment from Seboomook being brought back down the lake to Lily Bay to be hauled to the site. The crew was housed in tents, and the Spruce Wood Department again provided the commissary. No particular problems were encountered except that local material was unsuitable for concrete, and fines had to be trucked from a pit some four miles distant. The rock in the area was also too friable for use, and crushed stone, some taken from a pile left over when the dam was constructed there, was trucked from Ripogenus. Work was completed on November 1st.

Some time in this year, the Company was offered and purchased 119 shares of stock of the Big Black River Dam Company, a log driving corporation which had rights on this tributary of the St. John River. We have little information of this company. However, due to the interest in the movement of wood from the St. John River watershed northward to loading points on the railroad, it was voted to buy this stock, at a price of \$8,000. William Hilton became a Director, but as far as we can remember, this company was never of any great importance to Great Northern. In 1956, after the wholly-owned or controlled log driving subsidiaries had been merged with the Company or otherwise disposed of, it remained on the books as an "Investment in Subsidiaries and in Other Companies and Associations". Of the 329 shares outstanding at that time, Fraser Paper, Ltd. had 89, Andrew R. England 120, and Great Northern 120, one of which was a qualifying share in the name of William Hilton, and as far as we know these 120 shares are still carried as an investment, valued at the original purchase price of \$8,000.

Of minor importance, the President, who as it may be recalled had been given blanket authority to sign deeds for land sold in the townsites, was granted the further authority to make sales of any land or property on which the value was not more than \$2,500; and for \$4,000 an easement was obtained from the Weston Heirs on land around the holding ground in North Anson, on which rent of \$100 a year had been paid for a long time.

By this time, the short but unexpected secondary depression of 1937-38 had begun, and the overall demand for newsprint, which had reached such incredible heights earlier in the year had started to slip, and at this strategic time -- we do not know exactly the date, but probably late in November -- Great Northern put out its 1938 price; \$48.00 a ton, an increase of \$5.50, for the first six months, and \$50.00, catching up with the market, for the last half of the year. It will be remembered that the Canadian industry had long before announced an increase of \$7.50, to \$50.00 a ton, which, if it was not originally for the entire year, was later made so. Great Northern's lower price, believe it or not, was not primarily intended to capture business. The Company had all it could handle. Neither was it influenced very much by the weakening in the market, no one having any idea at that time how bad it was going to get. It was based on a careful calculation of increased costs, with provision for a modest improvement in earnings and a factor of the old policy of not taking advantage of the customers. The \$50 figure for the second half of the year was intended as a stabilizer. The Canadian industry was thus put in a predicament as to what to do, which was what the publishers had hoped for, but it was smarter than it had been. During

the year, most of the mills had cut loose from the provision that had tied them to the price offered by Great Northern, and with its \$50 figure for the second half as encouragement, along with both pressure and backing from the Provincial governments, they stood their ground, pooling their tonnage and going to a shorter production week as business dropped off, and held their \$50 price through the year. Great Northern, however, did not implement its \$2.00 advance for the second half of the year, as we will see later. These were the conditions under which Time Magazine made the statement that William A. Whitcomb was popular with publishers but poison to his colleagues in the newsprint industry.

We have noted the salary cuts of 1932 and 1933, which had averaged a total of a little over 13 percent, and the restoration to the pre-1933 level in December, 1936. This had amounted to an average of about 6.7 percent. In October, 1937, it had been voted to restore the 1932 cut also. The new rates for the officers were specified:

President	\$30,000
Vice-Pres. and Mgr. Spruce Wood Dept.	15,000
Treasurer	12,000
Auditor and Clerk	11,770

It will be recalled that the salary of the Vice-President and Manager of Manufacture had already been raised to \$18,000, and that that of the new Vice-President and Manager of Sales had been established in 1936 at \$12,000. No adjustment was made in these rates. The officers were authorized to raise other salaries generally, to bring them back to what they had been before the 1932

reduction "taking into account changes in organization and responsibilities". This was done immediately, and in November the President reported that the adjustment had cost \$52,200, amounting to 6.4 percent on the salaried payroll.

By 1937, five years had passed since the machine room at the Millinocket mill had been rebuilt and extended to accommodate four wide paper machines which would add substantially to productive capacity. It had not been possible to go any further with this scheme during the depression years, although a lot of money had been spent for other improvements. Now, with more business than could be taken care of, and the price of newsprint looking up, the need for additional production had again become clearly apparent to the operating management. A little more paper could be squeezed out of the existing machines in one way or another, but there was a limit to what could be done with them. What was really required was a massive job of machine replacement, although William A. Whitcomb and the Directors were not expansion-minded, and seemed to be content to make haste in the direction of more production slowly. Unfortunately, any substantial increase was not possible anyway, because of the old problem of power shortage. The North Twin development had been only a drop in the bucket. Mill load -- the power required for process equipment other than grinders -- had increased greatly with the installation of a lot of power-eaters like suction rolls. The change-over to four-foot grinders at the Millinocket mill had been going on gradually, the 24th stone being installed in 1936 -- there would be 30 eventually -- and already the motors originally installed were too small and were being replaced with larger ones, even though the horsepower

per ton of groundwood had been cut well below the normal. With a 40-cycle system, only a very limited amount of power could be purchased from outside sources; we will describe how this was done later; but not much was available in any event. The purchase of groundwood pulp from outside sources, except in dire necessity, was prohibitive in cost, and while the water situation in 1937 was excellent, nothing was surer than that some time there would be a recurrence of the drought conditions of the earlier 1930's. The only answer was more power before any meaningful increase in paper production was attempted, and that meant, at this point, the development of the head at Mattaceunk Rips.

This project came under discussion early in the year. There was some question about its legality under the various charters, and as to whether or not a Federal license need be obtained, but it was finally decided that the power could be developed under the old Mill Act, without any special authority. Studies were made to the point of arriving at an estimate of \$2,880,000, and William A. Whitcomb agreed, under the urging of William O. McKay, to put it up to the Directors. For some reason which we cannot really explain, he was not gung-ho for it, and this was one of the times when he found reasons to procrastinate. Although surveys and borings had been made and a site selected for the dam a number of years before, he developed a sudden suspicion of the quality of the ledge in the river-bed, and the permeability of the material in the knoll (Mattaceunk Hill) at the northern end of the site, and insisted upon further investigation. Frank Bowler, back in favor, engaged the firm of Sprague & Henwood to make additional core drillings, exploration lines were laid out, and they started



work on June 16th, going to two shifts in August, working on the proposed site; on a line extending northward from the site and across the highway, along both banks and in the river bed, to a point nearly half a mile upstream, while William O. McKay fumed about the delay.

Four months, 32 core holes and six or seven test pits later, there was a lot more knowledge about what was in the bowels of the earth around Mattaceunk Rips, but nothing had been found that changed the picture. In the meantime, the Engineering Department had started on design, Hardy Ferguson being consulted, and on September 8th, before the drilling schedule had been completed, the Directors authorized the job, the cost to be spread over four years, and an expenditure of not over \$200,000 for work up to the end of 1937.

While the details of this job will not be interesting to everyone, we are going to cover it quite thoroughly, because it was the first really big project involving entirely new construction in 30 years -- the North Twin station had utilized an existing dam -- and because it was the Company's only project on the main Penobscot River.

The Mattaceunk development, renamed the Roy V. Weldon Station in the early 1960's, involved the building of a gravity concrete dam across the Penobscot River, its spillway crest at El. 236.00 (G.N.) -- 234.20 U.S.G.S., with four feet of flashboards, bringing the water level at full head to El. 240.00 (G.N.), backing a pond up to the tailrace of the Rockabema station and some little distance up the East Branch and Salmon Stream; a gate section, a log

sluice, a fishway, and a concrete, steel and brick power house, integral with the dam and involving rather extensive core and retaining walls; the spillway 657-1/2 feet long, the gate section 114 feet, and the whole structure, between abutments approximately 950 feet; the construction of a 33,000-volt transmission line on steel towers to connect with the Dolby station -- some 10.8 miles as the line ran, and the rebuilding of several miles of State highway, including a substantial bridge at Salmon Stream, with some other highway complications. The dam lay roughly north and south, the southerly end in the Town of Woodville and the northerly in the Town of Mattawamkeag, some four miles above the village. However, a line through the axis of the dam brought this end -- that next to the highway -- a little east of north, and for some reason it was called the east end, and the bank of the river on that side the east bank. We will use these designations in our description of the work. We will also use Great Northern datum, 1.80 feet higher than the U.S.G.S. elevations at this point.

This job cannot be neatly compartmented in the manner of the one at North Twin, and we will divide it roughly into time segments of three months, more or less, beginning at the date of the start of the job on October 25, 1937, although to make things as clear as we can, some phases of the work will be carried through more than one time period, or to completion.

Roy Weldon was the supervising engineer, and other members of the Engineering Department, notably Vic Cram, an excellent construction engineer, were assigned as required. Oscar Nickerson supervised the electrical work. The job was awarded to the H.J.

Deutschbein Company, a separate contract being drawn for it under the usual terms. Charlie Eklund was Superintendent for the Deutschbein Company, and the writer was the liaison with the Boston Office.

William O. McKay had decided that the power house should be built first. His reason for this actually was to psych William A. Whitcomb into not holding up or slowing down the job at some future unpredictable time, his figuring being that he could get money into the power house faster than he could into the dam, and that once he had a power house it would look kind of silly without a dam, and there would be less chance of construction funds being held up. The construction plant was laid out on this basis.

As noted, work was started on October 25, 1937, before the core drilling was completed, with 13 men clearing the site of the construction plant, and 12 in other locations, namely unloading ten carloads of equipment which had been moved from Seboomook and Ragged Lake to Greenville and shipped to Mattawamkeag, the rail-head for the job; starting investigation of the quality and quantity of the material at the so-called Dickey pit on Lot 19 on the east side of the highway in Medway, about four miles above the damsite, bought by the Company for the gravel; and opening test pits in smaller gravel deposits on the Mullen Flat just below the site.

To start with, a 1-3/4 yard diesel shovel and crane had been bought, and a tractor fitted with an angle-dozer was provided by the Millinocket Mill. A few trucks were hired. The construction plant site, a space about 1,000 feet long, between the highway and

the river, on the slope of the knoll previously mentioned, was cleared and graded in two levels -- a large yard almost at the grade of the highway, with entrances at each end; a smaller yard at a lower elevation at the southern end; a "beauty strip" of trees being left along the highway and protected by a barbed-wire fence. By the end of the year, an office and first aid room, a blacksmith shop, a rigger's shop, a carpenter shop, a storehouse, a compressor house, in which the 1,000 cu. ft. compressor bought for the North Twin job and used at Seboomook was installed; a boiler house, containing a re-tubed 125 h.p. oil-fired boiler brought from Seboomook, and an ice-house, had been built. A commissary was originally planned, but was never provided, and there were no living quarters for the crew, who lived in, or found places to live, in the surrounding communities. The Houston House -- the old Mattawamkeag Hotel -- was practically taken over. A 4,000 gal. elevated water storage tank. for reserve and fire protection was erected near the upper end of the yard. -- a second one was put up at the other end of the yard later -- and a pumphouse was built on cribwork on the river bank outside the area to be coffered. Main water and air piping was laid in trenches insulated with straw. A small vertical boiler was converted to oil and mounted on skids for thawing ice; a 310 ft. portable air compressor was brought to the job, and two 1,000 gallon fuel tanks, one for gasoline and one for fuel oil were provided. Water supply pumps, and pumps for use in the cofferdams, nearly all Jaeger or Mooretrench construction type units, one as large as 10", were brought to the site and placed or made ready for use, and shop equipment was installed. The Bangor Hydro line ran right by the job, and they set

up a transformer station for power and light, allowing almost everything to be electrified. Motors for this purpose had to be purchased, as motors available at the mill were of the wrong frequency, but some 40-cycle current was required for work to be done in the power house, and a generator set made of a 60 cycle motor and a 40 cycle synchronous motor from the mill was provided. The use of motors involved quite a conversion job, as most of the construction equipment was designed to be used with internal combustion engines. The small air compressor and a few pumps were left with the gasoline engines on them, for emergencies, and a few steam hoists were used on the derricks. Temporary lighting was installed, and power lines were run down the slope to the site of the coffer. A start was made on heavy cribwork built against the slope from the lower level just below the site of the power house, to support the main concrete plant, but as this was not going to be needed for some time the cribwork was not completed. However, a Smith 1-yard mixer was moved to the job and set up for preliminary concrete work.

It was necessary to find a source of drinking water the proposed commissary, and for use in the power house later, and this proved to be quite a problem. A diamond drill rig started work on November 22d; was stopped by something too tough for it 40 feet down; was moved a few feet and got down to about the same depth with the same result. The outfit was then moved to a new location, with even worse results, as the drill broke off, the casing could not be pulled, and this hole was abandoned. On the fourth try the drill got to ledge at 60 feet. S.B. Lister, doing the drilling, took a couple of weeks off, started again on January 6, 1938, and about January 22d struck good water, not at 100 feet, nor yet

at 200 feet, but 300 feet down, well below sea level.

On the same day that well drilling was started, a crew recruited from the Spruce Wood Department began work on the upstream arm of Coffey No. 1, the big one in which the power house and gate section were to be built. This extended some 400 feet into the river, and was trapezoidal in shape, the river end perhaps 150 feet long, the shore end about 600 feet. It was built as a series of log cribs, about 15 ft. square and a little less than 15 feet apart, loaded with rock and material dredged from the river bottom by the crane, which built itself a road in the river bed around the outside of the coffer from which to work. Horizontal 12" x 12" wales ("walers" colloquially) were placed outside and between the piers, and wooden sheeting, its top at about Fl.208, a few feet above the tops of the cribs, was set vertically outside of and against these, and sealed with heavy clay taken from excavation which was started with a second shovel at the location of the retaining wall which was to extend upstream from the shore end of the power house foundation. Late in December, flow ice jammed in the shallows the whole length of the Mullen flat, raising the level of the river above the top of the sheeting, and flooding the coffer. It took about ten days to blast a channel through this jam and get the water level down, and the coffer was completed on January 22d, was pumped down in a couple of days, and a shovel was moved into it. In the meantime, a road had been built down to the coffer, the upstream arm had been planked over for a working surface, and stairs were built from the upper to the lower levels of the yard.

Surveying had begun early in November. By the middle of January, 1938, the transmission line had been located and staked all the way to Dolby. As most of the markers that had been set at the 240 elevation during the old study were missing, a new survey of the flowage was started immediately, and by February 21st had been run up the west side of the river, around to and up the East Branch to the Hathaway Farm, and back down to Medway. At this point, the engineers had to go back onto the transmission line and move part of it nearer to the river. This took until about March 17th, when the flowage survey was resumed, and this, together with surveying for the State Highway relocation, a change in a road and the possible moving of a cemetery on the Woodville side of the river at Pattagumpus Stream, the marking of lines on the many lots on the west side of the river which would be crossed by the transmission line and determination of the acreage that would have to cut in the flowage, was not finished until September, 1938.

Working in a cofferdam in the middle of January presented certain problems. The first thing that had to be done was to remove a mass of ice that had formed after the flooding, and a road had to be built down into the coffer, along the inside of the downstream wing, but on January 25th, within a week after this work had been started, two inches of rain in 24 hours broke up the ice in the river, formed another jam at the Mullen Flat and flooded the coffer a second time. Everything had to be moved out, and a channel was blasted again through the ice jam, but this took only a few days, and the coffer was unwatered again by January 31st. The two floodings had not done the cribwork any good, particularly on

the upstream side, and it was decided to top them out level with the sheeting, and load them with heavier stone. It was also necessary to tear out the roadway and run sheeting well into the bank at the lower corner of the coffer, a bad leak having developed at that point. While this was being done, a section of the sheeting on the downstream arm was cut out and built over so that it could be removed quickly to flood the coffer intentionally, if it became necessary, to equalize pressure and prevent washing under the piers. The walers on the upstream arm were braced, and lighting was installed all around the coffer. Excavation, which was substantial, as there was from 40 to 70 feet of overburden where the power house came ashore, was started on February 7th. The first two days nothing was taken out but ice, actual earth removal starting on February 9th. At this point, the crew consisted of 46 men, divided into two crews working nine-hour shifts.

H.J. Deutschbein brought in a 1-1/2 yard diesel shovel belonging to him, along with a crane boom for it, and by March 14th about 14,000 yards of earth had been removed, along with some 3,000 yards of "solid blue ice". That day was the coldest of the winter -- 28 degrees below zero -- with a high wind making conditions ideal for the formation of anchor ice, which again jammed below the job, causing the water to rise rapidly. All equipment was again removed from the coffer, but it did not flood, and work was resumed the next day. As a matter of fact, the winter had been bitter, and there had been a lot of trouble with the equipment. The crawler gear on the shovels and bulldozer plugged with the heavy clay, and froze up. The dipper boom on the larger shovel broke, was welded, broke again, and had to be replaced; bucket teeth on



both shovels wore out, and there was other breakage. Diesel tractor and shovel engines had to be allowed to run twenty-four hours a day, whether working or not, as it was almost impossible to start them after they had been shut down for any length of time. The Company tractor broke down entirely; a rebuilt machine was bought to replace it, and another was borrowed from the Spruce Wood Department. The air lines froze, and Tanner-gas had to be used to keep them dried out. Mud time came, the trucks had to be loaded more lightly to keep them from bogging down, the normal disposal areas could not be used, and excavated material was used to fill the holes on the Mullen flat from which material had been taken to build the road into the coffer. Nevertheless, by April 23, 1938, most of the shovel excavation in the coffer; that is, the removal of the hillside at the site of the power house and the retaining wall which ran some 95 feet upstream from its corner, was completed to ledge, over 36,000 yards of earth and heavy blue clay having been removed. About the middle of March, work had been resumed on the heavy cribwork for the concrete plant. This had been finished and loaded with rock by the above date, and some concrete required at this location had been poured, using the small mixer. The crew now totalled 60 men.

At this point, things really began to get moving. All the equipment was overhauled. One shovel was converted into a crane and hand cleaning of the ledge was started, the material removed being hoisted up to the trucks in scale boxes. A small "Speeder" shovel, having opened up another pit on the Mullen flat for road gravel, was moved to the Dickey location to build a road into that pit, and the bridge at Salmon Stream was reinforced so that one of

the big shovels could be moved over it later. A 30-inch concrete culvert was placed in the bed of Bartlett Brook, which crossed the highway just north of the site, so that stone and heavy material removed from the excavation could be used to build up the grade at that point. The small compressor which had been used all winter broke down, and the big unit was started up for the first time.

The station was designed for four units, but only three generators and the embedded parts of the fourth waterwheel were to be installed in the first step. Blasting of rock was started at the location of No. 3 unit, numbered from the river end, about April 24, 1938, and within a few days ledge was being blown out to remove bad seams the whole length of the coffer. Formwork for the upstream retaining wall, 72 feet high and 8 feet thick at the bottom, was started the last week in April, and the first permanent concrete was poured on May 5th, at the base of this wall, the 1-yard mixer having been set up in the yard at this location, with chutes to drop the concrete mix down into the forms.

By this time, the Bangor Hydro Electric Company had installed a second transformer station and a line into the Dickey pit, and the road into it had been finished. A power line had also been run down to the river at this point for a pump for wash water. Two thousand feet of second-hand 8-inch pipe had been bought for the wash line. This was found to have been used for oil, and the entire length had to be swabbed out with soda ash. Foundations were put in for the gravel plant; a pump house was built on the river bank and the wash line was run to the pit; a rock crusher and screening equipment purchased for the job were installed, and

a flume was built to carry away the wash water. A storehouse and material storage bins were constructed, conveyors were put up, and the plant went into operation on June 7, 1938, one of the big cranes being moved up from the dam job to do the digging.

The completed cribwork for the big concrete plant at the construction site was connected to yard level by a wooden ramp on trestles. Stone and sand bins were built at the upper end of this cribwork, with log ramps so that trucks could dump into them, and a stiff-leg derrick was set up to handle these materials from the bins to the hoppers of the mixing plant. A cement shed, equipped with a belt conveyor, was built adjoining the downstream side of the ramp to the concrete plant. The plant itself -- two mixers, as we recall, furnished by Ginsberg & Horan, with automatic weighing equipment and overhead hoppers for the aggregate -- and a Rex concrete pump, driven by a gasoline engine, was installed starting about May 16th. Facilities were provided at Mattawamkeag for unloading bulk cement, a contract was made for trucking it, and the installation was ready for service on June 8th.

Meanwhile, work was going on within the coffer. The East Millinocket steel guy derrick was set up just upstream and about midway of the power house location. Cleaning, drilling, blasting and removal of ledge continued all over the area, to get down to grade. The pouring of the retaining wall, in sections and lifts went on, with some delays caused by material from the face of the cut washing down into the forms because of heavy rain. Form work in the power house proper was started around Nos. 3 and 4 draft

tubes, and the first concrete for the power house was poured at the location of No. 3 unit during the week of May 23d, from the temporary mixing plant. About the middle of June, one shovel was put back to work completing the removal of the overburden at the upper end of the upstream retaining wall, and as the upstream piers of Nos. 3 and 4 units were poured up to a considerable height, material removed was used for backfill between them, any excess going to Bartlett Brook, after which filling at this location was discontinued for the rest of the year; the highway was graded, gravelled, and a temporary surface was put on it. About 8,500 yards of the estimated total of 10,500 yards of fill had been placed. With the big concrete plant in operation, and the pump system allowing considerable flexibility, rapid progress was made on concrete for the power house, and the first pour on the main dam, under the fishway and log sluice, was made on June 23d. Special Hayden elbow draft tube forms were received between June 15th and July 15th, and all four were in place by July 18th. The steel draft tube liners were received on July 15th, moved to the job, and installation of No. 3 was begun at once.

The vertical, propeller type hydraulic turbines, Nos. 1 and 2 Kaplan variable pitch wheels rated 5,900 h.p. and Nos. 3 and 4 fixed blade, rated 6,250 h.p., to run at 171.4 r.p.m. at 39 ft. head, were furnished by I.P. Morris Company, of Philadelphia. The units at North Twin, built by the same company, had been described as being "Baldwin-Southwark", but there were several changes in the name of this company, and to avoid a lot of different designations, the Mattaceunk units were identified with the name of the original company, and so were those at North Twin after they went into service. Parts for three wheels began to arrive the middle of July. A side-track had been laid for the Company at

Mattawamkeag, and a heavy timber structure, with two eight-ton and two four-ton hoists, were set up over this to handle heavy equipment, which was stored at Mattawamkeag until needed. Early in July, excavation had been started for the short down-stream (tailrace) retaining wall at the east end of the power house, the material removed being used to backfill the partly completed upstream wall.

Outside of the early flooding of the coffer, and the difficulties due to bad weather conditions, no more than the usual trouble had been encountered up to this time except at the gravel plant at the Dickey pit. This plant was not producing satisfactory material, but after extensive rebuilding was turning out good aggregate by July 25th, by which time over 12,000 yards of concrete had been placed in the upstream retaining wall, the power house sub-structure, wheel pits and dam to a point under the log sluice, and 285 men were at work.

Surveying by the Spruce Wood Department for the relocation of Route 157 was started July 18, 1938, a Spruce Wood crew started cutting the right-of-way at once, and Company equipment was worked at intervals around Salmon Stream until the first of November, at which time the cutting and burning of the right-of-way had mostly been completed, and work was discontinued for the year.

Installation of the embedded parts of No. 1 turbine was started August 1st, and these parts of all four units were in place by the first week in September, at about which time excavation for the downstream retaining wall was completed, the ledge

had been cleaned, and formwork started. Excavation for the gate section, at the river end of the coffer, had also been completed, except for a roadway left for access to the upstream arm of the coffer. The tractors and earth-moving equipment began to wear out again, and these and the concrete pump had to be shut down and overhauled. While the embedded water wheel parts were being welded, a lot of fancy formwork was being done for the power house flumes, and concrete work was concentrated at the gate section and retaining walls, the upstream wall being completed on August 15th, and the tailrace wall on September 8th.

The excavation of keys in the rock at the gate section had disclosed an area with bad seams, and the ledge was grouted before the bottom of this part was poured. The heavy overburden on the hillside into which the power house foundation was cut required that a cut-off, or core wall, be built to ledge, hardpan or solid blue clay from the upstream corner of the power house at right angles to the retaining wall, to meet the contour at about El. 246, a distance of 110 feet. A trench six feet wide was excavated, and about 35 feet of concrete was poured in this, without forms, starting September 19th. This was a mean job of digging, much of it by hand, between sheeting placed to hold the sides of the cut. Forms were built above the 35-foot level, and the remaining height, 37 feet, was poured as a two-foot reinforced wall. This was knitting-work, and was not completed until the latter part of November. The first big pour on the power house flumes, 1,250 yards, was made in a continuous operation on September 22d and 23d and all four of these big pours, to rough power house floor level, were completed by October 25th. Concrete had been being placed all

summer off and on in the dam at the location of the fishway, log sluice and waste gate. We have been using the term "gate section" and we should explain this feature of the project here. There was only a single waste gate; a so-called "roller gate", sold by S. Morgan Smith Company and built by American Bridge Company; the second such installation east of the Mississippi River, the first being at Bellows Falls, Vermont. The gate was an internally-braced steel plate cylinder, 100 feet long and 15 feet in diameter, as scaled from current drawings, although the writer's memory says that it was slightly smaller. The ends of this cylinder rolled on tracks set in recesses in piers at either end of the gate openings, these recesses slanting, the top further downstream than the bottom, and it was slung at each end on a heavy roller chain, one end fixed, the other leading to the hoist mechanism. The gate opening itself was 90 feet wide between the piers, and was an ogee section of the dam, its crest at El. 221, nineteen feet below full pond height. An oak beam was embedded flush with the top of this. The gate cylinder sealed against the piers at its ends, but its lower side was about four feet above the crest of the gate opening. This gap was closed by a curved fin attached to and projecting from the projecting cylinder, seating against the oak sill when the gate was closed. To open the gate, the hoists pulled up the loose ends of the chains, actually rolling the cylinder up the tracks in the inclined recesses. The projecting fin turned upstream as the gate rolled, and was intended to break away ice which might have formed in front of it. The waste gate section of the dam was completed on October 16th, but the piers were not up to full height at this time. Part of the headwall in the power house

had been poured, and the guides for the S. Morgan Smith flume gates, the first used by the Company to be fitted with rollers for easier raising and lowering, had been set in place. Structural steel and electrical wiring materials was arriving; all the steel for the power house had been received, and erection of it had started on October 20th, the crane for the power house being set on its beams as soon as they were up. The gravel plant was shut down on October 22d. A garage had been built for the three tractors then on the job. The clearing of the flowage -- it was only a few years since the cutting of flowage had become law -- had been started by a Spruce Wood Department crew, and as of October 25th about 500 acres of flowage had been cut; 34,000 yards of concrete had been placed; columns and roof steel were up over Nos. 1 to 3 units, and 322 men were at work, on a 44-hour week, under the new labor law.

Brickwork was started on October 31, 1938, and preparations were made to start on the spillway section of the dam. This was to be built out from the west bank, the first 300 feet, more or less, in the dry, the next 150 feet or so, where the final closure was to be made, in a second coffer. This necessitated a bridge to the west shore. A road was built down onto the lower arm of No. 1 coffer, the tops of the piers were levelled to carry a road deck, and a line of rock filled cribs were started across the river from the end of the downstream arm, one of the cranes being moved down onto the deck to build the piers ahead of itself. At the same time, a large new pier was built inside the No. 1 coffer just above and beyond the far roller gate pier, to which it was connected with wales and sheeting in preparation for the construction



of a third coffer later. This was very carefully done, the sheeting being driven well into the clay at this point, and a concrete seal being poured on both sides of it, as No. 3 coffer would have to carry nearly a full head of water when built.

The second new bridge pier was under construction the first week in December. By that time the power house was entirely bricked in, the flume gates had been moved into the gate house, and pouring of the concrete roof deck had been started, in spite of continuous heavy rain -- over three inches in this week. On December 7th, the East Branch began to run wild, and the level of the river rose rapidly. Debris from the flowage, mixed with cake ice nearly a foot thick, running down along the end of No. 1 coffer, tore out the seal at the lower corner pier. and a bad leak developed. It could not be plugged, and to avoid a serious washout everything was moved out of the coffer, no small job, and it was flooded, with no loss of material, and little damage to equipment. It was ten days before the water went down. A sort of dyke of stone and boulders was then placed around the lower corner pier, a second row of sheeting was placed outside the first, and a new clay seal was placed. Pumping was begun on December 27th, and after plugging another leak the coffer was quickly unwatered and the crane was put back into it to remove the ice which had formed. It was then decided not to use the lower arm of the coffer as part of the bridge, but to build an entirely new bridge below it, although the first few piers of the coffer, starting at the east end, were utilized. It will be recalled that the lower arm of the coffer angled upstream, so that a new line of rock-filled cribs, 13 in all, could be built in a straight line from the lower east end of it and still land at the desired point on

the west shore, and work was started. The ice was all removed from the coffer by January 5, 1939, and grading below the power house was begun, but right at that time the weather turned very cold, anchor ice formed as usual and plugged the river below the coffer, which developed a number of leaks and flooded again. This time it was decided to give up and leave it flooded until spring. Work was continued on the new bridge, however. the cribs being ballasted and heavy stringers laid between them and planked over. By January 28th, the bridge was about half completed, the roof was on the power house, the windows were glazed and the doors hung; all possible forms, staging and so on had been removed, construction equipment no longer required was moved off the job, the clearing of the flowage, 829 acres, had been completed and 129 acres had been cut on the transmission line. Except for washing down the brick, work on the power house ceased, and the crew was down to 35 men.

The bridge was finished on February 23d. Two shovels and a crane were moved to the west bank and started building a road about 300 feet long up to where the upstream arm of No. 2 coffer was to come ashore. Meanwhile the pulpwood and other merchantable timber cut on the flowage had been hauled, the rest burned. Turbine parts, flume gate hoists, the log sluice gate and other equipment had been coming in, and a supply of logs for No. 2 coffer had been cut and piled on the west bank. The first pier of this coffer, which was to extend 125 feet or so into the river, and about twice that distance up and down stream, was started adjacent to the end of the bridge the day the latter was finished. Excavation was immediately started along the west shore line for a

diversion channel which would later carry the flow of the river into the openings left for the final closure.

By the middle of March, construction of the piers for both the upstream and downstream arms of the No. 2 coffer was in full swing, and excavation to ledge had been started on the west shore, working three shifts. It was mud time again, and corduroy had to be laid under the shovels and on the truck roads to the disposal area to keep the equipment from sinking into the clay. It was actually necessary to keep a crew of several men cutting logs and laying corduroy while dynamite had to be used to loosen the frozen material in the excavation area. This was a repeat of the previous year, with equipment breaking down and being repaired -- one shovel operated for quite a while with a dipper stick made of hardwood right on the job. Along with these repairs, the equipment to be used during the coming summer was overhauled. Late in March, digging was started in what was called the "spillway", lowering the grade in a triangular area below the extreme west end of the dam. The ice in the river had begun to break up, and it was necessary to have several men, including a dynamite man, patrol the bridge night and day to watch for jams between the piers, and occasionally to blow them out.

The piers for No. 2 coffer were completed by the end of March, and sheeting was started. The ice within the coffer area was blasted, and as much of it as possible was floated out before the lower arm of the coffer was closed. The sheeting and clay seal were placed by April 29th, and heavy boulders were laid around the outside of the upstream corner pier. Excavation had continued on the line of the dam on the west shore beyond the coffer. There was

almost steady rain through April, making a number of problems. The ground got so bad on the west shore that by the middle of the month the trucks could not get out of the excavation and hand digging was started, the material removed being hoisted up to the trucks in scale boxes. Some of it was so soft that it was possible to pump it out. The banks at the far end of the excavation caved in and slid down into the hole, and the material in this slide was so soupy that it had to be left to dry out before it could be handled. The ice in the East Branch broke up the last week in April and came down in great masses, undermining all the bridge piers in the channel between the cofferdams so badly that they tipped upstream and were unsafe for anything but foot traffic. However, blasting of ledge had been started around the middle of the month. It was found that the rock was of much poorer quality than expected; full of clay seams; and as it turned out this condition existed all the way across to the roller gate, requiring extensive pressure grouting, 10-foot deep holes, 8 feet apart, being drilled for this purpose along the entire length of the dam under the upstream and downstream edges of the base. However, to conclude this period, formwork was started the last week in April in an area near the diversion channel at the natural west shore of the river, in which excavation had been carried on from time to time. The big concrete plant and the gravel plant were made ready for use, and a small mixing plant was set up on the west bank, the equipment having been taken across before the bridge became unsafe. The crew at this time consisted of 178 men.

During the first week in May, work was resumed at the power house, and a survey crew went back on the transmission line to

establish locations for the steel towers. Incidentally, this line was laid out for two sets of towers, in case an additional circuit should be required later, but only one line was to be installed in this job. A row of test pits was started about 150 feet west of the west end of the dam, to determine the slope of the ledge. A cable was strung across between No. 1 and 2 cofferdams to carry an air line from the big compressor to the west shore, as the portable unit being used did not have sufficient capacity.

It will be remembered that No. 1 cofferdam had been left flooded during the winter. On May 8th, without any warning, two of the piers on the upstream arm of this cofferdam blew; the water rushed through the power house flumes, and before the emergency gate on the lower arm could be opened the sheeting was forced off between two of the piers on that side, and water ran straight through. Efforts had been made to pump down the new No. 2 cofferdam, but the seal would not hold, and in view of what had happened to No. 1, the cribs of the lower and river arms were sheeted on the inside, and a clay seal was puddled between the two walls. This was successful, and No. 2 cofferdam was pumped down and easily kept dry. Piles were driven around the bridge piers, the tops were levelled up and the deck was replaced, but it was the end of May before the bridge was restored to use. Two new cribs were built on shore and floated down to replace the two that had gone out of No. 1 cofferdam. These were loaded, and the sheeting was replaced, but it was found that there were numerous boils that had to be sealed. There was a bad one at the upstream corner pier, where the force of the current was

greatest. A second row of sheeting failed to hold, and steel piling had to be driven around the pier outside of this, but the coffer was finally tight, and was pumped down again on June 21st.

The first concrete was placed in the dam structure on the west bank on June 6th. This was poured from the temporary plant. The pipe from the pump at the main plant had been run across, but it was 845 feet long, and there was some doubt as to whether the concrete would flow that far. However, pumping was tried on June 9th, and worked very well. Things began to go better. Excavation, cleaning and grouting ledge, forming and pouring concrete on the west side of the river and in No. 2 coffer proceeded smoothly during the three-month period up to the end of July, at which time this part of the dam, about 450 feet long, was completed, except for the west abutment and retaining walls. Three 25-foot wide openings, the first about 300 feet from the west end of the dam, separated by 25-foot sections of completed concrete, were left as water passages for final closure. These openings were fitted with heavy timber frames on the upstream side, to make bulkheads by putting in stoplogs. No. 2 coffer was then flooded, and the sheeting was pulled from the downstream arm. The diversion channel had not been completed, and little water was passing through the openings at that time. Excavation for this section of the dam, and in the diversion channel, had amounted to almost exactly 50,000 yards, of which about 12,000 was rock. The progress of concrete work was plotted daily by the writer on a chart taped to the wall over his desk in William O. McKay's office, and the latter many times in later years joked about "you, on your bony old knees up on that desk coloring the concrete on the Mattaceunk chart." Incidentally,

while most large construction jobs resemble organized chaos, this one, at this point in time, while well under control, looked like a disaster, with bridge and coffer piers tipped crazily, propped up with piles at all angles; steel and wood sheeting sticking up irregularly where patches had been made; air pipe, water pipe, concrete pipe and wire strung all over the place; equipment spread out all the way from the highway on the east shore to the woods on the west shore; logs, boulders and debris everywhere -- there was no time to clean up then -- and the river rushing through a hole right in the middle of the whole works.

Elsewhere, everything went into high gear in the spring of 1939. A road was started up the transmission line, using material from the excavation on the west bank. The survey for tower locations and the figuring of side-hill extensions was finished by the middle of June, but Oscar Nickerson was not satisfied, and some changes had to be made around Rockabema to meet his wishes. Foundations for two river crossing towers, one for future use, were started on the power house side on June 21st. Unlike the situation at North Twin, there had been a lot of argument about the relative advantages of steel versus wood for this line, and when steel had finally been decided upon, it had been most difficult to get William A. Whitcomb to approve a design for the towers. However, he finally settled upon one submitted by the American Bridge Company. About the middle of May, a crew started work again around the site of the new bridge at Salmon Stream and on a culvert at Little Salmon Stream. The culvert was finished by July 18th, and by the end of that month the abutments of the Salmon Stream bridge were ready for the girders, the stream was

diverted into its new course, and a temporary bridge had been built to carry the traffic.

As we noted earlier, William A. Whitcomb was doubtful about the quality of the material in the knoll east of the power house. Frank Bowler was sure that there was no danger of a blow there such as had occurred at Rockabema, in spite of the fact that the ledge was so far down, but the President was not convinced. For this reason, two pieces of steel piling had been set into the end of the core wall, and on June 3d the driving of 60-foot steel sheeting, hooked on to these and running in a straight line eastward was started. William A. Whitcomb wanted this carried right across the highway and some uncertain distance beyond, but when 33 feet had been driven Frank Bowler decided that it was not necessary to go any further. More on this later.

The job of rebuilding this highway, from Mattaceunk to a point a mile or so beyond Salmon Stream was let to Wyman & Simpson, and early in June a fleet of trucks began hauling fill from Magoon's pit, two miles downriver, to Bartlett Brook. The Company crew continued work on the Salmon Stream bridge, which was finished about August 19th. Wyman & Simpson's road job was wound up late in October, and the relocation of Bangor Hydro and telephone lines was completed about the same time. On the other side of the river, a section of road and a new bridge were required at Pattagumpus Stream. Work was started on this late in July, equipment having been moved to the site, and a temporary bridge constructed by the end of the month. This was a fair-sized job, and was not finished until the middle of October. At about this late point, it was discovered that there were some pieces of land, parts of which would



be flowed or crossed by the transmission line which had been understood to have been included in the purchase from Charles Mullen,      were not. William Hilton went to work on these at once, and was able to make quick and reasonable deals with all the owners but one, who held out, knowing that he had the Company over a barrel, but eventually settled for about five times what the property was worth.

At the power house, the first job, upon resumption of work in 1939, was the building of a retaining wall around the main entrance, which was downstream of and considerably below the top of the core wall. Inside concrete work for the switch gallery and the like was started early in June, and the placing of conduit was begun about the middle of that month, switchgear beginning to go in at the same time. The eight flume gates, two for each unit, raised and lowered by two travelling chain hoists, were in place by early July, and a crew from the American Bridge Company started on the roller gate about July 1st. At the same time, the water wheel erectors from I.P. Morris Co. began their work, starting with Nos. 1 and 2 Kaplan units. The trash racks were all in place the first week in July, and the travelling power trash rake was installed. The mess left by the flooding of the coffer was cleaned out of the flumes and wheel pits, and by the end of July Nos. 1 and 2 flumes were smoothed up and waterproofed, the roller gate was erected, and the towers for the river crossing were up on both shores.

Back on the river, work was started on No. 3 coffer, connecting Nos. 1 and 2, on June 21st. The upstream arm of this coffer ran

from the river end upper corner pier of No. 2 easterly straight across the main channel of the river to a point about 100 feet above and a little west of the big pier that had been built inside No. 1. The short easterly arm angled down to this pier, with one new intermediate crib between. All these new piers were larger and several feet higher than those previously built. The lower arm of No. 3 coffer utilized a reinforced bridge pier just below the end section of the dam built out from the west shore. From this, the west arm ran to the dam, and thence upstream inside the old No. 2 to the starting point, the downstream arm back to the downstream corner of No. 1, the last section of the completed westerly part of the dam of course projecting into the new coffer. These cribs were built along the shore, floated into place, and then ballasted and built up to El. 214. An anchor pier, not part of any coffer, was built in the channel to assist in lowering the new cribs into place. Steel sheeting was used on the west arm and the upstream arm, wooden sheeting on the rest. This was the critical coffer, and great care was used in placing the seals all around. Two westerly bridge piers which were in the diversion channel were removed, and the bridge was put on trestle bents in this area to allow free flow of water. At the end of July, most of the cribs had been placed, sheeting was being driven, the bridge bents were set up, the sheeting had been pulled from the upstream arm of No. 2 coffer, allowing part of the flow of the river to run through the openings in the dam, and every available man and piece of equipment were being worked to complete the excavation at the lower end of the diversion channel, where very hard rock had been encountered.

The upstream arm of No. 3 coffer was closed on August 12th, the upstream piers of the old No. 2 were demolished, a reef of ledge which had been under one of them and was an obstruction to flow was dynamited, and all the water was turned through the three openings in the dam and down the diversion channel. On this same day, the sheeting was pulled on the upstream arm of the old No. 1 coffer, and water was let into the forebay, several of the river end piers of this coffer being removed at the same time. On August 16th, the downstream arm of No. 3 was closed, and it was pumped down in 24 hours, while excavation within it was started with draglines. A week later, part of the east end of the old No. 2 was removed, so that Nos. 1 and 3 were now one huge coffer. Three shovels were put into the No. 3 area, and by September 6th shovel excavation was completed, as the ledge was high in that area, and hand cleaning and grouting were started. A total of 66,000 yards; which includes the figures previously given; 53,000 yards of earth and 13,000 yards of ledge, were removed in 1939 excavation. Grout holes were spaced in this area the same as they had been under the west section of the dam, but the ledge was much better, and they would take considerably less grout. Formwork was started on September 7th, and the first concrete was poured on September 12th. This work continued without a hitch, and this entire section of the dam, some 250 feet, was completed on October 25th. At this point the big concrete plant and its cribwork support were removed to allow grading. Back in what had been No. 1 coffer, excavation for the tailrace, the channel below the fishway and log sluice, and for the roller gate apron, mostly overburden, had started about the middle of July, the material being hoisted up out of

the hole in scale boxes. This digging was finished by the middle of September. The islands in the tailrace were not made at this time. These were the result of excavation in 1949 or 1950 when cuts were made through a bar which had been formed by material washed down by the discharge from the roller gate. Pouring of the apron below the roller gate was also finished in September.

Over on the transmission line, the pouring of footings or the setting of ledge anchors, and the placing of stub angles had been started about the end of July, as soon as the crossing towers were up. The tower sections had been received and distributed along the line by the middle of August, those to be placed between East Millinocket and Dolby being ferried across the river on two batteaux lashed together. The first towers, starting at the Mattaceunk end, went up during the week of August 19th, two American Bridge crews working on this job, and the structures were all up on October 21st. Stringing of wire -- 3 copper conductors and two steel ground wires -- was started September 28th, and was completed October 25th and connected to the new 6,600-volt step-down transformers at East Millinocket, and to the 33,000-volt station at Mattaceunk. By November 2d, the crossing at Dolby was completed also, and the new power station was tied in to the Millinocket mill through the existing line from that point.

Now back again to the power house. Nos. 1 and 2 turbines were installed by August 12th, when it was found that there was insufficient clearance between the tips of the runner blades and the throat rings on both units. They had to be dismantled, the blades were ground off, and both were back in place on August 26th.

Installation of the 6900 volt, 4800 K.W. General Electric 40 cycle generators was started the same day. The delay on the turbines had put unmerciful pressure on the generator installation, because closure of the dam could not begin until water could be put through the wheels, it not being safe to count on the roller gate to pass enough water to hold the head. While the generators were being installed, and starting the first week in October, stoplogs were placed in No. 2 tailrace flume, the big coffer which had been No. 1 and No. 3 was flooded, and removal of the piers and sheeting was begun. Some time during the summer, the slide at the west end of the dam had been cleaned out, the abutment was built, and about 38 feet of steel piling was driven westward from this to a point where the ledge was at El. 240, full pond height with four feet of flashboards which had been placed on the spillway as each section of the dam was completed.

On October 14th, the removal of the parts of the old coffer downstream from the dam and power house was started, the heavy squared timbers being salvaged for stoplogs for the closures. There had been a lot of rain again, and the flow of the river was high. On October 27th, Nos. 3 and 4 gates in the power house were opened, allowing water to pass through these flumes. At the same time, the stoplogs were dropped into the bulkheads as the water rose. In exactly 12 hours it had reached El. 221, and was beginning to go through the roller gate, rising to El. 227 before it evened out. On October 29th, with the stoplogs at El. 228, a clay and sandbag dyke was put up below the openings in the dam, and pumping was started. At this same time, besides the electrical and finish work going on inside the power house, the embankment

between the upstream retaining wall and the core wall was being finished, the office building had been moved, so that the place where it had stood could be graded; the slope below the power house was being trimmed, transformer structure fenced off, and so on. The crew at this time was 335 men.

It had been possible to start work on the closure because No. 1 unit was started up on October 28th, drying out, and on November 1, 1939 was opened up to full gate, generating 3,600 K.W. at the head available. Form work for the first lift in the western opening was built, but the water began to rise again, driving the crew out of the coffer. The discharge from the roller gate took out the whole center section of the bridge, which was abandoned, and the east end piers were torn down and removed. However, the coffer was pumped down again, and pouring of concrete was started on November 5th. The big mixing plant having been removed, concrete was pumped from a temporary mixer set-up on the east shore, and swung in buckets from the mixer on the west shore, where cement, stone and sand had been stockpiled. The last of the three openings was up to full height on November 21st, the flashboards were installed on the closure sections, and the dam was completed. Meanwhile, No. 2 unit had been turned over on November 2d, drying out, and was put on the line November 7th, at 28 feet of head. Neither the turbine nor the generator for No. 3 unit had been received at this time, but the fishway and log sluice, on which progress has not been covered in detail, was completed.

William A. Whitcomb was not pleased with Frank Bowler's cut-off at the eastern end of the power house. Beyond the high-

way, a hollow sloped away from the river toward the valley of Bartlett Brook, and he was sure that this constituted a hazard. Early in September a road had been cut into this area, a line was laid out, a shovel was moved across the highway, and a dyke was built from about 1,900 yards of material from the grading around the power house. This was of course not what he wanted, and near the end of the job, in late November and early December, about 350 feet of steel piling was driven in this dyke, starting at the easterly end, penetrating from 12 to 28 feet, all but the last 40 feet being down to ledge, and he was satisfied. This piling did not join up with that driven at the end of the core wall, but the interval, under the highway, appeared to him to be safe.

There were a lot of odds and ends of work in the power house which were finished by Christmas. The gravel plant had been shut down about the middle of November, with enough material stockpiled to finish the job. Most of the temporary buildings were sold, the office being moved down about 1200 feet and across the highway and made into a dwelling house by one of the station operators. What was not sold was demolished. Everything on the west side of the river was ferried across, and a footbridge that had been built across the dam was removed. All construction plant not needed for the work still to be done was dismantled and shipped to various points for storage, or was sold. Most of the grading was completed, and sod had been placed in some locations. All the old coffers and the remains of the bridge were cleared out, usable material was salvaged, and the fill from the cribs was distributed over the river bed.

Most of the job was done, but work on the Mattaceunk project straggled on over most of the next two years. The U.S.G.S. people wanted a new stream gauging station below the dam, and the Company agreed to put this in, dug the well and piped it to the river, and built a small concrete building along with A-frame supports on each side of the river for a cable furnished by Bangor Hydro as its contribution. This work was finished late in December, 1939. A number of buildings on low ground on both sides of the river at the old ferry location in Medway were moved to higher levels. This also was done in December. A brick well-house had been built, and a permanent pump installation was made and piped to the station late in 1939. At Christmas time of that year, about 100 men were working, but the Deutschbein crew was all laid off by the end of the year.

The dangerous approaches to the old bridge across the East Branch at Medway have been noted. The State Highway Department's plans for a new bridge at this point were hastened by the creation of the Mattaceunk flowage, which rendered the old structure unsafe. As the Company had caused the flowage, it contributed toward the cost of the new bridge, which was built about a quarter of a mile above the old one. We have not been able to determine exactly what Great Northern's participation was, but it paid for the construction of the approaches and possibly put in something toward the cost of the abutments and the two river piers. The job was let to Wyman & Simpson. The approaches were started about the middle of November, 1939, but work was discontinued in January, 1940 for the rest of the winter. The foundation work, involving four cofferdams, was also started in December, 1939. This continued right through the winter, and except for a little to be



done on the backwalls, was finished on March 11, 1940. The Phoenix Bridge Company began to put up the steel truss bridge in May. Construction of the approaches was resumed at the same time, but had to be held up again the middle of June, because the erection of the bridge was so far behind; nothing more was done until the middle of August, and it was late in October, 1940, before the bridge could be put into use.

We may as well complete the story of the Mattaceunk station, although this means reaching ahead a year or two, so let us go back to January, 1940. With only two wheels running, it was necessary to waste a lot of water. When the flow began to drop with cold weather and an attempt was made to close the roller gate, it was found that the ends of the drum were frozen to the piers. Temporary electric heaters were installed, and the drum was thawed out enough so that it could be nearly closed, with some small damage to the projecting fin. This was braced, and permanent heating elements were installed in March. The equipment for No. 3 generating unit arrived late in January. Stop-logs were placed in the tailrace, the flume was pumped down, and installation started immediately. No trouble was experienced, and No. 3 unit was on the line on March 5, 1940. Just before this unit went into service, it was found that frost action had put a bad strain on the underground cables between the power house and the transformer station, and a section of the bank had to be dug up and the cables exposed to relieve this. In May, four rows of wooden piles were driven along the cables to prevent movement, and they were carefully buried again. Grading and rip-rap on the easterly bank above and below the power house was completed during the summer.

permanent yard lighting was installed. the roadways were gravelled, grass areas were loamed and seeded, and Charlie Burr, the Superintendent of the East Millinocket mill, had a grove of spruce seedlings set out along the highway below the main entrance. Some trouble had been experienced the previous winter with the air line along the flashboards, and this was corrected. The east bank, below the tailrace wall, scoured out very badly in the spring, and after much discussion of a cheap way to prevent this from happening again, it was decided to try crib-work made of precast reinforced concrete ties, held together by steel pipe. Work on this was started by a Deutschbein crew late in July. The first ties were made at the East Millinocket mill, but this operation was transferred to the site within a few weeks. Two cofferdams were built, about 250 feet of this cribwork was placed, loaded with stone and backfilled, the area was cleaned up and graded, and late in October, 1940, the roads were surfaced.

At this point, the station, essentially completed, was a pretty sight, as seen from the Mullen flat, with the pale, rather graceful dam crowned by gray-painted flashboards, straight as railroad tracks, the great aluminum-coated roller gate gleaming in the sunlight and the simple lines of the clean red brick station contrasting with the newly-painted steel of the log sluice, fishway and bridge to the far gate pier, the freshly-trimmed banks with their neat rip-rap, and the near white of the new concrete cribwork; the shining copper catenary of the river crossing and the bright complexity of the crossing towers low against the sky.

There remained one more step, the installation of No. 4 unit. This did not start until October, 1941, when a diver was sent into

the flume to look for obstructions, and found a big piece of angle-iron lodged in the stoplog opening at the tailrace. By this time, due to the lend-lease program, delivery of equipment was subject to long delay, and from this time until the end of the year the only work done was the installation of additional transformers and switchgear. The turbine was finally received early in January, 1942, but as General Electric was held up for material for the generator, only intermittent electrical work was done until the end of March. The generators were of welded steel construction, and at this point, steel plate was the problem. However, some time in the spring, General Electric was able to get some of the plate salvaged from the ill-fated Tacoma Narrows suspension bridge, and the writer gave them permission to use some of it, on the guarantee that it had not been strained, and on the strength of this, installation of the turbine was started on May 23d. The generator was received about July 1st, No. 4 unit went into service on August 24, 1942, and except for cleaning up after this work, the Mattaceunk station, rated 24,000 KVA was completed.

We now have to go back again to the year 1938. In 1937, Canadian production of newsprint reached 95 percent of capacity. Great Northern ran full. The weakening economy of the fall of that year was not noticeable in the newsprint industry, as during the fall months the customers loaded up with paper in anticipation of the higher price. By early in 1938, however, the slump had become very real, and with this backlog of inventory, orders for newsprint suddenly began to be cancelled as if the publishing of newspapers was going out of style. Great Northern's operating ratio dropped almost in a matter of weeks to a point lower than at any time during

the great depression of a few years before. This very low rate of operation lasted for only a short period, but production was curtailed to some degree until after the middle of the year, and the Company rescinded its \$2.00 price advance for the last six months, extending the \$48.00 price to December 31st. While machine down time was equivalent to about 25 days' production, Great Northern, because of its lower price, got the orders as inventories were worked off, and its business improved rapidly. Much of the loss was made up by crowding everything to the limit during the latter part of the year, aided by good water conditions, some newsprint was made at the Madison mill, and total production for the year came out at about 95 percent of capacity. Such was the unexpected but fortunate result of the Company's price policy. However, increased costs during the periods of curtailment ate up the price increase, and there was no improvement in earnings over the previous year. The Canadian mills operated at an average of about 64 percent of capacity for the year.

It is interesting to note that a paper on the Great Northern Paper Company, dated November 7, 1938, identified only as being prepared by "An Analyst for Insurance Groups", lays out neatly and concisely the developments in the newsprint industry, going back to the 1920's; the reasons for these developments, including the relationship between the Company and the Canadian industry, the part taken by the Provincial governments in establishing the Canadian position; the Company's outstanding position, its favored status with the publishers and the policies which produced it, its financial structure and the price picture, follows with astonishing precision the story as we have told it from our own

research. It also includes a short but very accurate briefing on the Company's properties, financial standing and past earnings, and a short but highly inaccurate forecast about its possible earnings, the probable developments in the newsprint business, and the future of the incipient industry in the South, and ends up by quoting from one of the financial services, which was negative on the purchase of Great Northern stock at the current price of \$39, on the ground that this price discounted a probable earnings improvement in 1939, and the poor marketability of the stock -- the average monthly turnover on the Curb Exchange for the last two years having been less than 2,000 shares. Whoever this person may have been, he was an excellent researcher, but a poor prophet.

Mention of the Company's stock brings to mind an amusing little episode which occurred in this year, when the Treasurer discovered some time in the spring that one Francis H. Kendall, of Boston, had not cashed a dividend check for seven years, for whatever reasons of his own he may have had, and it took until November and threat of a stop order and limitation claim to get him to deposit them -- and he had them all but two or three, for which new ones were issued.

There were a few more developments in 1938, apart from those which we have noted or will cover in other parts of our story. Unlike the funds for the North Twin job, money for the Mattaceunk project was doled out to cover work to be done in specific time periods. The initial appropriation of \$200,000 was sufficient to carry the job to May 1, 1938, and another \$375,000 was voted in April to allow work to continue to September 1st. This was in

addition to two small appropriations for the purchase of some land for the transmission line and flowage, and the lot in Medway containing the gravel deposit, which was bought for taxes. In June, another \$50,000 was voted for clearing the flowage, and in August, \$475,000 was turned loose to cover work to the end of the year. In November, it was reported that just over \$1,000,000 had been spent, and \$350,000 more was allowed for anticipated construction costs up to May 1, 1939. Two more four-foot grinders, with motors, an additional outside groundwood storage tank and some auxilliary equipment were authorized for Millinocket in anticipation of the new supply of power which would be forthcoming.

The decline in the price of the Company's stock in this year has been noted, and in an unprecedented action, the cost of the shares bought by a number of employees at \$60 was reduced to \$50 by simply crediting each account with \$10 a share, and the interest rate on these loans was set at 2 percent. These people had not grieved, and this action was voluntary, but the writer is quite sure that it grew out of the complaint of one other important employee, who had bought very early at a still higher price, and whose purchase agreement had been renegotiated. At this same time, the salary of the Vice-President and Manager of Sales was raised to \$14,400.

Some additional land was given to the Town of Millinocket for an extension to the cemeteries. The Boston Transcript folded, and \$34,000 of its debt of some \$44,000 was written off. A balance of \$112,000 on five timberland purchases on long-term agreements was prepaid. One of these purchases, the writer recalls,

was from a lady, the last of several heirs to an estate. The others, one at a time, as they needed money, had sold their undivided interests to the Company. These were not much good without her share, but she had held out against all offers for quite a while, at one point agreeing to sell her land only on condition that the trees on it not be cut, but she had eventually capitulated. By the end of 1938, the Company's timberland holdings had grown to approximately 1,800,000 acres.

And so, as far as this part of our story is concerned, we come to the year 1939, when the mess which had been stewing all over the world for the last six years or more came to a boil in Europe, and World War II broke out in earnest, making mincemeat of the plans of mice, of men and of the Great Northern Paper Company.