

Forest History Foundation, Inc.  
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ORAL HISTORY INTERVIEW

with

Walter Neils  
Libby, Montana  
August 19, 1953

by John Larson

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Interview with  
WALTER NEILS  
of the J. Neils Lumber Company  
Libby, Montana  
August 19, 1953  
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My father started in the lumber business the year I was born, 1888. He was living at Sauk Rapids, Minnesota, at the time and was in business with his older brother in a hardware store. He apparently decided the hardware business at Sauk Rapids would not support two families and therefore suggested to his brother that he buy him out or my father would buy the brother out. The older brother decided to buy my father out, and that's how he happened to start in the lumber business. While he was still in company with his brother, they frequently had to take in logs as payment for hardware bills. They had these logs sawed into lumber at the local sawmill and then sold the lumber. I don't recall whether it was right at the store, but I presume they hauled their lumber from the sawmill to the store and then sold it.

When my father went into the lumber business he was in partnership with three people - himself, and a man by the name of Thayer (I don't recall his first name), and a man by the name of Buckman, who was a state senator. My father looked after the office management and did all the bookkeeping and correspondence. Mr. Thayer ran the sawmill and Mr. Buckman did the selling. The partnership did not do so well the first year - I'll skip the reasons. My father and Mr. Thayer bought out Mr. Buckman and then ran the partnership under the name of Thayer and Neils.

All the logs that we had came down the Mississippi River and were hand stamped "T cross N", meaning Thayer and Neils. The logs came down the Mississippi River with the general drive. I think it was the Rum River Boom Company that had charge of driving all the logs for all the companies along the Mississippi River. We had to catch our logs out of the jam that came down the Mississippi River, and of course we could not inspect every log that went by, and consequently some of our logs were left and went down the river as far as Minneapolis. Thayer-Neils made money on the lumber that they sawed at Sauk Rapids; on the other hand, they lost money on the logs that went by and were picked up by mills in Minneapolis, who apparently paid them whatever they chose to do, resulting in quite a loss on those particular logs.

In 1893, the year of the big panic, Thayer-Neils did not turn a wheel. However, in '94 they had a good operation, but in the spring of 1895 freshet high water in the Mississippi River washed out the boom at

Sauk Rapids. I do not recall exactly whether it was 1894 or whether it was in the spring of 1895; I think it was the latter year. They decided then that they would quit the partnership. Mr. Thayer had enough of the lumber business and moved to Riverside, California.

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Father conceived the idea that if he could interest someone in Minneapolis that had an operation there to take care of the logs that went by our mill at Sauk Rapids, that the mill at Sauk Rapids would be a profitable proposition. He therefore contacted Mr. T. H. Shevlin, and the present J. Neils Lumber Company was formed as a result of that in 1895. As soon as they started operating the business expanded, and new improvements were put into the sawmill. They changed from the old circular saw to a band mill, and everyone thought that that was a marvelous change in the direction of saving sawdust, making more lumber instead of so much sawdust. The next big change, I think, was the introduction of the Hill nigger. I think that was the name of the man that invented it. The Hill nigger is still in use in most sawmills that do not have large timber where they use Simonson Turners or other equipment of that type. Some mills have both niggers and log turners. These improvements were introduced in the Sauk Rapids mill before we started an operation at Cass Lake.

In the fall of 1899 my father went to Cass Lake, Minnesota, to look over the opportunities there for building another sawmill. This was all Indian Reservation, but the Government decided to sell one section of land at the present site of the town of Cass Lake. My father bought forty acres, part of which was a swamp between the present Great Northern and Soo Line bridges. The mill there was built on pilings and when they started the engine that was to drive the mill, it shook the whole swamp for about two hundred yards around. I distinctly remember the pulsation from the forward steam engine. You could feel it in the machine shop. You could even feel it up as far as our boat house where we kept our small boats.

We continued the sawmill operation at Sauk Rapids for about ten years, after starting at Cass Lake. Surplus logs that were developed at Cass Lake were shipped over the Great Northern in solid log trains to Sauk Rapids and were cut into lumber there. It was not feasible to ship or to transport logs by water from Cass Lake to Sauk Rapids, as there were too many lakes to be crossed and river conditions between Cass Lake and Winnibigoshish were such that it would have been impractical to drive logs over that route.

I worked in the plant during summer vacations. My first job was piling wood. I distinctly remember that I worked ten hours a day and at the end of the day I'd earned \$1.25. Later during summer vacations I tallied lumber for one of the graders that shipped out five-quarter and thicker white pine shop and also five-quarter clear Norway. The latter item was usually shipped to the Wabash Screen Door Company at Minneapolis. During the second summer while I was tallying, the lumber grader

quit to go to the harvest fields in North Dakota where they were paying much higher wages apparently than the lumber industry in Minnesota could afford to pay. An inspector from the buying companies usually was on the pile to watch the grade, and after the regular lumber grader for the J. Neils Lumber Company quit, the inspector suggested to my father that he let me try it. I had watched the grader carefully during all the time that I was tallying for him and knew the contents in board feet of every width and length, and also had a good knowledge of the grades. After my father had watched my grading for an hour, he said, "the job is yours," and I received an increase in pay of 2-1/2 cents an hour. The increase looked very good to a boy going to college.

The shop lumber, as a rule, was shipped in the rough, which is different from the practice out West. The grades of shop were very similar to what they are today. There have been a few changes made in cutting sizes, but generally speaking the grade is about the same as it was at that time. The reason it was not finished in the East and was finished in the West was the difference in freight rates - the fact that a finished board is cheaper to ship than a rough board. Freight from out West is a big item, while freight from Cass Lake to the consuming points was usually less than 20 cents per hundred pounds.

After finishing school, I worked in the office until it was time to start logging operations, and I was then assigned the job of camp clerk in one of our logging operations. I moved into the camp in September of 1908 - and did not come home until Christmas and then only for two days. I immediately went back to the camp and did not come out again until break-up time in the spring, which was about the last week in March. I kept time for the men, sold them their Peerless and Copenhagen snuff, and usually their wearing apparel, shirts and pants.

(Did you call that building the wanigan or not?)

No, the wanigan was a boat used on a drive. My recollection is that a wanigan always was considered to be a scow that was covered in which the men that worked on a log drive slept and ate, and where they were able to buy the supplies that they needed.

Lumber from our Cass Lake operations was shipped to southern Minnesota, Iowa, the Dakotas, Illinois, and some of the white pine was shipped East. Chicago and Milwaukee always were big markets for our lumber, but the state of Iowa, I think, took more than any other state. Besides white pine, we had Norway pine and a little tamarack. The latter species we'd usually saw into dimension and plankage. Norway was used for dimension and boards. The clear Norway was usually cut into five-quarter or screen stocks. We also sawed a lot of the Norway into dimen-

sions 22-28 long. At one time there was a great demand for long dimension in both Milwaukee and Chicago, and of course we took advantage of that.

The transportation of logs in our operation was almost entirely by sleighs. These were drawn by four horse teams on roads that were especially prepared for sleigh hauls. We had a "rutter" that cut ruts in the ground or swamps that they crossed. For hauling, these ruts and roads were iced so that we had practically an iced road from the woods down to our log landings, which were as a rule on the ice of the lakes north of Cass Lake. In the early winter we could haul only small loads of logs, as the ice was not heavy enough to carry the larger loads that we hauled when the ice became three feet thick or more. Usually the first loads to come onto the ice were small, and when the teamster came to the edge of the lake, he'd unhitch his horses and hitch them onto the end of the tongue so that if the load did break through the ice, the horses would not go with it. The "road monkey" looked after haying the hills. Whenever a load of logs had to come down an incline, the road monkey would run ahead of the load with an armful of hay and throw handfuls of it into the ruts to slow the load as it came down.

(In your early days, say before 1905, or so, did you ever hear Paul Bunyan stories?)

I don't recall I heard Paul Bunyan stories until I began grading lumber. That was about in 1906 or '07.

(What is your own feeling about the Paul Bunyan stories? Do you feel that they go back earlier than that?)

I've never given that a thought. They go back as far as I like to remember.

In 1905 my father and Mr. Shevlin began to interest themselves in timber in the West. They began purchasing timber land in Flathead County, Montana, thinking that this was the closest, available supply to the consuming area in the East. While we were operating at Cass Lake, North Dakota took a lot of our lumber, and we thought it would continue to take lumber from us if we had a plant in the West. The freight rates at that time were very favorable from Montana to North Dakota. In later years freight rates from the producing area in the West were grouped, and we therefore lost a lot of our freight differential. Losing this, of course, made quite a difference in the value of the mixed species in Montana. In the year 1905, Mr. George W. Millett, who looked after our timber in Minnesota, was sent to Kalispell, Montana, to pick up timber claims and buy timber lands from homesteaders. We continued buying timber for a number of years - I think until the depression hit in the fall of 1907. Very little timber was purchased in 1908. I don't recall exactly how much we bought in the succeeding years.



However, we had enough in the vicinity of Libby, Montana, to interest us in the sawmill that was being operated at that time under the name of the Dawson Lumber Company. This mill was purchased in 1911, and then was operated by us as the Libby Lumber Company, which was a subsidiary, entirely owned by the J. Neils Lumber Company. The J. Neils Lumber Company was still owned at that time by the Neils' interest and the Shevlin's interests. We actually began operating here in 1911. The Anaconda Copper Mining Company owned timber lands that had been picked up from the Northern Pacific land grant intermingled with ours, and in 1914 we made a trade with them, they taking the timber in the Fisher River area and we taking the timber in the Libby Creek drainage. We also kept the timber lands that we had north of Columbia Falls and east of Kalispell, and also the timber on the Tobacco River around Eureka, Montana. We kept our markets in North Dakota and, of course, developed markets in eastern Montana as this area was rapidly being settled and built up.

In 1914 my father and the Shevlin interests decided to divide up the property between them. The Shevlin group took the Libby mill; we took the Cass Lake mill and all the other property that went with it. We also kept the timber tributary to Columbia Falls and Kalispell and also the timber along the Tobacco River. The war had already started in Europe and as we feared that the United States would be involved, the J. Neils groups did not look for any expansion as many of the family group were of military age and, we expected, would be called into the service. A policy of accumulating cash was developed, and after the war was over, the Libby plant was purchased from the Shevlin interests, and has been one of the operations of the J. Neils Lumber Company ever since that time. I came here in January, 1919, as manager of the plant and have been active as manager ever since that time.

When I arrived, the mill was shut down; nobody seemed to know what was going to happen to the lumber business after the war. A large part of the production from the Libby mill had been marketed in Eastern Montana and in North Dakota, and, as Montana had had some bad drought years, I immediately discovered that we would have to find other markets for our fir and larch and also for the ponderosa pine that we expected to cut. I contacted our sales connections in Chicago and induced them to try a few carloads of 22 foot and longer larch and fir dimensions. The price was competitive with Coast fir and, of course, was shipped green as was the custom of shipping long dimensions on the Coast at that time. Our Chicago customers liked the larch and fir, and it developed into a steady market and is still.

We also have developed other markets that take the long dimension as well as the shorter lengths. Now all our dimension is kiln dried and is a much better quality. We also had quite a problem of marketing our ponderosa pine. Our customers in Southern Minnesota and in Iowa had been accustomed to getting northern white pine and were not familiar with the ponderosa pine species. We induced some of them to try a few carloads of the number

two boards. Apparently they liked them as a steady market for them has developed in that area, and these boards are at a premium today. Since that time, of course, other markets have been developed and our boards are shipped as far as the Atlantic coast and south to the Gulf of Mexico, into Texas and California. About the only state we do not sell ponderosa in is the state of Oregon.

At the plant here at Libby in 1919, the sawmill equipment for cutting logs consisted of two bands and a gang. The gang had been installed during the winter months to take the place of the horizontal resaw. Our sawing equipment now consists of two bands, two gang saws and one vertical resaw. Our mill at Cass Lake had had a gang saw. The equipment in that mill was a band saw, a gang and a horizontal resaw. The lumber was transported from our green chain on lumber buggies to the yard where it was piled by hand. There were four kilns here when I arrived, and two years later we put in the northwest blower system so as to speed up the drying in the kilns. Shortly after that we added four more kilns and introduced the cross circulation system for drying lumber. This eliminated the chimney that was built into the dry kiln loads to take care of the forced draft. I think that our kilns were some of the first to employ the new system of cross circulation in dry kilns.

At one time we employed about one hundred head of horses around the plant. In 1932 in the depth of the depression we bought our first lumber carrier. In the fall months we immediately ran into difficulty as our roads and our lumber yards were rough and in some places were rather soft to operate the lumber carrier over. However, we saw the advantage in rapid transportation and then the next year put a large crew on to gravel all of our alleys in the lumber yard. We then bought another carrier and a year after that disposed of all of our horses. We continued to add dry kilns so that now all of our lumber production goes through the kilns. The only thing that we do not dry is three inch plant and thicker lumber. After having dried the lumber, there was the problem of keeping it dry. We therefore had to build some rough dry sheds in the yard. We now have nineteen kilns with a capacity of eleven million feet per month, and we have dry sheds to house practically all the dry lumber that we normally carry.

When we first stored our kiln dried lumber in the yard, it all had to be handled by hand. This meant another operation and was quite costly. Some of the other mills were handling their lumber with crane sheds, but sheds of this kind, especially where you handled more than one species, ran into a lot of money. In the year 1937 we introduced the fork lift truck at our plant, and I think this was one of the first to be used in the lumber industry. At that time it had hard rubber tires. It had tremendous counter weight in the back of it, or on the steering end, and although it did a good job, was rather awkward and very rough on our oiled roads in hot weather. We operated this lift truck for one year and then changed over to pneumatic tire equipment. The manufacturers of lift trucks, of course, made that

change, and I think the suggestion came from us and other people that were trying them out.

In about the year 1926 the local power company had a power failure, and asked us whether we could supply a limited amount of power to light the Libby. We took on the task, and in the following year I suggested that we take on their load permanently. At that time we had only one small generator used principally for lighting the plant and office. The only motor we had on the place was used to drive a grinder to grind feed for the horses. Everything else was run by steam engines and transmission machinery from them. In 1927 we installed our first large generator and took over the task of supplying power to the local power company for distribution in Libby permanently. We have supplied all the power in the area ever since that time and have never had a brownout or interruption for any length of time.

In the meantime we have electrified our planing mill. The dry kilns draft is created by motors running large fans. In fact, everything around the plant is motorized with the exception of the head rigs and the edger in the sawmill. Our first generator was a six hundred kilowatt mixed pressure turbine. I was wondering at the time we installed it what we were going to do with all the power. Since then our load has increased so that we had to add additional steam generators, and we now have four of them besides having a hydro-electric plant at Troy. The increase in power consumption in the city has been approximately ten percent consistently every year, since we introduced our first generator.

The steam generators are used during the winter months when the water supply at our hydro-electric plant is low. During the months of sufficient water supply, the steam generators are shut down, and during those months we accumulate fuel. Before the introduction of Pres-to-logs, we burned some of our excess fuel in our refuse burners.

After the war was over we feared that we would again have to go to a five day week, and with the increased consumption of electrical energy in the area I feared that we would be compelled to reduce our Pres-to-log production if we did not find some other source of electrical energy. We therefore bought a hydro-electric plant at Troy, which was being operated by a mining company that had failed. The flume was in run-down condition and had to be renewed. Before we could do this, however, we had to supply the power to the city of Troy and community, and, therefore, built a power line from our powerhouse at the sawmill to Troy and supplied that area with power from here during the time the flume was being built. We now have a ten foot wood pipe, built entirely of larch, bringing the water from the dam to the forebay. This has been in operation since 1946. We also found that the one generator that we had at the hydro plant was too small to take care of the ever-increasing demand and therefore added another thirty-five hundred kilowatt generator in 1948.



The idea of starting a box factory originated at our Klickitat, Washington, operation. We purchased a plant there in 1922 and two years after that we started a box factory, supplying box shooks to the fruit industry in the Yakima Valley, and also in the Hood River country. The operation was so satisfactory that we thought we would do the same at our Libby operation and use up lumber that normally does not sell well in retail yards. Since then the box factory operation has been increased, and during the war we were running three cut-off saws two shifts a day and six days a week. The box factory normally supplied employment for fifty men. During the war we made some ammunition cases, but mostly containers for food. The large packing companies took most of our output.

In the year 1946 we were informed by the REA that they would require a tremendous number of poles for the rural lines that they were building in the north central states and in the entire northwest. Having a lot of pole-sized timber in our holdings, we conceived the idea of going into this business and therefore built a pressure-treating plant, consisting of two retorts, which are eight feet in diameter and one hundred and forty-four feet long. The retort is the shell into which the poles are pushed on retort cars. The doors are sealed; the retorts are then filled with creosote and the poles are treated under pressure. I could tell you just how the operation is carried on, but I don't think that the story would be interesting. Our retorts are not any different than others, but our method of peeling poles, transporting them, yarding them and planing them is quite different from most of the pole operations. As our poles are delivered from the woods, they are dumped into a pole pond, similar to a log pond. From there they are fed into the pole peeler building by means of a bull chain, the same as logs are fed into a sawmill. The poles are kicked onto a deck similar to the log deck in the sawmill, and then they're loaded on dollies and they are put through the pole-peeling machines. The largest and best pole-peeling machine in our plant was designed by our planing mill superintendent, Albert Becker, and also was built here at our shops. I believe it is the best all-around peeling machine in the industry.

Al Becker has also designed and built all of our framing machinery. It is quite a departure from what you see at other pole plants, and I am sure it is the best in the industry today. We have a large machine shop, and we also have a special machine shop for building special machines. We have also built box factory machines and numerous other items that are used around the plant.

Many of our poles are shipped as far east as the Atlantic Coast. We have some in California and Texas, and shortly after the war we shipped a large number of poles to Alaska. I was quite interested when I took a vacation trip to Alaska this summer to see some of our poles in the power line between Anchorage and Natanuska. I recognized the poles from the bus window, but to make sure that they were ours, I inspected a pole the first time the bus stopped, and sure enough, there was our brand on the poles.

Our planing mill superintendent, Albert Becker, has also built other machines for us. Some that we are very proud of and that are used extensively are the grain door making machines that he built. I don't think there is anything exactly like it in the industry. The grain doors use up a lot of our short lumber. The cleats are accumulated from refuse in the sawmill conveyor. Normally we use lumber in grain doors that is not desirable for construction and therefore would not be purchased by retail yards. It is therefore an outlet for lumber that would be difficult to dispose of if it were not for the fact that it can go into grain doors. In a normal year, our grain door department consumes approximately five million feet of lumber.

We bought a lumber plant at Klickitat, Washington, in 1922, as we saw the end in sight of our operation at Cass Lake, Minnesota. We wound up that operation in 1923. Many of the men and officers of our company moved to Klickitat after we completed the operation at Cass Lake. We have quite a number of men of the third generation that are now working for us, both at Klickitat and also here at Libby. These are men of the third generation whose fathers had worked a life-time for us and whose grandfathers started with us in Minnesota.

In 1937 we bought a mechanical lumber stacker to stack lumber for our dry kilns. It was getting ever more difficult to find men to do the hard work of piling lumber by hand. We had a lot of difficulty with the machine in the beginning but our dry kiln superintendent, John Knudson, got ideas as to how the stacker could be rebuilt and made to function. We turned him loose with one of our men from the machine shop, and they almost completely rebuilt the machine. John Knudson also invented an automatic stickerlayer, and as far as I know this is the first machine of its kind used in the industry. It was successful right from the start. John got a patent on it and sold his rights to the Moore Dry Kiln Company, who paid him a royalty on all those they sold for some time after. Since then other automatic stickerlayers have been developed, but the idea originated with John Knudson. At one time he was given recognition for it by the National Lumber Manufacturers' Association. Since that time he has invented another automatic stickerlayer. It is simple to operate, and in my opinion, the best machine used today. The first one built is still in use in our old stacker and is functioning perfectly.