

This interview with Mr. Edward Howes took place on April 6, 1978 at his home in LaPorte. Interviewer was Jerrold Gustafson.

JG: Could you first of all give me a little capsule history of your sawmill?

EH: Prior to 1918 the sawmill was established by the Vail Cooperage Company who made barrel hoops and wooden barrels out of elm. The reason they established here was the fact that there was a plentiful supply of elm stempage in the county. As the years went on it got to be less and less and in 1918 the Vail Cooperage Company sold the mill to the Fullerton-Powell Hardwood Lumber Company whose headquarters were in South Bend. They had established mills already in Minnesota, Akron, Indiana, and Mississippi. They operated this mill until 1929 - until the depression. Soon thereafter Mr. Powell died and the mill was sold to Norman Rose and myself. That proceeded as the Rose-Howes Lumber Company. It is a six foot band mill which means that it is quite a large mill with two six foot cast iron Wheels, one above and one below and a ten inch bandsaw, that would be 23 feet six inches long if it was laid out flat. The advantage of a band mill over a circular mill is that the teeth are narrower and therefore the waste in sawdust is less. The principal stumpage that Fullerton-Powell took off the area was in oak, seconded by hard maple, basswood, hickory, white oak and of course the various incidental trees like cherry and walnut; there was quite a distribution of walnut in the county yet. The Rose-Howes mill proceeded until Mr. Rose died and then my wife and I bought over the mill and operated it until 1962, When due to Mrs. Howes' illness, the mill was liquidated. We found our main market right in LaPorte - Allis-Chalmers, the Bastian-Morley Company, the Indiana Moulding and Frame Company, and the LaPorte Manufacturing Company. Otherwise the lumber went primarily to Chicago and to different Indiana industries. The object was to keep utilizing as much of the low grade lumber close to home, and we were very fortunate in that respect that we had Bastian-Morley using quite a quantity of low grade lumber to make crates for their products and the LaPorte Manufacturing Company also used quite a bit of low grade for crates.

JG: Could you describe the steps involved from the time when a tree was cut down and then brought back to be milled?

EH: Yes, we located our timber through advertising and through personal contact. We had a man known as the timber estimator who'd go out and he knew the type of trees we needed to make high grade lumber. He would go out to the timber tracts and if a farmer wanted to sell, he would explain our policy. We didn't want to buy timber under fourteen inches in diameter on the stump fourteen inches from the ground. The reason for that is it is not practical to operate much lower than that - you don't get enough high grade lumber to offset the low grade. The second reason is that by cutting down to only fourteen inches there is a second growth crop left to become established for the next generation. The timber estimator would go out and list the number of oak trees, the number of maple trees, the number of elm trees, the different ones and the amount of feet that he estimated was in it and he would give a general description as to the quality of that timber. We would then figure what we could pay for that on the stump. If the owner wanted to sell we would draw up a contract specifying the date of the purchase and the time that the timber was to be removed. We would pay cash for it before we removed the timber. That timber list was then turned over to the timber cutters, a team that went out and located the trees and they would cut them down and cut them up into log lengths with two things in mind: to keep the strong,

straight wood as long as possible - up to sixteen foot and not less than eight foot, and to work the second grade logs which are generally further up the tree, into suitable lengths to produce a maximum of product that we could put into lumber. The tree now being cut into lengths on the ground the teamsters pulled the logs around to the open ground where they could be loaded. The logs were loaded onto a log wagon which consisted of a set of wagon gear with a bunk, an upright with cross pieces over each axle. The teamster would pull his wagon alongside the logs where they'd been put in a suitable load. He would roll the first log on with a chain hooked underneath, he would have skids, wooden timbers that would hook onto the front bunk and onto the back bunk. And he would pull that log with a team on the other, opposite side. That would pull that log up on the bunks. He would have to block that so it wouldn't go clear off. He would get his first layer down and then he would put a second and third layer on with fewer logs in each layer till he got a pyramid shaped load that he could handle. He would bring those logs to the mill.

JG: Was the bunk wagon drawn by horses?

EH: Yes. These were old wooden wagons with gear underneath it - two axles and the tongue of it goes from front to back to pull it and it had double trees up on front to harness the horses, it was a very simple operation.

JG: How many horses would be used to pull a load like that?

EH: Well, normally a team of horses, anything that a good team couldn't pull would be too heavy for the roads under those conditions. As the years went on that operation was mechanized and instead of cross cut saw to cut timber, chain saws came in use, which was much faster. To get the logs around in the woods they used tractors. The tractor would get the logs out of the woods into an open space to where a log truck could get to it and get out with a load after it was loaded. The loading arrangement was the same process, the logs were hauled up by means of a cable which was operated by the motor of the truck itself on a power-take-off. We'd pull the logs up with a cable and after we got a suitable load we'd bind them down with chains. They were brought into the log yard and dumped where there was space available, to be pulled up into the mill. They were unloaded onto a set of bunks. There were three bunks, the logs would be rolled down those and on to the carriage of the saw. Once they were on the carriage they would be clamped on. The carriage was simply a platform with three upright columns to which the logs were fastened by means of log dogs. The carriage was pulled by the cable past the saw. Then the sawyer, itself on a power-take-off. We'd pull the logs up with a cable and after we got a suitable load we'd bind them down with chains. They were brought into the log yard and dumped where there was space available, to be pulled up into the mill. They were unloaded onto a set of bunks. There were three bunks, the logs would be rolled down those and on to the carriage of the saw. Once they were on the carriage they would be clamped on. The carriage was simply a platform with three upright columns to which the logs were fastened by means of log dogs. The carriage was pulled by the cable past the saw. Then the sawyer, who operates the carriage, he would, by hand signals, have that log set out to where he thinks he can get the maximum quality out of what's in the log. The first one would go by the saw and as soon as it cleared the saw frame the man standing behind there - called the elk bearer - would get the underside of that slab and slide it down flat on the platform. That slab then slid down to the far end of the mill where a man was operating a swing

saw, a cross cut saw. He would cut those slabs up into eighteen inch lengths. They would drop down to a chute below and be carried out of the mill and that would take care of the slab wood on that first cut. The second cut the sawyer would set it out an,inch or an inch and a half or two inches, whatever thickness he wanted, and when that went by the saw the elk bearer would get the bottom of that board and slide it out flat who operates the carriage, he would, by hand signals, have that log set out to where he thinks he can get the maximum quality out of whats in the log. The first one would go by the saw and as soon as it cleared the saw frame the man standing behind there - called the elk bearer - would get the underside of that slab and slide it down flat on the platform. That slab then slid down to the far end of the mill where a man was operating a swing saw, a cross cut saw. He would cut those slabs up into eighteen inch lengths. They would drop down to a chute below and be carried out of the mill and that would take care of the slab wood on that first cut. The second cut the sawyer would set it out an,inch or an inch and a half or two inches, whatever thickness he wanted, and when that went by the saw the elk bearer would get the bottom of that board and slide it out flat on the platform and swing his end over to the edger which was a machine that had multiple saws, adjustable saws that could take the back off each edge of that board. They would set the saw to make one center cut, that way they could get two boards. If they set it at two cuts, they'd get four boards. The idea of all this is to get the best quality lumber into the suitable thickness that would market to advantage. When they were brought to the back end of the edger, he'd take those slabs and strip them off on the left hand side toward this bandsaw where they could be taken out of the rack and cut up into long wood along with the slabs. Then he would run the trimmer over the boards. That is an adjustable two saw trimmer - one at each end to even up the length of the board and cut the bark off the end. Then the board would drop on some rows that would carry the lumber off to the far end of the mill where they would be loaded onto carts and trucked around to the piles according to the thickness and the type. Piles were started with heavy railroad ties on the ground and were fixed so that the front of the platform was held up on six foot posts so that these piles would be quite a bit above the foundation. The foundations were set so that is the boards slid down off the track and onto the foundation, the front end toward the cart would be higher and toward the back lower so that we could keep the back end of a load of boards off the ground. The purpose of having it sloped like that was to drain the moisture and in case of storms so that the moisture would run toward the back end of the pile and help to get the lumber in better, drier shape in a minimum of time. Each layer was separated by four or five cross strips depending on the length of the board and those cross strips, by the way, were six feet long; that made the pile six feet wide. Those were built up to several feet, maybe eight or nine feet above the platform. They called the men that handled these "lumber stackers." That was quite an act to build those piles and keep them standing straight with the proper slope so that we very seldom got more than 12% moisture content. When it got to be shipping dry content where it could be loaded into cars without molding or anything like that, we'd load a car. If the customer wanted, we'd put it in a dry kiln and get it down to his moisture content, whatever it was, for furniture manufacture and so on. Normally they'd be about between 4 to 6 percent moisture content, then it'd be safe to process and work it into their product without warping or shrinking.on the platform and swing his end over to the edger which was a machine that had multiple saws, adjustable saws that could take the back off each edge of that board. They would set the saw to make one center cut, that way they could get two boards. If they set it at two cuts, they'd get four boards. The idea of all this is to get the best quality lumber into the suitable thickness that would market to advantage. When they were brought to the back end of the edger, he'd take those slabs and strip them off on the left

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JG: Can you describe the kiln?

EH: A dry kiln is a long narrow, tunnel-like building and it has steam pipes underneath that furnish the heat to dry the lumber until it was down to the moisture content they wanted. They had tests that could tell you what the moisture content was in the lumber.

JG: How was your mill powered?

EH: Our mill was powered by a big steam engine that had twin flywheels eight feet in diameter with a fourteen inch face made of heavy cast iron. The steam was forced into this big cylinder and that would push the wheels forward that were on a crank. The flywheels were set side by side and a big belt went around that and under the mill. It powered the long line shaft that operated the various machines. The fuel for the steam engine was sawdust, and we used slabs. It was possible to consume these because of the construction of the boilers. The grids under the boiler were hollow blast, they had a hollow core and on top was a small aperture known as the outlet gate. The air was forced under the surface of the gate and up to those cores so that the air soaked up considerable sawdust. It was necessary to keep a proper mixture of sawed wood and sawdust so that the fire wouldn't get choked, the air could get free to get at it and keep the consumption steady and the steam pressure uniform and that was, in our case, about 90 pounds per square inch and it was a difficult grind to keep that engine going after it got started. That's quite a job to get those big flywheels set. They had a long iron bar with knobs on it they'd back onto the flywheel. They heated the iron till the crank that operated the flywheels was set back to 45 degrees so that when the steam was turned on it would force that crank to go down, of course

then the momentum would bring it back up and then up three quarters and so on. Those people had to work to keep it in motion. It was a very antique outfit but it did a good job.

JG: How many horsepower did that engine carry?

EH: Oh, it was supposed to be a hundred and twenty, but I don't know what it was. It was about a hundred and twenty horse, just a single cylinder outfit to give the flywheels enough momentum to go down and then come back up. Some had two directions, back as well as forward, this only had one direction - that was forward.

JG: How, many men did your mill employ?

EH: Twenty-two was our normal crew. We may have had more to load those boxcars, and when trucks came more into use we did quite a bit of our own hauling.

JG: What types of skills did the men need?

EH: Well, the main thing is to understand how to fall a tree so that when it came down it did not damage the surrounding timber. A knack like that was learned by doing it. They would have to know how to cut the tree in suitable lengths to maintain the best quality lumber, the straightest longest possible feet that they could get off hardwood lumber. Eight or sixteen feet was the normal length for hardwood.

JG: How about the men that operated the saws?

EH: Yes. The head sawyer was the technician of the operation because he had to know, to judge when the log got on the table he had a steam log turner that could roll that log over on the carriage and when he got the face cut that he wanted, that is the face toward the saw that he wanted, his skill was in being able to tell, to set that face so that knots that went in were toward the saw and would be taken off. Also he had to turn the log quite frequently to get the best lumber out of it. By turning frequently he was able to get out a lot an inexperienced man could not. It was a job you had to learn by doing, to know where to cut and how deep. Every log has different characteristics. You had to know the different logs and different woods - how to get the maximum quality timber out of any given log. The men on the carriage would have the quickest chance to learn what it took to do the job. When our head sawyer died, our head blocksetter who'd been there quite a long time, he took over the job and he did very well as long as we were in the mill. The next technical member was the man that kept those bandsaws in shape. When the saw was dull we'd shut the mill down and he had a way he could slack off the tension on the saw and slip that saw off the top and bottom of those six foot wheels. By the way, those saws were ten inches wide. They would take them from the mill into the filing room where the machine was. We had automatic machinery to keep those teeth in shape and keep those saws sharp. The man that did that job had to know not only how to operate the grinding wheel but also not to stretch the saw blade. When the saw got stretched out, it would not stand up on a cut. then those saws were put on the wheel and tightened up the side of the sawed material between the teeth and the back edge was stretched out so it was larger than the metal at the teeth and back edge, then they tensioned that saw back up so it was flat on the wheel. It was a very technical business

to have it gauged and as a matter of fact that center part of the saw was stretched so that when they put it on the wheel the saw would not run off the wood. Then the point of the teeth was stretched out by a clamp, it would make the edge of the teeth wider than the body of the saw and then they grind it and bring it back to a certain width and make all the teeth uniform, yet wider than the saw body itself so that the saw would not bind in the board. That was a highly technical job - how to maintain those. To learn that you had to serve an apprenticeship under someone else. The other saws - the circular saws, the edger, the trimmer and the slab saws - were more or less just common sense. On the slide saw you had to know how to keep the lumber together and to work the material fast enough not to slow down the whole operation. The trimmer, he had to figure out what to cut out and keep the quality lumber together. Not too much short lumber. The loaders had to keep bringing the lumber in and when it was done to stack it in those piles I told you about.

JG: Did you hire a man to tend the steam engine?

EM: Yes, that was an engineer fellow. He had to know how to maintain it and the belts, to get the fire started in the morning and get the steam up and watch the water on the gauge and keep that within certain limits so as to keep the maximum steam pressure to operate the engine. He had to keep lubricating the machinery and the belts. Belts - that was another big part of it. This was a fairly high speed operation and those belts would break and he'd have to know how to fix them. A good many of our belts, the bigger belts, had leather - rawhide leather laces. That was a knack that you had to know - how to put that in to do the job without tearing loose under pressure. There were also claw-type laces and when these'd break they'd have to cut a piece out and put fresh lacings in. Generally those belts had some form of a tightener that when they were running would pull, bear down on the top side of the belt and keep 'em snug so that they'd pull their load on the machine. That was the engineer's job to cover that.

JG: What kind of pay did your men make!

EH: Well, let's see, we started at thirty-five cents an hour at first, that was in 1920. I don't think as long as we were in the mill they never got - just for common labor - of course, those specialists, you had to pay them according to their skills - but the rank of the twenty-two, I would say seventy-five cents would be a top wage. Those timber fellers they would cut by the thousands, you know, down south and down there they would get paid by the thousands of feet they had felled. But we never found that practical here we could not continue that here - it was not a continuous operation. It was mostly hard, hard manual labor, and you had to have a liking for that kind of thing or an ability to stand up to it, to stay with it. The main reason, of course, they stayed with it was because they didn't have enough skill to do anything else. As they learned more of the process they could always become a drop setter or a carriage man. Dropsetters, mostly, but some people worked up to head sawyer. The boy that took over the sawroom when our head sawyer died, he'd been riding the edger.

JG: With all that equipment around, what kind of safety hazards would be involved?

EH: Well, there was very little you could guard against on that big saw. It could come off the wheel if it got the sound, which was like the cracking of a whip. When that slipped off there

were a series of four-by-fours controlled from outside the housing. It would spin and it would drop down off the wheel and roll onto those four-by-fours and would go around until they got it shut down. The housing itself was fairly hefty - it had to be so it wouldn't break down onto anybody. The boy that ran the edgers he was pretty well protected because the lumber that started through would run with a fairly heavy load on it and that would keep it from backing up. The man on the slab saw - he had to just be careful not to let the saw slack on the housing and when it was cutting to get in front. The reason for that is that if it was going to go, it'd be toward the back, it'd drop back out of there. The edger boys didn't have much opportunity to get hurt unless a log dropped too quick or something like that, you see. Then it might catch you.

JG: How about the danger of fire?

EH: yes, that was, the fact that our stuff was green minimized the number of dangers. On those high speed belts that went so incredibly fast there was a lot of dust in the air and it sat around on those beams overhead and like that. Well, there was no smoking. In dry weather, extended dry weather, that would be quite a safety hazard. It couldn't usually be ignited, but in dry weather, like I say, well two of our fires started that way, in that fashion. We burnt the framework on the boiler room. That was a small fire. The second one was a fire in the mill proper. Well that took the whole thing down. How that started, I don't know, just one of those things you can't account for.

JG: How did the depression in the 1930's affect your mill?

EH: Well that was something, the whole country went down, see. It was just as if, well, everything stopped. I got a call from Fullerton-Powell and they said, "Well, cut up what you've got, put everything up on sticks, wire it down and close up the mill." Well, that hurt. The whole country did that. And E.N. Vail was the president of ATT and he said, "This is ridiculous, we've got everything here that we ever had. Lets get going and get things rolling." And that was the start. Charley Fullerton said, "Well, we'll start your wages at twenty-five cents an hour." He was going to make it thirty-five but, well anyway Norm Rose said, "Charley, you just can't get a man to work for that." "They won't, eh? Let 'em starve!" Like old Marie Antoinette, when, the peasants in France were rioting and she said, "Well, what are they talking about?" "They have no bread." "They have no bread Well, give 'em cake!" (Heh heh, ha ha ha ) About the same sense in reverse. Well, I'll tell you, we went through the whole thing, the whole depression without a union. The foundations for getting things done was skill. But on the whole, there's been a lot of improvements for the whole country. Norm Rose said, "Charley, you just can't get a man to work for that." "They won't, eh? Let 'em starve!" Like old Marie Antoinette, when, the peasants in France were rioting and she said, "Well, what are they talking about?" "They have no bread." "They have no bread Well, give 'em cake!" (Heh heh, ha ha ha ) About the same sense in reverse. Well, I'll tell you, we went through the whole thing, the whole depression without a union. The foundations for getting things done was skill. But on the whole, there's been a lot of improvements for the whole country.

JG: Most of the sawmills that existed in LaPorte County are gone now...

EH: I was thinking about that last night. There still might be a couple smaller outfits. Electric. Though, they used to have portable steam outfits, that they'd tow around on skids and they'd go out to the stand. That is, of course, a much smaller operation. We called them "ground-hogs."

JG: Why do you suppose most of the mills no longer exist?

EH: Well, no trees. The state has got a very, good program now to maintain our lumber, but nothing like in those days.