

### SAW vs. PULP MILL.

That the saw mill and the pulp mill cannot live in peace on the same river is daily becoming more apparent—at least in eastern territory—as is instanced particularly in the last season's log drives in Maine. While it is true that drives may be late in any year from natural and unavoidable causes, it is also true that much of the delay lately experienced in Maine has been caused by the holding up of drives at sorting gaps in order that pulp logs may be sorted out from the others. This process of sorting out delayed the East branch drive seventeen days this year, and at last advices there was no telling how long it would take to sort the pulp logs from the West branch drive. There is apparently no remedy for this, because with the pulp men buying logs from many different operators, located at widely separated points along the lumbering waters, the various lots of logs purchased must necessarily be mixed all through the drives when the logs are started down the rivers in the spring. It seems to be a question as to which will survive—the pulp mill or the saw mill—and as the pulp men are the richer and their business the more profitable, it is the belief of many that, except where favored by exceptional advantages, the saw mills must soon disappear.

This prospect is regarded variously by the people of Maine. Some say that if the pulp men are the more prosperous and can pay higher prices for logs than can the lumbermen it is not only logical but desirable that the pulp mills should survive and the saw mills go. Others declare that the pulp mills, while of great temporary benefit to certain timber land owners of whom they buy supplies, will ultimately bring disaster upon Maine, by denuding the state of its forests, which eighty years of lumbering has not done.

United States Senator Eugene Hale, in a speech at Skowhegan in 1891, said. "In forty years the forest lands of Maine will be as bare of good timber as is this platform upon which I stand." At that time there were few pulp mills in Maine, but ever since those log-eating establishments have been multiplying, until to-day there is warfare between the pulp and lumbering interests as to which shall control the rivers of the state. Calvin Moore, a prominent lumberman of Somerset county, Maine, who has for many years operated upon the head waters of the Kennebec, says:

There is no use denying the facts. The time is near at hand when lumber for the outside market will not be available in this state. It is a fact that the pulp mills have eaten into the very vitals of the lumber business. They are creeping toward the tree, where once the tree was floated to the mills. It is a common thing and has been for a number of years for pulp mill managers to purchase of lumber operators logs that the pulp managers had not time to cut on their own holdings. The Hollingsworth & Whitney Company, with mills at Winslow and Gardiner, cut more than 20,000,000 feet of logs last winter and purchased large quantities.

Fifteen years ago the ordinary lumber operator cut from 1,000,000 to 2,000,000 feet of logs in a winter. It was then understood that the operator would be twenty years in cutting over a township and that he could then go over the same land again, beginning where he had cut the first lot, and get just as good logs as before. As a rule, this is true. Whatever pine the operator passed by on his first cutting over, on account of its being too small, would, when he made his second trip, have grown to good size, but when he had cut that down he was out of pine, for where a pine is cut a spruce growth follows.

Now, when a single corporation cuts 20,000,000 feet in one winter we can easily see how long it will be before a township becomes entirely stripped of its spruce. In a short time the great tim-

ber section will be an expanse of stunted growth fit for no purpose except to shelter game, and the lumber operator will have to go to Canada for his logs.—American Lumberman. ...

### LARGE TIMBER CONTRACT.

Mr. F. Clergue, of Sault Ste. Marie, Ont., has signed a contract with Mr. H. R. McLellan, of St. John, N.B., which is the largest of its kind ever entered into in America, and means that Mr. McLellan has undertaken to cut and skid 300 cords of hardwood per day for two years. This wood is to be used for the purpose of making charcoal for the steel plant at the "Soo," and at the same time the bye products will be extracted and utilized for commercial purposes by the largest carbonization plant in the world.

Speaking of the contract, Mr. McLellan said. Mr. Clergue's carbonization plant is by far the largest of its kind in the world, and 300 cords of wood per day is only half the quantity that Mr. Clergue's works will really have the capacity to consume. His plant is to be constructed for the consumption of 600 cords per day. While I appreciate the fact that this is a very large contract, I am satisfied to enter into it after seeing the immense quantities of hardwood that are lying along the Algoma Central Railway. I do not think there is any doubt about Mr. Clergue being able to supply his carbonization plant for a great many years to come. I only went out on the railway for a distance of thirty miles and in that distance I saw sufficient hardwood to supply 600 cords per day for ten years at least. The wood is all to be got on Mr. Clergue's own land. I shall bring my own men from Northern Maine and New Brunswick to cut and handle the timber, and I intend to be on the ground about the 15th of August. In addition to using horses for yarding and hauling I will use steam skidders and ladderwood cableways for procuring this wood. This carbonization plant is, I may explain, an auxiliary of Mr. Clergue's great steel works, but at the same time he saves the bye products."

### ONE WAY OF DIVIDING TRADE.

The Mississippi Valley Lumberman contains an interesting article reprinted below, in which is reflected a series of incidents peculiarly true to real life.

A good many lumbermen declare that it is impossible to successfully carry on a retail lumber business without having some kind of an understanding or agreement between all of the competing dealers. Many different methods have been tried, but there has been found some drawback to each. Where a uniform price list is agreed upon the customers and particularly the farmers very soon come to the conclusion that there is some combination between the lumbermen to extort excessive profits, and accordingly they will go many miles to make sure there is active competition for their trade. The dividing of the business with reference to the total number of cars is often apt to give one dealer a great deal of advantage over the other. The quality and character of material sold varies so largely in price that this plan is not often a very equitable one to follow. One of the most general practices is to divide up the different customers in accordance with the first letter in their name. Each retailer, in case there were two, would then have one-half of the 26 letters of the alphabet, representing parties whom they would consider their particular customers. By this plan, however, a good many sharp buyers soon discover that there is some scheme whereby they are compelled to purchase from but one dealer, and naturally they are inclined to make trouble. Some dealers have tried the experiment of figuring together each bill as it came up, allowing the different dealers to take them in rotation. The objection to this

method is that it necessitates frequent conferences between the lumbermen, and the public becoming familiar with this practice, concludes that there is a combination, and accordingly is suspicious and discontented. I had a talk the other day with a retailer who seemed to have devised a very equitable and satisfactory plan for dividing up the trade of his village. There are but ten dealers at this point, and once a month they get together. Twenty-six small cards are provided and on each is printed one of the letters of the alphabet. These cards are placed in a hat and shaken up and each dealer alternately draws one out. The thirteen cards which the dealer has then represents the first letter in the name of the parties in the neighborhood who will be his customers for the month. A list price is agreed upon which each dealer will maintain when asked for prices by any customer that belongs to the competitor. The party who wins the bill has the privilege of cutting the price list up to five per cent. The next month the same lottery drawing is gone through with. By this plan the customers are kept guessing and it gives also the semblance of a very active competition between the local dealers.

### LUMBERMEN'S SUPPLIES.

Attention is directed to the page advertisement of Lewis Bros. & Company, which appears in this issue. Every lumberman knows that the success of his business depends to a great extent on the quality of the tools he employs, and Messrs. Lewis Bros. & Company have established a reputation for handling the most reliable and modern tools for all branches of the lumbering business.

The firm is well known as one of the largest dealers in lumbermen's supplies in Canada. They are sole agents for Hurd's celebrated axes, including Hurd's Michigan, Dayton and Wedge Pattern razor blade axes, Hurd's razor blade sawing axes, Hurd's Michigan pattern double bit, and Hurd's 707 hand-made double bit, and others. They also represent Messrs. Henry Disston & Sons, the leading saw makers of the United States, and Shurley & Dietrich, Maple Leaf Saw Works, of Galt, and supply pokers, cant hooks, boom chains, skidding tongs, Swede's iron piling hooks, etc.

Mail orders received by Messrs. Lewis Bros. & Company are given prompt and careful attention, goods being shipped the same day as the order is received. It is largely owing to this careful attention to detail, as well as to the reliability of their goods, that this firm has succeeded in building up the immense patronage it now enjoys.

### HOW CIRCULAR SAWS ARE MADE.

Circular saws are now made of cast steel specially manufactured for the purpose. An ingot heated to the requisite temperature is reduced to the proper thickness in power rolls. The plate is then centred and a circle scribed upon it, and which it is passed to the shearer, who reduces it to a circular form. The centre hole is then bored. It is then handed to the toother, who punches out the teeth around the edge, and which it is rough-filed or ground on an emery wheel to take off the burr left by punching. The rough saw is now again heated in a large furnace until it is of a bright red color. It is then plunged into a bath of sperm oil, which makes it hard and brittle. The oil is then partly cleaned off, and the rest burned off in a furnace to give the saw the required temper. When cold the saw is hammered on a steel faced anvil and it is quite straight. It is next ground between vertical grindstones revolving in opposite directions, and then polished with emery on a large disc. Once more the hammer men take it and strike it with smooth-faced hammers on an anvil as before until it is absolutely straight and true, and has acquired the proper temper, which allows for expansion while the saw is revolving at work. The teeth are now set alternately right and left to allow for clearance when sawing timber. They are then sharpened by being filed on the front and top of the tool, which operation completes the manufacture. Invention.