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THE CANADA LUMBERMAN

WOOD WORKERS' MANUFACTURERS' AND MILLERS' GAZETTE

VOLUME XIV.
NUMBER 9

TORONTO, ONT., SEPTEMBER, 1893

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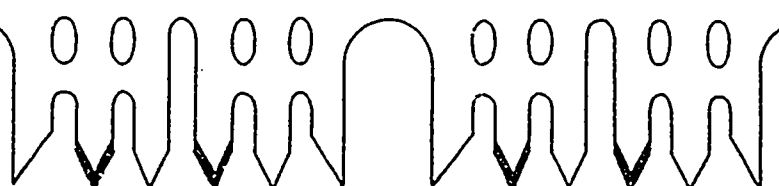
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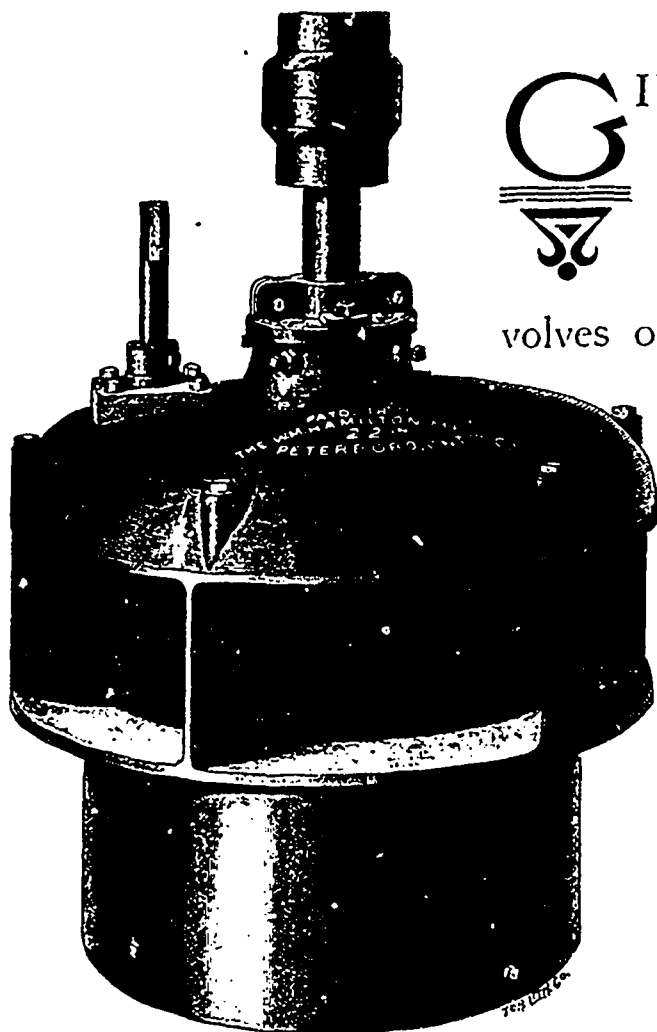
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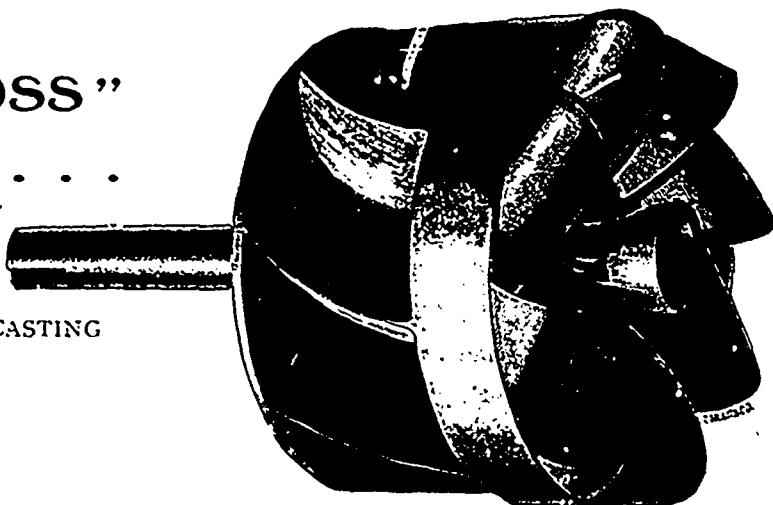
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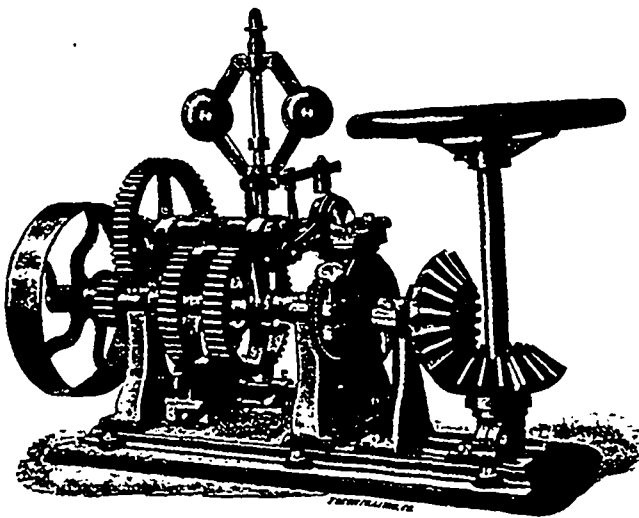
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BY THE WAY.

OUR friend E.L.I., whose nose for news is keen, regales LUMBERMAN readers this month with several stories illustrative of the large advances made in the price of Canadian timber within a comparatively few years. These may be taken, perhaps, as supplementary to others that have appeared in these columns at different times and that could easily be further extended. They all go to show what a valuable asset the country holds in its timber limits. If the advance has been so great in the past, what may be expected in the future as the forests become more and more denuded? This question may seem inconsistent to some in the light of the depression that hangs over lumber at the present moment. But this, as a second thought promptly suggests, is only momentary, and as is pointed out elsewhere in these columns, has its origin in causes foreign to the lumber trade itself. The condition is one that gives strength to those who tell us that Canadians should go slow in allowing to pass out of their possession this valuable heritage.

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In the cutting of timber the lumberman is getting deeper into the interior, and further away from civilization each year. It does not appear long ago when, so to speak, the timber was at one's door. Our Ottawa correspondent tells us that some of the logs that have reached the Capital this season have travelled a distance of 425 miles. This is a long drive. It is hardly to be expected, however, that conditions will become any better in this respect. The lumber mills of the Chaudiere will, in the future, draw their supplies of logs from increasingly greater distances. Similarly changed conditions exist in the Georgian Bay and other northern lumber territories of the province. The logs have been steadily removed further from the saw, and some of the changes that have taken place in the mills in that section have been due to this fact. It will no longer pay to bring logs the distance now of some mills, and these have been closed and the cutting is being done nearer to the saw.

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It is not to be supposed that the rapid denudation of the forests in Canada is exceptional to this country. Maine, Pennsylvania and New York state were rich at one time in pine, but they are practically bare to-day. The timber countries of the old world have had visited on them a similar experience. We do not know why in some respects anything different should be expected. To the lumberman who pays a large sum for his timber berths the practical value is in the cutting and marketing of the timber they contain. It may increase in value by being allowed to stand and judging by the figures in the E.L.I. page this unearned increment grows into large and profitable sums. But in this case the value is after all in the prospective price of the timber when it shall have been cut. The difference between the older countries and the newer continent is in the careful and scientific effort that is made to preserve the forests so that they shall not become wholly extinct. The lessons of Germany, France, India, and in part Great Britain, are deserving of closer study and practice in these particulars than they have yet received on this continent. Michigan, Wisconsin and Minnesota are not in that position yet, but the cut runs into large figures each year and the supply is not limitless there any more than in Maine, New York or Pennsylvania. It may be said, on the strength of competent authority, that Michigan white pine is almost a thing of the past even now.

POWER STEAM.

EVERY man should know his own business. Not a small percentage of the failures that occur in commercial and manufacturing lines is due to the inexperience of the men who undertake to operate the business. When it comes to mechanical vocations, there are so many contingencies that may arise, that this remark applies with redoubled force. The question is discussed with clearness and ability in the Mechanical News with a special reference to steam. The remark of our contemporary is that the architect who undertakes to erect a building, or the mechanic who constructs an engine, without first obtaining a full knowledge of the properties and nature of the material used in such building, is almost sure to fail; and the engineer who takes charge of a steam engine, or uses steam for any purpose in mechanics or manufactures, should first acquaint himself with its nature and properties.

What then is steam? What are its natural chemical composition and properties? The Mechanical News answer these questions in these terms:

Water is looked upon by many as a common and simple element; and the mode of converting it into steam is known by every school boy of the present age. Not so with the constituents and properties when in the gaseous form. The analysis of steam, such as is usually generated in the ordinary steam boiler, has yet to be made, and consequently many vague theories and ideas are advanced. We can safely affirm that ice water and steam are one and the same substance, only that they are of different degrees of temperature. Then it is evident that the temperature gives different properties to the same substance.

The highest point to which ice can be raised and maintained as ice is 32 degrees Fah., but the highest to which water and steam can be raised has not yet been accurately ascertained. We know that at atmospheric pressure water evaporates into what is known as steam at 212 degrees, and above or below that point in accordance with the pressure to which it is subjected, and in proportion to the units of heat applied. Steam and water can exist in their respective forms at all temperatures above 32 degrees Fah., and in fact steam is known to exist much below the freezing point. We may say, just at this point, that we make no distinction between what is called vapor and steam; in fact, there is none, except temperature.

If the temperature of the air should fall sufficiently below that of the water in our bays and rivers steam would be given off from their surfaces, and become visible when condensed in the colder atmosphere. Steam can be condensed from the atmosphere by any cold substance being placed in it. A pitcher filled with ice will illustrate this. Steam is given off from our bodies at nearly the same temperature as the air. To prove this we have only to breathe on a piece of cold metal or glass, when condensation ensues and the water can easily be collected. When the atmosphere is much colder than our bodies this steam is made visible by condensation, and when the temperature is sufficiently low, has been frozen into ice upon the beard.

We have said here that steam was made visible, but when visible it is no longer steam, but minute globules of water, of infinitely small proportions, which, by their attraction for each other, under favorable conditions, form drops and fall in rain, or are evaporated again and carried off in the thirsty atmosphere.

Pure steam is composed of two volumes of hydrogen and one of oxygen; or, by weight, one of hydrogen and eight of oxygen. If two cubic feet of hydrogen and one of oxygen are united, they will form only two cubic feet of steam, or a volume equal to that of the hydrogen and equal in weight to both. Steam is three-eighths

lighter than common air. An atmosphere of pure steam would only weigh a little over nine pounds, yet water, of which it is composed, is 770 times heavier than air, it being in weight as 1, nitrogen 14 and oxygen 16.

The thermometer, being the instrument generally used for measuring degrees of heat, might be more properly termed degrees of expansion and contraction in the liquid or metal used in its construction. Quantity of heat cannot be measured by the thermometer, although it is indicated by the expansion of the material of which the thermometer is composed, to be either more or less intense. The galvanometer is the most sensitive instrument in use for measuring minute differences in temperature. This instrument will not indicate quantity, but will indicate or detect the presence of heat, though insensible to the ordinary thermometer. The calorimeter is a device for measuring quantity. It consists of a glass vessel having two annular chambers, the inner one to contain the liquid or material to be tested; the other two chambers to contain pounded ice; the outer chamber of ice to prevent the action of the heat in the surrounding air from acting on the ice in the middle chamber. The quantity of heat is then obtained by the quantity of ice. The substance under test will dissolve in the middle chamber, and can be ascertained by the weight of water thus collected from the ice in the middle chamber; yet this will not give accurate quantity, as all the ice thus dissolved cannot be collected, a portion of the water being retained in the ice by capillary attraction, even though no heat were lost while conducting the operation.

Watt gives the latent heat of steam at one atmosphere as 988 degrees; at ten atmospheres as 840 degrees, Watt's theory being that 1200 degrees is the total heat contained in saturated steam, and that as sensible heat increases latent heat diminishes. In measuring the quantity of heat contained in steam the ordinary thermometer is useless. An approximation to quantity is made as follows: One cubic inch of water generated into steam contains sufficient heat to raise the temperature of 5½ cubic inches from 32 degrees Fah. to 212 degrees, making in all, when condensed, 6½ inches of water at 212 degrees, yet the steam only indicated 212 degrees. Hence if we multiply 6½ by 212 degrees, and deduct the 32 degrees contained in the 5½ inches of water, we will have 1202 degrees as the amount of heat obtained from 1700 cubic inches of steam, or the amount necessary to evaporate one cubic inch of water into steam, yet the steam will indicate, by the thermometer, as having only received 108 degrees. When, as shown by the calculation, it has received 1170 degrees and yielded up to the 5½ inches of water 990 degrees.

If we go on a little further, we will find that this heat was diffused throughout 1700 cubic inches of space occupied by steam and here quantity takes the place of intensity each atom of steam requiring its unit of heat to hold it in the gaseous form, for if one atom should lose its required unit of heat, it would be no longer steam, but would become water, and perhaps carry several of the surrounding atoms with it to the liquid form.

If we could compress the 1700 cubic inches of steam into one-half its volume without loss by radiation or condensation, we would find an indicated increase of temperature of 38 degrees, and it would continue to increase as the volume was reduced. Water at the boiling point cannot be made to indicate any higher temperature than 212 degrees. No matter how intense the heat applied, an increase of ebullition is all that is indicated until the body of water is all evaporated. It is during this period that the seemingly lost heat is carried off into the increased space occupied by the steam.

Rumford says that steam contains enough heat to raise ten times its own weight of water 102 degrees, or

102 times its weight 10 degrees. Water is the greatest absorbent of heat of any known substance. If we take equal weights of water and iron, and raise them to the same temperature, it will be found that the water contains ten times more heat than the iron. The heat required to raise one pound of water one degree will raise 4.4 pounds of air to the same height. Again, if one pound of mercury be heated to 160 degrees, and one pound of water to 40 degrees, and mixed together, they will give a temperature of 45 degrees. But if the water be heated to 160 degrees, and the mercury to 40 degrees, and then mixed together, they will give a temperature of 155 degrees. The five degrees taken from the water will indicate an increase in the mercury of 115 degrees. On the other hand, the 115 degrees taken from the mercury will only indicate 5 degrees in the water; showing that the different bodies have different capacities for heat.

Water, although the greatest absorbent, is a poor conductor of heat. It can be boiled in a vessel only a few inches in depth, and emit steam from its surface, without materially increasing its temperature at the bottom. The ease with which steam gives out its heat is of great annoyance to the engineer and also of great service in the steam engine by its rapidity of condensation. Many devices have been resorted to to prevent the radiation of steam, such as jacketing and superheating it in the boiler. Superheating has been applied in various ways, and the poor conductive property of steam makes it possible to have steam at different temperatures in the same boiler, unless a very active circulation is kept up. If pure steam be superheated beyond the point of loss by radiation, it becomes subsaturated or surcharged with caloric, and acts upon the iron of the boilers and engine with a deleterious effect. Oxydizing the same, when superheated or subsaturated, its absorbing properties are increased on account of its inclination to become saturated or attain its normal condition. If expanded in a cylinder, it will take up a portion of the water that may have been formed by contact with the colder surface of the engine. When expanded it falls in temperature, and it follows that the temperature being reduced, the boiling point is also reduced, which allows the greater portion, if not all the water so formed, to flash back into steam, it having obtained the same temperature as the steam at its highest pressure.

A sudden ebullition, which produces what is sometimes called priming, is caused by the same law of pressure regulating the temperature of the boiling point; for water can be heated to any degree to correspond with the pressure applied of its own vapor, and might be so confined as not to evaporate at all. The solvent property of fresh distilled water is known to produce the brown substance found in pipes and on the tubes of boilers using it, causing what is termed pitting of the iron. This brown product by analysis is found to contain 79 per cent. of the oxide of iron and 15 per cent. of water with 1 per cent. of silica. Steam having similar properties as distilled water, when superheated, acts still more powerfully on the iron of the boiler, superheater or engine; and because of this corrosive property in surcharged steam, superheating to any extended degree has been abandoned by many engineers. An eminent engineer who is unfavorable to superheated steam explains superheating thus: "In order to utilize the maximum effect of steam, it is not necessary to overheat it. After a pure steam is formed, that is, when all the particles and bubbles of water are evaporated, water which accompanies the steam in such a form has the same temperature as that due to the surrounding steam pressure, preventing it from vaporizing, and when it passes through the superheater the temperature is greatly increased, while the pressure remains the same. It being in connection with the steam room in the boiler, allows the water to vaporize, and a pure steam is formed.

Pure steam is the vapor from water, free from watery particles, all foreign substances or other compound gases than oxygen and hydrogen, and of a temperature equal to the temperature under which it was produced. Subsaturated steam is that under which it was evaporated, and it can be raised to any degree of heat the vessel will endure in which it is contained, its absorbing properties becoming greater with each degree.

VIEWS AND INTERVIEWS.

Business Negatives.

The aggressive man, especially in business, where all is supposed to be "go," will usually receive a generous share of praise from those around him. He deserves it. Aggressiveness is a desirable qualification. It is a positive element of character that can, as it were, be seen and handled, and is more readily comprehended than any mere negative force. Yet as Milton has intimated in his own beautiful way there is such a thing as doing nothing sometimes and accomplishing more than those who are all bustle and stew. "They also serve, who only stand and wait." What not to do is oft-times as important as what to do. The "don't's" of life are as essential as the "do's." The small boy's definition of "salt" as "the stuff that makes potatoes taste bad when you don't put any of it on," is suggestive of more than a mere laugh. There is a sound business philosophy beneath the humor, and of a kind that in the present times, when business affairs are somewhat rocky, might be worked out with profit by many business men.

Sawmill Economics.

An impatience, born largely of the times in which we live, causes many men to become neglectful of the details of business. It is forgotten that the largest business is after all only a massing of details. The littles make the muckle. The present, in the judgment of the Southern Lumberman, offers a splendid opportunity for lumbermen, whether manufacturers or retail yard men, to study and put into effect every opportunity to watch these littles, and thereby reduce the expense of handling lumber. "There is such a small margin," says this Nashville journal, "between the cost of delivered logs and the selling price of lumber that the old wasteful methods invite a suspension of business, if not a receivership. Suppose every sawmill man and every yard dealer will take advantage of the present lull in business and consider carefully all the little wastes and useless expenses incurred in his business, it is almost certain that he will find that much of his profits go to waste in the little minor details of his business that in flush times he thought were not worthy of his attention or worth the trouble to look after. In a saw or planing mill the item of oil is generally considered a small matter. In nine mills out of ten one-half of the oil paid for is worse than wasted, because leaky cans and no particular place to put them increase the fire risk and cause loss of time. Tools used about such establishments cost money, and when left around loose where last used are hard to find sometimes when wanted in a hurry, and they have a faculty of disappearing unexpectedly. In a lumber yard piling sticks are often thrown in loose piles to take the weather till again needed, when perhaps many of them are so warped as to be useless. It is not possible to point out every line in which economy is practicable in each individual case. The leading idea should be to curtail expenses that are useless. Every lumberman can think them out for his own business. The very general, erroneous, and most hurtful idea of economizing in the matter of expense in the manufacture and handling of lumber is to lay off the working hands or to reduce working hours or wages. That should be the last resort. First, look over the details of the business, stop the small and useless expenditures before depriving the faithful workmen of employment. The ranks of the unemployed to day would not be so full if a sensible economy had been exercised in all our industrial departments."

A Knowledge of the Past.

In the brightness of the nineteenth century there are found not a few who pretend to despise the experience of the past. They live in the present, what concern have they with the dead records of by-gone years? The mistake is a fatal one to genuine success in any calling. What we are to day is the natural sequence of what our fathers were before us. The civilization of this age is built upon the savagery of a past age. A trade cotemporary makes an application of thoughts of this character to the young man of to-day who in his lordliness would despise an acquaintance with the com-

mercial history of the past. "If one should suggest to him the propriety of reading the history of commerce and the business history of the world, he would say, these things don't interest me. What I want to know is how to run my business to-day and how to make money. I am not interested in what happened a hundred years ago, nor how the old heathen made money when the world was young. This remark was made over and over again during the American civil war. It was made repeatedly after the war was ended. And yet, because men had never known the history of money, and did not know that it had its rise and fall in price, like any commodity, thousands of men were ruined in New York city by the depreciation (as they called it) in the value of property. Had they been familiar in boyhood with the course of speculation, they would have known when the war began that the value of money was going down, and that they became rich by putting their money into commodities or real property. When the war was over and the value of money began to appreciate, they should have known that this was the time to reverse their operations and exchange their goods and real estate for money, and thus escape from the losing side of the speculation." In troubles that oppress the neighboring republic at the present moment had more healthy financial notions been entertained some years ago the depression that is now bearing down upon so many might have been lessened. The laws which govern the course of trade are as little to be trifled with as the laws of nature. They may be suspended or thrown aside for a time, but they are there. Because "the mills of the gods grind slowly," young men are prone to forget that they grind at all. When they wake up to the fact that they have been ground "exceedingly small," it is too late to learn their lessons over again. The grinding goes on, but lines of business in which they may have prospered for years are suddenly wiped out of existence with a vim that seems altogether out of proportion to the sins they have committed.

THE AUSTRALIAN TIMBER TRADE.

SOME idea of the present position of the timber trade in Australia can be gained from the report of an influential deputation of timber merchants from that colony, which recently waited on the Colonial Secretary. The information gleaned makes the position, according to the *Advertiser*, of London, Eng., about as bad as it can possibly be. The bank stoppages have, of course, had a good deal to do with this state of things, but for a long time past the building trade in and around Melbourne, particularly, has been in a very bad state, and, as a large firm of brokers remark in their circular, "business all around has been more or less at a standstill."

A perusal of this report, says our cotemporary "will show that our Colonial friends have many just and reasonable grounds for complaint, the principal of which is that, in spite of the large number of people (some 10,000 it was stated, employed directly and indirectly) in the timber trade of Australia, and the splendid native timber which that country produced, no less than eight million feet of dressed and sixty million feet of planed timber was imported, we presume, every year. Doubtfully as Australia is supplied with wood, most of the varieties cultivated there are hardwoods, which, although admirably suited in many ways for building purposes, entail, of course, a much greater expenditure of labor than the bulk of the wood imported, viz., Oregon pine. This was to be remedied, the deputation suggested, by increased import duties, which is apparently the only way out of the difficulty. The whole trade of Australia is passing through a more serious crisis than there has been experienced for a long time, and the timber trade is evidently taking it as keenly as any other."

A SAFEGUARD.

WHEN the water is found to affect the boiler plates only in particular places, as at the water level, it is well to use thicker plates at such places, and to arrange them so that the seams do not come within the region attacked by the water.

NORWAY has abolished the export duty on lumber of all descriptions. This duty amounted to an annual income of about three hundred thousand kroners to the government.

A MODEL SHINGLE MILL.

A VISIT TO THE PARKIN LUMBER CO.'S WORKS AT LINDSAY.

THE accompanying view is a good representation of the new shingle mill recently put in operation by the Parkin Lumber Co., of Lindsay. On the invitation of the proprietors and Mr. F. J. Drake, the mechanical expert, a LUMBERMAN representative paid a visit to this establishment during the past month, and amid the hum of machinery and the general bustle, which the turning out of 120,000 shingles a day makes necessary, he witnessed with interest the process from stage to stage of the log being converted into that unpretentious but ever-necessary commodity—the shingle.

Our illustration shows the main building, dry kilns and railway siding, the public and private offices, engine and boiler room being situated in the rear. The mill building proper is constructed of brick, being 45 x 100 feet in size, and composed of three floors, or flats. This, as well as all connecting buildings, is so constructed as to be practically fire-proof, the object being to do away entirely with fire insurance, which, according to the past experience of the firm, proved anything but satisfactory.

Viewing this as the most complete shingle mill yet constructed in Canada, and, perhaps, second to none on the continent, both as regards buildings and general equipment, a brief description of the mode of manufacture from the log to the perfected article may prove of general interest to LUMBERMAN readers.

The logs are drawn into the mill by endless chains, driven by friction-gear log jacks, so constructed that the chain can be driven forward or backward, as the operator may desire. The log is then delivered to the drag saw, where it is held in place by two improved log holders, which hold the log perfectly rigid while being sawed into proper lengths for shingles by means of drag saws. These drag saws are made entirely of iron and steel, driven by friction, the saws being 12 x 78 inches in size and run at 180 strokes per minute. The blocks pass from here to a saw splitter, or bolter, with a 4 in. steel mandrel, and balance wheel weighing 1,200 lbs. The blocks, after being split, are elevated nearly 24 feet on an incline to the shingle machines above. From these machines the shingles drop to the jointers, where they are edged and sorted, great pains being taken to secure the greatest quantity of first grades out of stock being manufactured. The jointers all consist of 40-inch saws, with iron frames, constructed for two operators, who edge and sort shingles into three different classes. They are then packed into quarter-thousand bundles, twenty inches wide. From here they are conveyed in cars, constructed for the purpose, to the dry kilns, where they are made shipping dry and ready to be placed on board cars for shipment to the United States.

The line shaft is of 4-inch steel, turned to gauge and polished. The bearings, or journal boxes, are all of four

diameters, or 16 inches in length, for a 4-inch shaft and lined with the best quality of Spooner's "Copperine." All pulleys are turned inside and outside, and perfectly balanced. The log jack frames are of iron, made in one solid casting. The friction gearing is so powerful as to be capable of breaking a three-quarter inch chain. The drag saws also have heavy iron frames throughout, no timber whatever being allowed in their construction, even the pitman being of steel. The log holders were designed especially for this mill, operated by friction, and guaranteed to hold anything from the size of a match to a log five feet in diameter. The saw and refuse conveyors, and block elevator troughs, are all made of heavy sheet iron, with endless chains, and are complete in every detail.

The detail equipment of the mill is as complete as modern engineering skill could well devise, no pains having been spared by the inventor of the machinery and engineer of the work to construct everything in the most modern and best style.

The credit for the success of this model mill is largely due to Mr. F. J. Drake, of Belleville, Ont., who

"The country is very level with good drainage towards the streams. Back ten miles from Rainy river and upon the heads of the Black Rapid and Beaudett rivers there stands in groves a fine lot of No. 1 pine which will find its market in the prairie country a few miles west of it that contains no rich timber for a thousand miles. This reservation is being surveyed by the government preparatory to selling its ten to twelve million feet of pine to the highest bidder at no less than \$3 per 1,000. The pine lands are being subdivided into forty acre tracts with a good plan transit line around each forty.

"The country farther east, out of which the Big and Little Fork rivers flow, is much the same with the exception that it seems to be a little higher and the timber of an older growth. These two streams are over 400 miles long and are fed with innumerable branches, all with deep, swift current, and high, clean banks. All these streams rise to a great height in time of freshets, but generally do not overflow their banks. Five million acres are drained by these streams, the water from which flows north through Rainy river and the Lake of the Woods into Hudson bay.

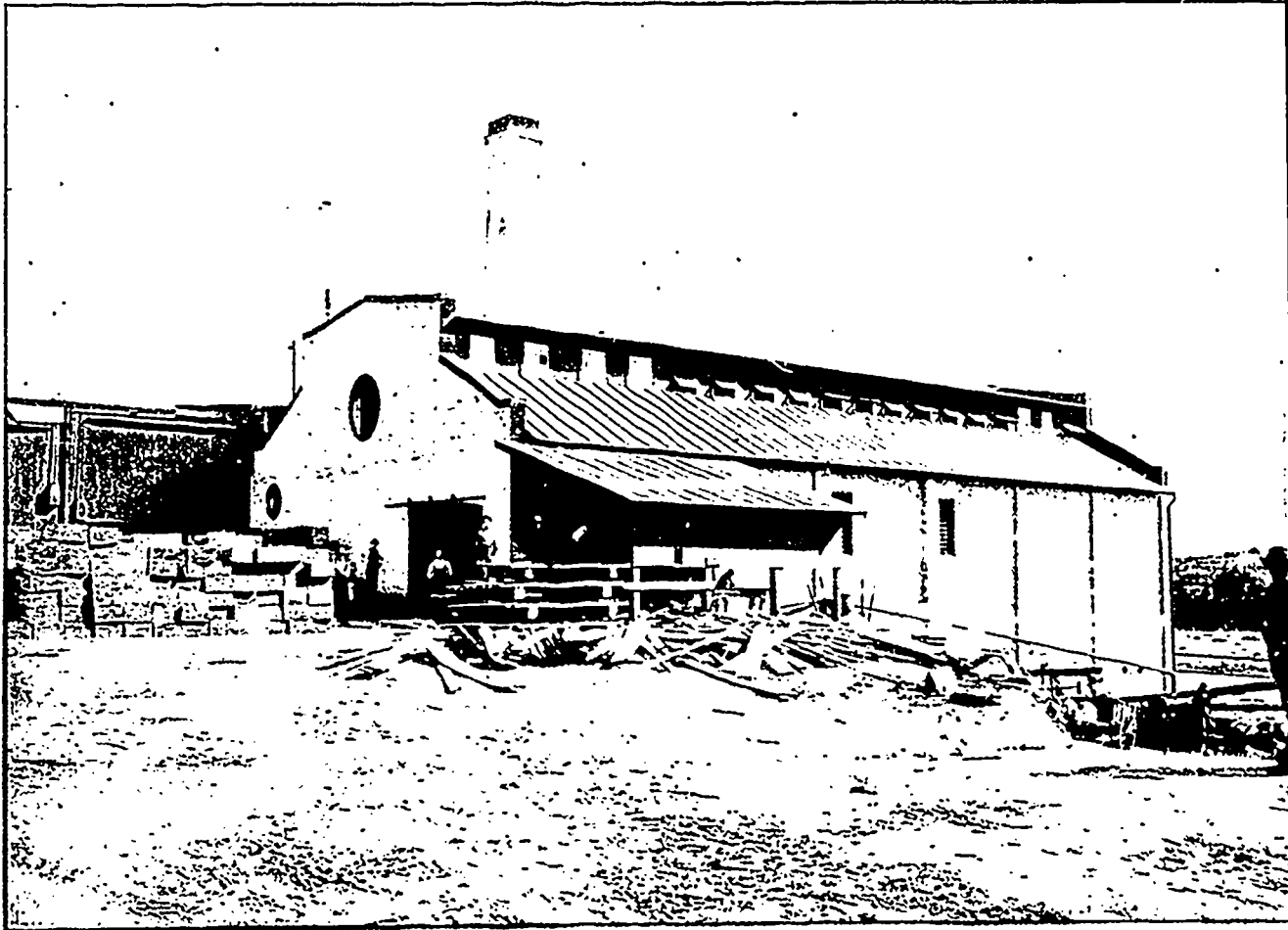
"Nearly all the good pine in this northern country stands on these two streams, and it is estimated that they contain upward of fifteen billion feet. Only 30,000,000 feet is now cut annually on them, and the logs all find a market with the Canadian manufacturers at Rat Portage and vicinity at from \$8 to \$15 per 1,000 and quick sale, being a much better price than could be had in Minneapolis. The cost of driving on these streams is hardly 25 cents per 1,000, with comparatively no loss, as there are no marshy rivers to run through and no place to lose logs by getting out of the channel.

"Several million acres of this country is yet un-

surveyed, consequently unexplored. Further up on Vermillion and other American streams, the country is rough and considerably rocky. The pine is smaller, running about ten logs to the 1,000. The same can be said of the Canadian side of this big water course. Rainy river is from one-quarter to one-half mile wide, with a deep channel and two mile current, clean, high banks, and with about six hundred farms fronting it on the Canadian side.

"One farm at the foot of Rainy Lake at Fort Francis (an old Hudson Bay Fur company post, has been cultivated for eighty years. On the American side at the mouth of Big Fork river, there is a new town being started named Hannahford. At this place the Canadian lumbermen have built a boom to hold logs that formerly went to the mouth of Rainy river to be rafted. It is rumored that the seven mill companies at Rat Portage intend moving their mills up there, and will barge their lumber across Lake of the Woods instead of towing logs in rafts, as an average loss of about 20 per cent. will be saved, besides the difference in cost of towing."

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THE PARKIN LUMBER CO.'S SHINGLE MILL, LINDSAY, ONT.

supplied nearly all the machinery from his own patterns and personally superintended the work of construction. He is proud of his work and invites all interested to pay a visit to Lindsay and see in operation the best equipped and most complete shingle mill in the Dominion.

RAINY RIVER PINE.

IT is hardly possible in some cases to give a description of climatic and natural conditions in one section of either Canada or the United States without finding that these have a close relationship to conditions on the opposite side of the border. A writer in a Minnesota paper has been telling of the big lumber country on the north side of that state, and in doing so furnishes certain information of interest to lumbermen along the Canadian line.

"Commencing with the north side of the Red Lake Indian reservation," Mr. C. S. Sheppard, writer of the article, says, "I find that the country along Rainy river has a very rich soil with clay subsoil, and is heavily timbered with poplar, spruce and white and black ash.



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J. S. ROBERTSON, - - - - - EDITOR.

THE CANADA LUMBERMAN is published in the interests of the lumber trade and of allied industries throughout the Dominion, being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion by others.

Special pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information on which it can rely in its operations.

Special correspondents in localities of importance present an accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome, but is invited from all who have any information to communicate or subjects to discuss relating to the trade or in any way affecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance, individually they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN, with its special class of readers, is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements, which will be inserted in a conspicuous position at the uniform price of 25 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

LUMBER TO-DAY.

As the fall season opens, business in all lines is expected to be marked by fresh activity. What will be the experience of the lumber trades? is the question that specially concerns lumbermen. A considerable measure of anxiety surrounds the question because of the unexpected and depressed turn that the lumber market has taken in the United States within the past two months.

On the opening of the lumber season in the early spring, lumber in that market could not be supplied fast enough to meet the demand. Prices not only stiffened, but with white pine, advanced from \$1 to \$3 per thousand over former figures. It was not an unwarranted confidence that caused lumbermen then both in Canada and the States to say plainly that lumber was enjoying a substantial boom. The enjoyment was plainly visible and get-at-able.

The situation has undergone a radical change. Rather more than two months since a measure of concern was observable in lumber quarters, and some lumbermen began to talk cautiously of a reaction. Then followed a tardiness in closing lumber sales. Transactions became slow, then stagnant. A little later word was passed around that this firm and the other were in financial difficulties and some suspended. The banks were reported to have become chary of discounting mercantile paper which a few months earlier they were only too pleased to have the opportunity of melting down for their customers.

These conditions could only have one ending and within the past thirty days the situation has become so serious that the large millmen of Michigan, Wisconsin and Minnesota, and further yet, down in the southern States, are resolving, after canvassing conditions carefully, to close down their mills at a very early date, for the reason that lumber is not selling, their piling grounds, which, before, were bare, are being awkwardly overcrowded, and a further cut would only aggravate the

situation. The Mississippi Valley men have, in solemn convention, already fixed the date for a general closing down of the mills, viz., Sept. 20. In this one case this action will mean that the cut of lumber will be reduced by about 1,000,000,000 feet, which represents for cutting and piling a lessening of expenditure by about \$1,125,000. As we have intimated, for similar reasons, and where like necessitating conditions exist, the millmen of Michigan, Wisconsin and the southern States are, if they have not already done so before this issue of the LUMBERMAN goes to press, decided on doing as the Mississippi Valley has resolved to do.

This is a plain setting of the situation as it appears at the time of the present writing. The Northwestern Lumberman states the case thus:

"Extreme depression of demand in Saginaw Valley, at Manistee, Menominee, Marquette, Duluth and Minneapolis are noted. The operators who had contracted sales of a large portion of this season's product, and counted on that to help them through the season of quiet demand, are finding that it is one thing to make contracts and receive notes in consideration of sales, and quite another to be able to deliver the lumber and realize on the notes. They find that the notes they have received are not convertible into cash, and it is the money they need to pay current expenses, as nothing else will answer in the present state of prostrated credit. Hence they might as well have lumber in pile as notes on which ready funds cannot be realized. Some who had contracted for lumber to be cut, are pleading to have the logs carried over, or the lumber held at the mills, because they do not want to give either notes or cash for it. The lumber is accumulating at the mills in such volume that piling room is becoming exhausted, and the necessity of shutting down the mills is imminent."

It is a satisfaction to be able to say that the circumstances that have led up to these darkened conditions are not inherent to the lumber trade. The monetary disturbances that are giving so great trouble to the country to the south, the silver perplexity, in particular, are the root difficulties in the lumber depression. The general distrust that has affected every branch of commerce, shaking public confidence so that a universal shrinkage of trade has been the result, could hardly be expected to leave unmolested any branch of business no matter how flourishing it may have been. It has not done so, and consequently the lumber trade, with other departments of trade, is suffering. The rift in the cloud is to be measured by this fact that when the troubles of the day are conquered lumber will be one of the first trades to recover. Lumber itself, whether in the standing tree in the forest, or in the manufactured stuff in the mill, is as safe a commodity to possess to-day as it was in the month of March, barring this one exception that it may require a little more foresight, a larger patience, and possibly a plethoric bank account to hold on to it to-day for profit.

What is the result of the present situation on the Canadian lumber market? Sympathetic, of course. Our lumber goes in large quantities to the States. What it means to close out, or curtail, to any remarkable extent, this important outlet of lumber production is obvious. Lumber trade is quiet in Canada just now because of the depression in the States. More than this is not unlikely to be an after effect. Neither American lumbermen, who own limits in Canada, nor our own lumbermen, will be disposed to enter extensively into winter work in the woods until the clouds that are thick and black just now show signs of rolling by. The LUMBERMAN believes they will roll by and perhaps in time for substantial gains to come to the trade, in part, this fall. We would, however, be serving the part of a false friend of the trade were we to do otherwise than clearly and fully place before our readers the real situation, adding not thereto, nor taking from, as it exists to-day.

EDITORIAL NOTES.

"BENEFITS of Organization," was the title given to a paper read at the recent meeting of the Poplar Manufacturers' Association of the United States by Mr. M. T. Greene, the president. On general principles the benefits that come to any class of men by organization are obvious. There are abuses that grow out of the

organization of business men, but it does not follow that these need to be in any way a part of these organizations. During the past month various associations of lumbermen have been meeting in different sections of the United States and a report of the proceedings of these meetings furnish very clear evidence of the advantages that accrue to business men engaged in the same line of business getting close to one another. Organizations of business men are not wanting in Canada. One of the most important of these, the Dominion Millers' Association, held a successful meeting the second week in August. The LUMBERMAN mentions these bare facts not for the purpose of following up the argument for such organizations. This has been done on other occasions in these columns. Moreover, our opinion is that the argument is known to, and realized by, business men of all classes. We simply rise to ask, as the old Methodist preacher has said, why is it that among these organizations, there is no association of Canadian lumbermen?

CONFIDENCE is born of practice and it is difficult to say what a man may not accomplish in almost any walk of life by persistent effort. In the mechanical arts a dexterity that becomes marvellous is sometimes attained by workmen. These are things to be admired were it not that this dexterity too often develops into the most terrible recklessness and leads frequently to loss of life. In our news columns this month is recorded a sad fatality that overtook an expert band sawyer in one of the Ottawa mills, where the body of the man was literally cut in two. We are told by a fellow workman who knew the deceased well that he could do fully twice as much as an ordinary workman. It was his work to run the band saw, and he was noted for his great dexterity in "flipping" the logs on to the carriage. Frequently he had been warned to be more careful, for it was known that the work was surrounded by dangers. It is no lack of sympathy for the widow and family that causes friends to say that Marquel might have been living to-day had he heeded these words of caution. Nor is his case exceptional. A fuller knowledge of many accidents that occur in sawmills and elsewhere will show that with many, carelessness and recklessness on the part of the injured ones were the bottom cause. Particulars are before us of a recent accident where an oiler in a mill went about his work with some cotton waste sticking out of a pocket. The waste caught on a projecting set-screw, then his clothing caught, and the result was the man was killed. Eternal vigilance, it has been well remarked, is the price of safety in the mill.

VARIOUS and queer are some of the notions entertained in regard to money. Why cannot the government make money enough to meet all wants of its people? is the stupid question asked not unfrequently by people who would be insulted were you to intimate that they were stupid. The United States has been filling its treasury for months back with silver dollars at the rate of four million a month, and while its vaults have been full to bursting the country has been passing through a tryingly severe financial depression. The condition is not at all novel to students of economic subjects. The history of the English land bank scheme, the Rhode Island paper bank experiment, the John Law bubble in France, the land loan fiasco of the Argentine Republic, the crop moving paper currency of Mississippi, the banking mistakes of Alabama and Michigan are examples illustrating the inevitable result of schemes to inflate the circulation with cheap and valueless money. To borrow an illustration from Adam Smith, even sensible men forget sometimes that the highway to a particular place is not the place itself—the houses and lands. It is simply a means of reaching the place. Money is only a vehicle of exchange, and must have behind it something which is something. Dollar bills may be run off the printing press to advertise the wonderful values that some shoddy dealer is offering in pants, but when you come to buy the pants you must put a more tangible value behind the handsomely printed bill the same dealer has given you. The money issued by tailor or government is worthless if it has nothing substantial as its real representative.



OUTSIDE views of a newspaper office are very varied, and often quite amusing. Will Carlton's poem of the farmer who wanted to make an editor 'outen' of his boy Jim is one view of the material of which editors are supposed to be made. It is needless to say that the old farmer was off color on this occasion. In a sketchy article in a recent Scribner we have a lumberman's idea of the kind of timber used in making ye editor which, it may be remarked, hits the situation more closely than did Mr. Hayseed. "Newspaper making," says Julius Ralph, the writer of the article, "is not a business, except in the publication office. It is not a business - as the word is meant to be used - in the editorial or reporters' rooms. The kind of brains that are powerful there would not fit a man to earn his salt in trade. Once, when I called on a millionaire for a piece of news, at seven o'clock every morning, twice a day at his office, and at least once every night at his home, he said to me. 'You newspaper men amaze me by your persistence and enterprise. I have made ten millions in the lumber business, but if I could have employed young men like the newspaper reporters, I would have made one hundred millions in half the time.'"

* * * *

Mr. D. Ring, foreman of the Bronson & Weston lumber company, returned to Ottawa a few weeks ago. He has been engaged for over a month on the construction of a short railroad as overseer. At Bay Lake where he was working at the very head waters of the Grand river, some 50,000 logs are being piled ready for transshipment across the height of land and thence down by the tributary streams saving a long turn of several hundred miles. The storms in that region he describes as most terrific, tearing the mighty trees of the forest and doing great damage.

* * * *

"My shipments," said Mr. Norman McIntyre, of Durham, "are altogether of elm and ash, which goes as square timber to the United Kingdom. This season I am finding trade slow. The British markets are very lacking in buoyancy and it does not look as though a period of revival was near by. It had been my intention to cut considerable during the coming winter, but unless business looks up between now and the time to get to work in the woods, I shall withhold much logging next winter. There is a good supply of elm and ash in our district. I don't speak of soft elm, which, I understand, is rather scarce."

* * * *

"Business is pretty quiet in Canada so far as lumber is concerned," said Hon. R. A. Loveland, president of the Saginaw Lumber & Salt Co., on his return from a trip through the Dominion and the eastern states. "Prices are maintained, however, and the people are all eyes and ears as to what is going on this side of the line and what congress will do. They seem to think over there that if the purchasing clause in the silver bill is repealed it will inspire greater confidence. The banks think very favorably of the operations of Michigan lumbermen and have had extensive operations with them. I have been told by Canadian bank officials that they have always found them prompt and reliable. In regard to the New England market and Boston, prices have not dropped materially on pine lumber but spruce has declined considerably. In looking over the Albany market, I've never seen so small a stock on hand for this season of the year and the dealers say that the buyers in the month of July were few and far between, but they are now looking for a good fall trade. In my judgment there would be very little, if any, more lumber sold if prices were reduced. Our company has plenty of logs and our own mill at Crow Island is running full capacity and three mills of Bay City are cutting logs for us. We have plenty of dockage room for the next

ninety days. The yard trade as a whole is quiet and Micawber-like is waiting for something to turn up."

* * * *

"Experience," says Mr. Geo. Hague, general manager of the Merchants Bank, "shows that it is more and more difficult to carry on business successfully. There was a time when almost anybody could make money either out of farming or any other pursuit. In these days it is impossible to succeed without a practical knowledge of business, close application, the adoption of all new methods and appliances, and the exercise of sound judgment and self-restraint in giving credit. The banks, as a whole, hold the purse-strings of the supply of gold for mercantile purposes, and all my experience points to this conclusion that they have it in their power to do much to promote mercantile success or failure. I verily believe, looking back over the varied events of thirty years' management in Toronto and Montreal, that if the banks generally came to a good understanding among themselves as to the manner in which they would lend money, the rules they would adopt about the security for it, and as to limitation in amounts according to the circumstances of borrowers, the number and amount of the failures that occur year by year might be diminished one-half. I put this on record as my deliberate opinion, and would be glad if due note were taken of it. What benefit would arise from this you can readily imagine. I for one would be well pleased to see it."

* * * *

Mr. McRae, of McRae & Co., Ottawa, Ont., speaking of the new patent for the treatment of beech and birch woods, the control of which has been secured by his firm, said: "The great objection hitherto held against these woods is the fact that they are very difficult to season, and even when they have been seasoned fully 40 per cent. is defective. By the new process the sap is sweated out of the boards by being placed, in a green state, in steam chambers for twelve days, after which it is put into the drying chamber for two or three days, according to thickness, and then, by a chemical application the wood is stained throughout a rich walnut color. The process has been tried on a large scale in Germany for the past eighteen months, and has proved such a success that experts acknowledge that wood so treated is superior to walnut, and the owners there write that they are quite unable to supply the demand. No country in the world has such forests of beech and birch as Canada, and the discovery of this process will no doubt greatly enhance their value. A trial kiln has been built in Ottawa, and the first parcel turned out is so satisfactory that works for the treatment of twenty-five car loads monthly will be erected there immediately, and arrangements made for the erection of two other plants, one in western Canada, and the other in the Province of Quebec. It is probable that the bulk of the first season's output will be shipped to England, where the wood is well known and can be readily sold on a profitable basis."

* * * *

An Ottawa gentleman, who believes he knows the lumber business of Ontario and Quebec quite familiarly, talked freely the other day of the profitable deals that have been made at various times in Canadian timber. He said: "William Mackey bought, I think, for \$30 the Amable du Fond timber limit 130 square miles on the Mattawa river thirty-one years ago. He has held it since, occasionally cutting a little timber, and eight or ten years ago he was offered and refused \$76,000 for the limit. This was not a bad advance on the original price, but this spring, it is said, a bid of three-quarters of a million dollars came to Mr. Mackey for this same limit. And gauged by the advance in value of other limits in the same period, this appreciation in value is not exceptional. Mr. Mackey again declined. Mossom Boyd, in 1886, paid \$86,000 for 68 square miles of pine timber on the north side of Lake Nipissing, which affords an outlet for logs to Georgian Bay, whence the logs are rafted across Lake Huron to the Michigan sawmills. Boyd did not cut any timber on this limit. He held it until last year untouched, when it was sold for \$1,500,000 to Davidson & Hay, Toronto. Six years brought him a profit of 400 per cent., or over \$360,000. The Hon. Peter White, of Pembroke, Speaker

of the Dominion House of Commons, bought a limit of 150 square miles on the Magnassippi river, near Mattawa, from David Bell fifteen years ago for \$72,000. Last year he sold this territory, on which meanwhile he had felled a good deal of timber, to the Hurdman firm, of Ottawa, for another quarter of a million. They say that J. R. Booth seven years ago bought from Charles Smith, of Ottawa, for \$67,000, a pine limit on the north shore of Lake Superior. That limit is now held at \$400,000. J. K. Ward, of Montreal, bought four or five years ago from the Mercier government of Quebec province, a timber limit on Lake Expance, among the head waters of the Ottawa, paying, it is said, some \$3 a mile. He holds it now at \$1,000 a mile. Perley & Pattee sold to Arthur Hill & Co., of Saginaw, Mich., a large limit on the Madawaska for a big sum, said to be close on half a million dollars. Sixteen or eighteen years before they bought it for a few thousands. The story is told that Mr. G. P. Brophy was standing in the rotunda of the Russell hotel one day some eight years ago, when a business acquaintance stepped up and offered to sell him a small limit on the Upper Ottawa. "What's your price?" said Mr. Brophy. "Twelve thousand dollars." "I will give you eight thousand." "Make it ten," said the seller. Mr. Brophy is a keen, sharp business man, as well as competent engineer, and no man in Canada has better chances of sizing up speculative opportunities in timber. But he could not, any more than any one else did, calculate at the time the money in timber limits. He declined. Subsequently the limit was offered to him at his own figure. He again declined and he had the pleasure last year of seeing the same fruit change hands at \$86,000."

* * * *

Editor Met L. Saley, of the Northwestern Lumberman, in a paper on "Ignorance Concerning Woods," read before the World's Fair Congress, said: "If I were to arraign more severely one class of men than another for their ignorance concerning woods, it would be our architects, for the reason that it is their business to know. They can tell us about the wearing quality of stones, the crushing strength of this material and that, but when it comes to any specific knowledge of the lumber used inside of our houses for doors, casings, floors, mop boards, and possibly ceilings - objects which are constantly before our eyes - they are woefully ignorant. When furnishing a fine house you select for one room furniture, carpets and draperies of colors to blend, and for adjoining rooms other shades to carry out a general idea of harmony. If the upholstering of the furniture, the carpets or the portieres were to turn another color, the harmony would be destroyed. So it may be destroyed through the lack of knowledge on the part of the architect. Were you to ask the question, 'I desire to finish my front parlor in one kind of wood, my back parlor in another, the reception hall in another, my library in another; now as these rooms are practically one, what woods shall I use in order that the harmony may be preserved after the house shall have been in use for years?' I am fearful that you would fail to find an architect who could answer it. Architects pay little attention to these vital points, which are really most intimately connected with their business - in fact, are and should be regarded as a part of their business. I am not aware that an architectural journal has given a line to this subject, and the furniture papers are equally dumb. Exposure has much to do in changing the color of wood. There is a piece of wood on my desk of a rich, dark brown color, and no man into whose hands it has been placed has rightly named the kind. The color which age has given to it misleads as to identity. A shaving taken from it with a knife reveals a bright saffron color, for it is nothing but osage orange. It has been remarked that yellow pine as finish is too glaring; for no great length of time will it offend the supersensitive eye in this respect, however. It becomes darker and darker, until it acquires the shade of old mahogany. The grainer's occupation is gone. No man can now earn a living by counterfeiting woods. People have learned in this line that nature surpasses art. Even in many of the cheaper dwellings now erected the finish is in natural wood. Considering the fact that wood in its natural state is used so extensively, it seems to me that architects and builders should make a study of it."

OTTAWA LETTER.

[Regular correspondence CANADA LUMBERMAN.]

THE drive of 30,000 logs cut on the Gilmour & Hughson limits on the Gatineau, and to which I made some reference last month, are coming along in fine shape. These logs, it is worth remembering, were cut 200 miles above Ottawa. They average sixteen feet in length and from three to four feet in diameter, the majority not being less than 44 inches in diameter. The average log of this drive, in short, contains a quantity of timber equal to that in five and a half standard logs, the standard lumberman's log being 12 feet long and 21 inches diameter at the top. These enormous Gatineau logs are yellow pine, the very finest timber in the forests, and when sawed will give on the average each 1,300 to 1,400 feet or from \$30 to \$40 worth of lumber. The size of the logs rendered necessary the manufacture of special cant dogs as the regulation size could not open wide enough to handle the giants. Jos. Hawkin, of New Edinburgh, who manufactured these cant dogs, says that in his twenty years' experience on the river he never saw anything to equal these logs for size.

LARGE DRIVES.

The Mattawa is once more clear, the cookery crib, the last of 75 cribs of 1,500 pieces of Perley & Pattee's drive having come to hand. Ten pointers and winch boats were portaged to the station, and with the balance of the outfit belonging to J. R. Booth shipped back to Nonsbosing, for next season's operations. Of Booth's immense drive, 130,000 came down the Sturgeon, crossed lake Nippissing, were lifted by the big mill at Wisawasa and shipped over the diamond to lake Nonsbosing. The following is the Mattawa's contribution to the vast aggregation of logs and timber floating down the Ottawa this season, viz.: J. R. Booth, 450,000 saw logs; McLachlin Bros., 130,000; Buell, Hurdman & Co., 30,000; Perley & Pattee, 20,000; W. Mackay, 2,500 pieces square timber; Perley & Pattee, 1,500 pieces timber. The majority of Booth's logs were of the two year old cut, the high water being favorable for this season's drive.

INDIFFERENT LENGTHS.

The Export Lumber Company will make considerable shipments this year to South America.

The old Perley & Pattee mill, which has been entirely modernized by J. R. Booth, has commenced sawing. About 150 men are employed.

Hale & Booth have purchased a Lake Huron limit of Francis & Carswell, the consideration being about \$25,000. The limit covers a territory of 25 miles, and has never been worked.

The new mill of Gilmour & Hughson, at Hull Point, has commenced operations, and takes its position as one of the finest mills in these parts. The sawing capacity is over 200,000 feet of lumber per day. The dimensions of the mill are 80 x 160. The machinery equipment is very superior.

Shipping from W. C. Edwards' New Edinburgh mill began the early part of the month. The barges as loaded will go down to Montreal. The shipping trade from this mill will, it is expected, continue steadily for the rest of the season. The first part of the year's cut was done for the Sheppard & Morse Lumber Company.

Steps have been taken to secure incorporation and letters patent of a company which proposes to engage in the manufacture of stained imitation of walnut wood. The concern will be called "The American Hardwood Company" (limited): Ottawa will be the headquarters and the proposed capital is \$100,000. These are the promoters: Henrich B. Toobe, Hull, Eng.; Frederick Cerkel, Hector McKrae, Peter McKrae, and Frederick W. Powell, of Ottawa.

The last of the Moore Lumber Company's timber has reached here. These are 171 cribs and the crew numbers about 70, mostly French Canadians and Indians, and all speak both French and English tolerably well. A swarthy pilot asked as to what he did in winter, said "he did nothing but cut wood for his fire—work six months and stay at home six months. He never go to shanty—only run the timber." And the man seemed happy and contented, but doubtless his family cares are not numerous.

The amount of timber which has been cut on the Quebec side of the river during the past winter and has already gone through the Chaudiere slides this season is as follows: Sheppard & Morse Co., 100 cribs, or 2,382 pieces cut on their Kippewa limits. R. H. Klock, 186 cribs or 4,343 pieces from Bear Creek. McCracken & Boyle, two rafts or 6,845 pieces in all. Francis & Carswell raft from the Magnissippi river consisting of 147 cribs or 3,843 pieces. This very nearly, but does not quite, complete the rafts yet to go over the slides.

A considerable part of the square and waney pine, of the Moore Lumber Company, that has been passing down the

Chats and Ottawa, has travelled a distance of 425 miles. With the exception of one raft belonging to Klock Bros., this is the greatest distance yet reached by Ottawa lumbermen. All of this timber was taken from a limit opened up by the late David Moore, the haul being short, from two to five miles only. The towing and floating of the timber began on the 9th May and on the 9th August the last crib had reached Ottawa; and then three or four weeks to Quebec, will make a four month's drive, probably the longest on the Ottawa record in recent years.

OTTAWA, Can., Aug. 25, 1893.

BRITISH COLUMBIA LETTER.

[Regular correspondence CANADA LUMBERMAN.]

EVER on the watch for fresh fields to conquer the lumbermen of the province are hopeful of new possibilities for lumber in the favor that is accorded what is known as yellow cedar lumber for decorating purposes. Yellow cedar, it is said, is also an excellent wood for carving. This wood is not very plentiful. There is, however, a moderate supply in northern British Columbia.

Some interest is also attached to a recent report of Prof. Fiebing, of Milwaukee, the leading leather trade chemist of the United States. He has reported that he finds on analysis that Washington hemlock bark possesses no less than 20.1 per cent. and spruce bark 18.9 per cent. of tannin, whilst fir bark has but 6.2 per cent., but is, nevertheless, peculiarly valuable for the reasons stated below. Mr. Fiebing says: "I have never before analyzed bark anywhere near so rich in tannin as this, the average hemlock bark not running over 10 per cent. tannin. Spruce bark seems quite as rich in tannin value as your hemlock, and if the available supply is large enough, can certainly be economically utilized. The richness of your bark in tannin properties is astounding and unprecedented."

British Columbia lumbermen argue that in view of the general scarcity of bark for tannin uses in the east that they may expect in the early future to make a large and profitable use of their spruce, fir and hemlock bark. Considering the general resemblance of British Columbia conditions to those of Washington state they think there is ground, in the light of Mr. Fiebing's report, for this hope.

A SOLID TRAIN OF SHINGLES.

The large consignment of shingles, representing really a solid train of shingles, that was shipped recently from Vancouver to Eastern Ontario, by H. H. Spicer & Co., is a significant event in the lumber history of this province. The consignment consisted of about 2,500,000 shingles, requiring about 450 cords of shingle bolts. Messrs. Spicer & Co. were one of the first to introduce Coast cedar shingles into Ontario, and in the face of the depressed condition of the shingle market they congratulate themselves on having developed a satisfactory and growing trade.

COAST CHIPS.

A ship is expected here about the end of this month to load lumber for Australia.

Shipments of finished goods are now being sent to Australia by the steamers of the new line.

Reports from South America are more favorable, and it is to be hoped trade with that country will soon be revived.

The demand for salmon boxes keeps the mills very busy. Their orders are larger for these goods than they have ever been.

A rumor is current here that a new sawmill will be built at Port Moody by Westminster, Victoria and English capitalists. I am not inclined to put much faith in the report, but trust it may be true and that building will shortly begin.

The mill and privileges of the Buse Milling Company, Vancouver, which is in financial straits, is to be sold under a mortgage. The mortgage is said to be for \$26,000, and this amount is not likely to be realized. There are several judgments and some of the machinery is not paid for. The firm is composed of Ernest Buse and John G. Bugbee.

A novel industrial effort bearing an important social aspect is reported from the North, where the Rev. J. B. McCullough, a Church of England missionary, has, with the aid of subscriptions from England, started a small sawmill at Aiyansh. After enough lumber has been sawn to erect a church and mission buildings, the mill will be turned over to the Indians now employed in the industry.

The new match factory on Lulu Island, New Westminster, has made a start. The initial capacity of the factory is 4,000,000 matches daily and several hundred thousand are now being turned out daily towards meeting a demand, which in this Province alone is estimated at 2,000,000 a day. The wood used is British Columbia spruce which burns as well as the cedar used in the California factories, and the labor mostly Chinese.

The British ship Earl of Duncorn, which cleared from San Francisco for Royal Roads, B.C., and instead went to Port Townsend, has been fined \$100 for having voyaged between two coastwise points. The vessel was under charter to load lumber in British Columbia for Australia, but one of the Puget Sound mills was offered the charter provided the vessel could be intercepted outside of Cape Flattery and taken to Port Townsend, which was done.

NEW WESTMINSTER, B.C., Aug. 22, 1893.

NEW BRUNSWICK LETTER.

[Regular Correspondence CANADA LUMBERMAN.]

TRADE with the American markets is showing a very decided shrinkage as a result of the monetary stringency across the border. Shipments of lumber to the British markets evidence some improvement.

The mill of Thos. Burns, at Kingston, recently destroyed by fire, will be rebuilt.

Laths are evidently in large demand in New York, as many as eight million being shipped from here in one week against three millions to all other American ports.

F. Tufts & Co., of this city, who handled over 20,000,000 feet of deals last year, expect to handle over 30,000,000 feet this year. The price paid is about 25 cents a thousand higher than last year.

The Maine capitalists, who purchased a tract of timber land at Keswick, York County, which was supposed to be no good, have cleared this season already sufficient timber to enable them to ship over 1,200,000 maple last blocks to the United States markets.

The Tobique Valley Railway, 28 miles long, which extends from Perth, on the C.P.R., to Plaster Rock, or the celebrated Tobique gypsum deposits, and which was opened during the present month, enters a section of the province, that is admittedly the best district available for the supplying of hemlock bark- cedar, spruce and hardwood.

Currency is given to a rumor that the larger part of the timber on the Swinny pine limit on the Tracadie river, has been destroyed by fire. The limit is owned by a syndicate of lumbermen, of Bangor, Me., and embraces 7,750 acres. The statement is further made that the fire had reached to an adjoining tract of Crown lands, leased by F. E. Winslow, Hon. J. B. Snowball and K. F. Burns, M.P. Definite particulars have not been received at this writing owing to the difficulty of telegraphic communication.

From the port of St. John last week W. M. Mackay shipped 666,047 feet of deals and battens and 25,689 feet of ends to Dundalk; and to Liverpool, 1,670,266 feet of deals and battens, and 131,171 feet of scantling and 142,916 ends. To Fleetwood, Alex. Gibson shipped 1,655,698 feet of deals and battens, 114,011 feet of scantling and ends; and to Drogheda, 354,299 feet of deals and battens and 17,462 ends. Thus the week's total to British ports is nearly 5,000,000 feet. From the port of Pugwash, N.S., there has been shipped to British ports since July 1 almost 9,000,000 feet of lumber.

ST. JOHN, N.B., Aug. 19, 1893.

MICHIGAN LETTER.

[Regular correspondence CANADA LUMBERMAN.]

THIS is not the time when the statement of the alarmist should be given any encouragement. The wise business man keeps a cool head and carefully calculates all probabilities. It is from men who view matters in this prudent light that we get the statement that not in thirty years in Saginaw has anything occurred to equal the present business collapse. I now quote the words of Mr. L. P. Mason who has been in the lumber trade here for 30 years. He said he was not buying a board; that lumber, which people 60 days ago would fall over one another to buy, hadn't a friend at present.

This view is not confined to Mr. Mason, nor to Saginaw alone. The piling docks are being uncomfortably crowded and the only source of relief is likely to be found in a shutting down of the mills and curtailment of the cut.

Mill men at Marinette are likely to close down at an early day, if for no other reason than the one that they experience great difficulty in handling their finances so as to permit of the large outlay necessary to a continuous running of the mills.

Of course everyone is hoping that now that Congress has got down to business that the financial stringency will show signs of relaxing and the heavy strain of holding on, that is commencing to tell on the mercantile community, will not be suffered to continue until, with some at least, the break will come. Not any serious trouble will occur if this relief is forthcoming, for lumbermen are cheerful and this cheerfulness is based on a knowledge that lumber is all right and that the present depression has not arisen out of any weakness in the lumber trade itself.

BITS OF LUMBER.

Forest fires have been raging along the lines of the Milwaukee and Northern and the Chicago and Northwestern railways north of Menominee.

The firm of C. K. Eddy & Sons, whose operations extend to Canada, has become incorporated with a capital stock of \$200,000. This firm is just now engaged in cutting a raft of 3,000,000 logs from Canada.

The piling ground of the Marinette sawmill yards is being severely tested owing to the shrinkage in shipments of lumber. Up to date the shipments of lumber from Marinette port have been 108,000,000 feet, which is about 40,000,000 less than at the same date last season.

A raft of 26,000 logs reached Alpena from the Georgian bay the early part of the month. F. W. Gilchrist took 14,000 of these and Albert Pack 12,000. Shipments of lumber from Alpena are not up to last year. For July the figures were 57,000,000 feet against 82,000,000 feet in July, 1892.

SAGINAW, MICH., Aug. 26, 1893.

PERSONAL.

E. E. Goddard, a prominent lumberman, of Saginaw, Mich., is dead.

William Pinchbeck, a well-known rancher and mill-owner, of William's Lake, B.C., is dead.

Mr. R. A. Ralph, a manager of the W. C. Edwards Lumber Co., has reached Ottawa, after having spent eleven months in the wilderness.

The LUMBERMAN was pleased to receive a call from James Dollar, of San Rafael, Cal., and recently ex-mayor and prominent lumberman, of Bracebridge, Ont.

Mr. John White, manager of the Toronto Lumber and Mining Company, which has mills at Sydney, B.C., has been spending a short time in the east arranging for machinery for a new sawmill at Edmonton, N.W.T.

Mr. Hugh McCormick, late of British Columbia, has transferred his services to Gilmour & Co., of Trenton, Ont. He is placed in charge of men working on the new limits of this company in the Georgian bay district.

Mr. Peter McArthur, of McArthur Bros., timber merchants, Toronto, and who has resided at Saginaw, Mich., for 26 years, has removed to Detroit. His business of late years has been removed largely from Saginaw. The firm owns large tracts of land in Canada and operates here, as well as in Michigan and Wisconsin. It is doubtless the largest timber firm engaged in the foreign trade in the country.

Premier Gladstone, the G. O. M., of Great Britain, has sent to the World's Fair, at Chicago, one of the axes which he used in felling trees at Hawarden castle. The axe is a gift to the Timber Trade's Association, of the United States. This is said by the Liverpool Timber News to be the only axe Mr. Gladstone has ever given away and that it is a very fine one, sharp and heavy, with an ash handle well worn by the hands of the Great English Premier.

Mr. B. T. Bayles, senior member of a lumber firm at Stonybrook, Long Island, N.Y., died on the steamer Chicora on 20th ult., while returning from Toronto. He was looking out of one of the cabin windows with a friend watching an approaching storm, when suddenly he fell into his friend's arms unconscious with the remark, "Thank God I have written to my wife." Mr. Bayles was 64 years old. A wife, son and daughter survive him.

Mr. Robert Cunningham, of Pt. Essington, B.C., was married recently to Florence Bicknel, of Coventry, Eng. The ceremony was performed by Rev. Charles Quinney, the bride's uncle. Miss Bicknel and her younger sister are orphans and were brought out to this country by a friend some years ago. Mr. Cunningham came to the Pacific Coast as a missionary, twenty-seven years ago, but soon embarked in business, and from small beginnings is now proprietor of canneries, steamboats, hotel and sawmill, in short he is the owner of most of Essington, besides being a large shareholder in the C. P. Navigation company.

Universal sympathy will go out to Mr. J. B. Miller, president of the Parry Sound Lumber Company, in the loss of his estimable wife and his son, Clauson, by drowning at Sloop Island, two miles from Parry Sound, on Friday, August 25th. Mrs. Miller only went to Parry Sound three weeks ago to spend the remainder of the summer. The boys were in bathing, and Clauson, aged 9 years, got beyond his depth. The mother jumped into the water to rescue him and both were drowned. Mrs. Miller was a daughter of the late Mr. Hunter, of the firm of Hunter, Rose & Co., publishers, Toronto. Mr. Miller was absent from Parry Sound the day of the accident, but returned next day.

THE NEWS.

CANADA.

—The new planing mill of C. C. Baldwin, of Pt. Credit, Ont., is running.

—McKechnie Bros.' new sawmill at Glenroaden, Ont., is finished and running.

—Robertson & McCallum, of Mullbay, Que., are shipping lumber in large quantities and at remunerative prices to Barbadoes.

—King Brothers, Grand Pabos, Que., have loaded several vessels of lumber this season for France and England.

—A drive of logs numbering 1,700,000 is coming down the Otonabee for the Rathbun Co.

—The Rathbun Co. of Deseronto, Ont., shipped per the Damara, for Great Britain, 900 doors and other manufactured lumber.

—B. Clem of Toronto, has purchased 8,000 acres of poplar timber and in Grundy County, Southern States. He will begin sawing within the next month.

—The Crown Lands Commissioner for Quebec has been collecting arrears of timber dues, which his predecessor had neglected. Some \$90,000 has been collected.

—The auction sale of timber limits in the Georgian Bay announced by the Georgian Bay Consolidated Lumber Co., to have taken place in August, has been postponed to the fall.

—A raft of 140,000 feet of deals belonging to Chas. Bragg, of River Phillip, N.S., went ashore in Pugwash harbor a few weeks ago. Many of the deals were lost by being blown out to sea.

—The creditors of Brosseau & Tremblay, sash and door factory, Montreal, Que., are considering an offer of 50c. on the dollar, 4, 8 and 12 months, unsecured. Liabilities probably \$40,000.

—It is estimated that the shipping trade at Quebec has declined this year nearly one-half. The shrinkage in the square timber trade of Great Britain is attributed as one main reason of the trouble.

—Shipping at Honora, Ont., is brisk. About 100,000 pieces of cedar have already been sent from here to Chicago, Cleveland, Tonawanda, and other United States points, and there are about 50,000 pieces yet to be shipped.

—The Lachute (Que.) sawmills have passed into the possession of W. J. Simpson and J. W. Boyd, who intend to repair and start both mills. The price paid the sheriff for the property was \$11,900.

—The people in the north of Frontenac and Addington are disposed to blame the lumbermen for damming up the inland lakes so that fish are unable to reach certain points to spawn. A petition is being circulated to be forwarded to Ottawa asking that the evil be remedied.

—In referring to the business of the Sanderson Company in the August LUMBERMAN the types located them at Brandon, Man. Their place of business is Prince Albert, N.W.T. The only lumber mills at Brandon are those owned and operated with marked success by Mr. J. A. Christie.

—A Campbellford (Ont.) correspondent reports shingle trade dull, and that shingles are now being sold at a loss. As a consequence shingle men say they will not get out any lumber for next season. David Richards, who has about completed a new steam mill for the manufacture of clapboards and shingles will not run it this season.

FIRES AND CASUALTIES.

FIRES.

Davidson & Sons, Halifax, N.S., have suffered a loss of \$3,000 by fire.

McRae & Powell's sawmill, at Madawaska, Ont., was burned on 15th ult. Loss, \$4,000.

A fire at Moncton, N.B., destroyed about sixty thousand feet of Southern pine lumber in the I. C. R. yard. Loss, \$2,000.

Timber and other property amounting to £180,000 were destroyed by fire in a timber yard adjoining the Mersey docks, near Liverpool, Eng., on 6th Aug.

J. W. Green & Sons' sawmill, Kingsville, Ont., was destroyed by fire on the 15th ult., together with 150 cords of wood. Loss over \$2,000; insurance \$400.

The sawmills of McRae Bros., of Ottawa, which are located at Calahogie, Ont., were destroyed by fire Aug. 14. Loss about \$12,000, covered by insurance. The mill will be rebuilt at once.

Matchwood, a little town of 200 inhabitants on the Duluth, South Shore and Atlantic railway, was almost entirely wiped out by fire on 15th Aug. The flames crept in from the burning forests near by.

A large lumber camp, out from Bradford, Pa., two miles east from the Kingua bridge, on the Erie R. R., was seriously injured by fire the early part of August. Kane's big sawmill was completely destroyed. The loss is estimated at \$100,000.

A fire at Ottawa on 12th ult., consumed \$5,000 worth of lumber owned by the Rathbun Co. Fully insured. While this fire was raging the lumber piles belonging to E. B. Eddy Co., near Hurdman's mill, were also burnt. Loss about \$5,000.

A sawmill at Turner's station, owned by Sewers & Thompson, of Teeswater, Ont., and leased to J. A. McArthur, was totally destroyed by fire three weeks ago. About 70,000 feet of maple lumber for flooring and 35,000 feet of hemlock all ready for loading on the cars were destroyed. Loss, \$4,000; no insurance.

The planing mill of the Safety Bay Lumber company at Norwood, Ont., was destroyed by fire the early part of last month. The fire was confined to the mill and some lumber around it. A railway car in a siding, partly loaded with lumber, was destroyed. The estimated value of the mill and machinery was about \$7,000; insurance on same, \$3,500. The lumber in the car, about 9,000 feet, and around the platform 15,000 to 20,000 feet was destroyed; no insurance.

CASUALTIES.

A boy named Athier had his hand badly crushed in the McLaren mill, Ottawa, a week ago.

A lumber worker named Wm. Kavanagh, who came from Michigan, was drowned near Dur church, Muskoka, on 21st ult.

Robert Easton caught his right arm in a saw at Ford's sawmill, Glenmorris, Ont., and had it cut off above the wrist.

Robt. Reid, of Hepworth, Ont., sawmill proprietor, was choked to death while eating his noon-day meal a few days ago.

Sam. Bromley, of the Pembroke Lumber Co.'s mills, had his finger badly crushed while working at the knife sharpening machine.

At Trout Creek, near Bracebridge, Ont., Robert Washburn was putting a belt on a pulley in a sawmill when he got caught and killed instantly.

A young lad, son of Daniel Cushion, of Peterboro', Ont., lost four fingers while at work on a shingle machine at the Dickson Company's mill.

A young man had his arm badly bruised in Edward's mill, New Edinburgh, Ont. A large piece of wood flew from the slash table and narrowly missed his head.

Two young men named O'Connor and Ducairo, of Ottawa, employees of the Buell, Hurdman & Co.'s mill, received ugly wounds by being struck by a piece of edging sent flying from the saws.

W. H. Crowe, foreman at Dowling & Leighton's sash and door factory, Harriston, Ont., had his hand torn recently by one of the saws. This is one of several painful accidents he has suffered lately.

A hand of the Muskoka Mill and Lumber Co., named McIsaacs, was drowned a fortnight ago. He was on the way from Orillia to Muskoka Mills with others, and was under the influence of liquor.

A man named Boulanger, employed in one of the sawmills, in Arnprior, Ont., was nearly squeezed to death by being caught in a pulley. Fortunately a fellow employee seized an axe and chopped the belt in two, releasing him from his perilous position.

Two men were badly hurt on Yonge St., Toronto, a fortnight ago. They were in charge of two horses and a waggon loaded with lumber, on the top of which they were riding. The ropes tying the lumber to the cart gave way, throwing the men to the ground.

A ghastly fatality occurred at the new Gilmour & Hughson's mill, Hull Point, Ottawa Valley, a week ago, by which Wm. Marquell, an expert hand sawyer, had his body literally cut in two pieces. A very large saw log was being flipped on the carriage when a knot sticking out on it caught the endless chain which drags the logs into the mill from the pond below. The log was given a jerk forward and struck with considerable force against the unfortunate sawyer's right shoulder. He fell forward on his hands against the moving carriage and the saw cut his arm off below the elbow. It was done in a moment, and the severed arm let his body fall on the moving carriage. He caught the band saw and the rapidly moving strip of steel ripped him in two before a word could be said or any action taken to prevent the accident.

TRADE REVIEW.

Office of CANADA LUMBERMAN, August 31, 1893.

THE GENERAL SURVEY.

WE have taken occasion in our editorial columns to deal at some length with the financial condition of the lumber business at the present moment. The changed situation, contrasting the position of the trade to-day with its position three months ago, warrants a careful study of conditions. There is no closing one's eyes to the fact that lumber is dull, and may remain slow, if not absolutely dull, for some months to come. Yet there is no good reason to justify despondency. Business generally, in Canada, from the Atlantic to the Pacific, would be resting on a bed of roses to-day, if the assets were as substantial and undepreciable in their nature, as is that one commodity—lumber. The lumber trade has reached a point in this country where, so far as the article of lumber itself is concerned, it will gather in value as time progresses. Temporary setbacks may take place, and local shadings of trade will sometimes unfavorably affect the situation, but these will not be more than as a passing shower. This is the solidly encouraging feature of lumbering in these days.

Coming down from general conditions to something more specific it may be remarked that local lumber trade, in Ontario or Toronto, is sympathetically dull with the general situation.

Among the mills there is not the life and stir of the earlier part of the season. The reason is found in the depression across the line; and the season will close with a larger stock of lumber on the piling grounds than had been expected. More than likely the cut of logs in the Canadian woods this year will be lessened because of the shrinkage in sales of present stocks of lumber and the uncertainty of the future.

The news from New Brunswick is of a like kind to that in Ontario, business with the American markets being restricted. In Farnworth & Jardine's wood circular, this remark is made of New Brunswick and Nova Scotia spruce and pine deals in Great Britain: "The import has been large, viz., 15,105 standards, against 10,587 standards in 1892 and 8,060 standards in 1891, still the aggregate import of this article up to date shows but little increase on the previous year. There has been a fair demand, a large portion of the arrivals going direct into consumption as soon as landed. Prices have been steady with an upward tendency, which, however, has been slightly checked by the reported decline in freights; the stock is moderate." British Columbia export market shows a slight improvement, and the local trade is fair.

UNITED STATES.

The lumber trade in the United States is undergoing a severe test at the present time, a result of the monetary stringency that has taken possession of our neighbors to the south. It would seem safe to say that the ultimate outcome will not be as serious as present conditions would appear to indicate. The difficulty is in no sense born within the lumber business. Lumber business had been going along swimmingly, and with increased momentum, until the silver trouble and other troubles growing out of this financial disturbance, began to make their influence felt in every department of commerce. Then lumber was struck. So soon, however, as a solution of the present difficulty is reached, lumber will no doubt quickly recover itself again. In the meantime the shoe pinches, and the season is so far extended that the hoped-for relief can hardly show itself before another spring's seeding has taken place.

FOREIGN.

Advices from Great Britain do not give much hope of improvement in the lumber trade across the water. Farnworth & Jardine's wood circular of current date, from Liverpool, Eng., says: "Business during the month has on the whole been quiet; imports generally have been sufficient for the dragging demand; values although steady show but little improvement, and stocks of all articles are ample. Both square and waney have

come forward from Canada freely, but deliveries have been disappointing, values are unchanged and the stock is sufficient. Red pine is seldom enquired for, and the stock is too heavy. Oak has been imported freely both from Canada and the United States, the demand has been dull and only first-class wood is in request; the stock (which to a large extent consists of United States wood) is much too heavy. Elm is in fair request, prices are steady and the stock is moderate. Ash has come forward freely, it moves off slowly, but prices are steady. Pine deals have been imported very moderately, and the bulk of the arrivals have gone into consumption; the stock, however, is still sufficient, and values have been difficult to maintain." Denny, Mott & Dickson, London, Eng., say in their monthly circular: "The recent fresh importations of Canadian timber are for the most part of satisfactory quality; waney pine of prime quality and good average lengths is in fair demand at fully previous rates. The stocks of square pine, oak and elm, are ample, at the present moderate rate of demand, for several months' consumption." Of the general situation they say: "There has been an increasingly hopeful feeling in the trade generally during the past month, and without our being able yet to chronicle any important advance in prices, we consider that the general tendency is certainly in an upward direction, and that the tone of the market is healthier than during many months past. Whether the otherwise probable improvement is to be again deferred in consequence of strikes or other extraneous troubles, we cannot pretend to foresee, but the factors of the situation germane to the trade itself seem all of a favorable nature." Figures of the value of sawed lumber imported into England from Canada for the half year ending June 30 show a falling off from £456,431 to £356,146, as compared with the corresponding period of last year, while in the value of hewed timber there was a drop from £79,955 to £44,580. Australian trade is dull beyond any immediate redemption. A report comes from the West Indies that there is a good, though somewhat limited, market there for white pine and spruce. Conditions are brighter in South America.

TORONTO, ONT.

TORONTO, August 31, 1893.

CAR OR CARGO LOTS.

Table listing various lumber types and prices, including 1 1/4 in. cut up and better, 1 1/2 in. dressing and better, etc.

YARD QUOTATIONS.

Table listing yard quotations for various lumber types, including Mill cull boards and scantling, Shipping cull boards, etc.

HARDWOODS—PER M. FEET CAR LOTS.

Table listing hardwood prices per M. feet car lots, including Ash, white, black, Birch, etc.

OTTAWA, ONT.

OTTAWA, August 31, 1893.

Table listing Ottawa lumber prices, including Pine, good sidings, Pine, good strips, etc.

QUEBEC, QUE.

QUEBEC, August 31, 1893.

WHITE PINE—IN THE RAFT.

Table listing white pine prices in the raft, including For inferior and ordinary according to average, quality, etc.

RED PINE—IN THE RAFT.

Table listing red pine prices in the raft, including Measured off, according to average and quality.

OAK—MICHIGAN AND OHIO.

Table listing oak prices, including By the drum, according to average and quality.

ELM.

Table listing elm prices, including By the drum, according to average and quality.

ASH.

Table listing ash prices, including 14 inches and up, according to average and quality.

HICKORY.

Table listing hickory prices, including 16 inch average, according to average and quality.

TAMARAC.

Table listing tamarac prices, including Square, according to size and quality.

STAVES.

Table listing staves prices, including Merchantable Pipe, according to qual. and spec'n—nominal.

SPRUCE.

Table listing spruce prices, including Bright, according to mill specification.

BOSTON, MASS.

BOSTON, Mass., Aug. 31.—The lumber trade of the Hub is decidedly dull.

EASTERN PINE—CARGO OR CAR LOAD.

Table listing eastern pine prices, including Ordinary planed boards, Course No. 5, etc.

WESTERN PINE—BY CAR LOAD.

Table listing western pine prices, including Uppers, 1 in., 1 1/2 in., etc.

SPRUCE—BY CARGO.

Table listing spruce prices by cargo, including Scantling and plank, random cargoes.

LATH.

Table listing lath prices, including Spruce by cargo.

SHINGLES.

Table listing shingle prices, including Eastern sawed cedar, extra, clear, etc.

OSWEGO, N.Y.

OSWEGO, N.Y., Aug. 31.—Nothing very bright can be said of lumber here any more than at other points.

WHITE PINE.

Table listing white pine prices, including Three uppers, 1 1/2, 1 3/4 and 2 in.

SHINGLES.

Table listing shingle prices, including 1 in siding, cutting up, etc.

12x12 INCH.

Table listing 12x12 inch lumber prices, including 12 and 16 feet, mill run.

12x10 INCH.

Table listing 12x10 inch lumber prices, including 12 and 13 feet, mill run.

12x10 INCHES.

Table listing 12x10 inch lumber prices, including Mill run, mill cull out.

12x4 INCHES.

Table listing 12x4 inch lumber prices, including Mill run, mill cull out.

| | | | |
|---------------------------|-------|--------------------|------|
| 1 1/2 INCHES. | | SHINGLES. | |
| 6, 7 or 8, mill run, mill | 20 00 | XXX 18 in. Clear | 1 60 |
| 6, 7 or 8, drug and | 25 00 | XXX Saginaw | 1 40 |
| letter | 30 00 | XX Clear | 1 25 |
| | | 18 in. 4 in. C. B. | 1 15 |
| SHINGLES. | | LATH. | |
| XXX, 18 in. pine | 3 70 | No. 1, 1 1/2 | 2 75 |
| Clear butts, pine, 18 in. | 2 70 | No. 1, 1 in. | 2 00 |
| XXX, 16 in. pine | 3 00 | No. 2, 1 1/2 | 2 55 |
| Stock cedars, 5 or 6 in. | 4 50 | | |

BUFFALO AND TONAWANDA, N.Y.

TONAWANDA, N.Y., Aug. 31.—The closing days of the month have witnessed some acquisition of strength. This is due, doubtless, to the improved feeling in financial circles. The hope is that these conditions may continue. When we say this much, however, we must, at the same time, write of a very dull market for the month. Sales few; prices firm.

| | | | |
|------------------------------|-------|------------------------|-------|
| WHITE PINE. | | SHINGLES. | |
| Upper, 1, 1 1/2, 1 3/4 and 2 | 48 00 | 6, 7 or 8, No. 1 culls | 16 00 |
| 2 1/2 and 3 in. | 50 00 | 6, 7 or 8, No. 2 culls | 14 00 |
| 4 in. | 52 00 | | |
| Selects, 1 in. | 42 00 | | |
| 1 1/2 to 2 in. | 43 00 | | |
| 2 1/2 and 3 in. | 47 00 | | |
| 4 in. | 51 00 | | |
| Fine common, 1 in. | 37 00 | | |
| 1 1/2 and 1 3/4 in. | 37 00 | | |
| 2 in. | 39 00 | | |
| 3 in. | 41 00 | | |
| 4 in. | 47 00 | | |
| Cut's up, No. 1, 1 in. | 29 00 | | |
| 1 1/2 to 2 in. | 35 00 | | |
| No. 2, 1 in. | 19 00 | | |
| No. 2, 1 1/2 to 2 in. | 25 00 | | |
| No. 3, 1 1/2 to 2 in. | 18 00 | | |

ALBANY, N.Y.

ALBANY, N.Y., Aug. 31.—Dealers have pretty well abandoned the hope of any improvement in trade this season. It is now too near a close. Almost absolute stagnation describes present trade. No one is buying; no one seems anxious to buy. Money fortunately is easier and there is not the same difficulty in obtaining discounts as was the case a month ago. Prices for lumber, notwithstanding the depression, show no signs of giving out.

| | | | |
|----------------------------|-----------|------------------------------------|---------------|
| FINE. | | SHINGLES. | |
| 2 1/2 in. and up, good | \$56 \$60 | 10-in. common | \$15 \$16 |
| Fourths | 52 | 12-in. dressing and better | 23 34 |
| Selects | 45 | Common | 15 17 |
| Pickings | 40 | 1 1/2-in. siding, selected, 13 ft. | 40 45 |
| 1 1/2 to 2-in. good | 52 55 | Common | 15 17 |
| Fourths | 47 50 | 1-in. siding, selected | 35 42 |
| Selects | 42 45 | Common | 15 17 |
| Pickings | 37 40 | Norway, clear | 27 28 |
| 1-in. good | 52 55 | Dressing | 16 18 |
| Fourths | 47 50 | Common | 11 15 |
| Selects | 42 45 | 10-in. plank, 13 ft., dressing | 42 55 |
| Pickings | 37 40 | and better, each | 23 25 |
| Cutting-up | 22 27 | 10-in. plank, 13 ft., culls, each | 23 25 |
| Bracket plank | 30 35 | 10-in. boards, 13 ft., dressing | 23 25 |
| Dressing boards, 12-in. up | 30 32 | and better, each | 23 25 |
| Shelving boards, narrow | 20 22 | 10-in. boards, 13 ft., culls | 23 25 |
| | | | |
| LATH. | | SHINGLES. | |
| Pine | \$2 40 | Spruce | \$2 40 \$2 50 |
| Sawed Pine, ex. NYVY | \$4 35 | Round butts, C x 18 | \$5 95 \$6 00 |
| Clear butts | 3 10 | Hemlock | 2 15 2 30 |
| Smooth, 6 x 12 | 5 50 | Spruce | 2 20 2 30 |

SAGINAW, MICH.

SAGINAW, Mich., Aug. 31.—Trade is dull; the whole situation is stated when we say that much. Holders of stocks are holding them, customers being few. But no disposition is shown to break prices. Those who own the lumber are in most cases able to hold on. The change from that of three months ago, when everyone wanted lumber, is very marked. At the same time the belief is firm that lumber is all right and those who pursue the holding-on policy will find it is true that all things come to those who wait.

| | | | |
|-----------------------------------|-------|---------------------|-------|
| FINISHING LUMBER—ROUGH. | | SHINGLES. | |
| Upper, 1, 1 1/2 and 1 3/4 | 45 00 | Fine common, 1 in. | 35 00 |
| 2 in. | 46 00 | 1 1/2 and 1 3/4 in. | 30 00 |
| Selects, 1 in. | 40 00 | 2 in. | 36 00 |
| 1 1/2 and 1 3/4 | 41 00 | C, 7, 8 and 9 in. | 20 00 |
| 2 in. | 41 00 | | |
| SIDING. | | LATH. | |
| Clear, 1 1/2 in. | 24 00 | No. 1, 1 1/2 | 2 75 |
| 3 in. | 25 00 | No. 1, 1 in. | 2 00 |
| Select, 1 1/2 in. | 21 00 | No. 2, 1 1/2 | 2 55 |
| 3 in. | 22 00 | | |
| TIMBER, JOIST AND SCANTLING. | | | |
| 2 1/2 to 10 to 12, 14 and 16 ft. | 11 00 | 20 ft. | 13 00 |
| 18 ft. | 13 00 | 22 and 24 ft. | 15 00 |
| For each additional 2 ft. add \$1 | | 24 and 26 ft. | 17 00 |
| for sires above 12 in. | | | |

| | | | |
|--------------------|------|------------------------|------|
| SHINGLES. | | LATH. | |
| XXX 18 in. Clear | 1 60 | No. 1, white pine | 2 15 |
| XXX Saginaw | 1 40 | No. 2, W. pine, Norway | 1 60 |
| XX Clear | 1 25 | | |
| 18 in. 4 in. C. B. | 1 15 | | |

NEW YORK CITY.

NEW YORK, Aug. 31. Perfect dullness overshadows the lumber market of the metropolis. Buyers are born of necessity only. The trade are hopeful that the financial situation will improve, but it must be confessed that as yet not so much as a rumbling of this better day is being felt by lumbermen here. Whilst certain prices are supposed to be current, it is yet difficult to say that any figures are absolutely fixed. Much depends on local conditions from day to day.

| | | | |
|---------------------------|-----------------|---------------|------|
| WHITE PINE WESTERN GRADS. | | SHINGLES. | |
| Upper, 1 in. | \$44 00 \$45 00 | 13 in. X cull | 1 00 |
| 1 1/2, 1 3/4 and 2 in. | 46 00 47 00 | XXX shorts | 1 25 |
| 1 and 4 in. | 55 00 56 00 | XX | 1 50 |
| Selects, 1 in. | 40 00 41 00 | | |
| 1 in. all wide | 41 00 42 00 | | |
| 1 1/2, 1 3/4 and 2 in. | 43 00 44 00 | | |
| 1 and 4 in. | 52 00 53 00 | | |
| Fine common, 1 in. | 36 00 37 00 | | |
| 1 1/2, 1 3/4 and 2 in. | 38 00 39 00 | | |
| 1 and 4 in. | 46 00 47 00 | | |
| Cutting up, 1 in. No. 1 | 28 00 29 00 | | |
| No. 2 | 21 00 22 00 | | |
| Thick, No. 1 | 29 00 30 00 | | |
| No. 2 | 24 00 25 00 | | |
| Common, No. 1, 10 | 22 00 23 00 | | |
| and 12 in. | 20 00 21 00 | | |
| No. 2 | 20 00 21 00 | | |
| No. 3 | 17 00 18 00 | | |

NEWS AND NOTES.

Peter Shaw, of Norvar, Ont., owner of sawmill, died August 23.

The shingle mill of John Manion, West Lather, Ont., burned; loss \$500.

Genelle Bros., sawmill, Tappin Siding, B.C., have dissolved; J. Genelle continues.

A young man named Gileon Kelville had his leg badly crushed in Booth's new mill, Ottawa, Ont., a week ago.

A new field for timber has been found, says an English trade paper, and it is somewhere up in the Russian domains of Siberia.

It is stated that Mr. Joseph Cartier, a rich Canadian of Ladington, Mich., is about to purchase the extensive lumber mills now belonging to Hon. Louis Tourville, at Louiseville, Quebec.

Mr. Alexander Bryce, a partner of the late firm of Bryce Bros., lumbermen, Toronto, died at Fort Worth, Texas, the latter part of August.

John Hann & Son's mill and lumber yard, at Ten Mile Lake, near Rosseau, Ont., was destroyed by fire on 28th August. Loss about \$3,000; no insurance.

Michael Tierney, an Indian, was killed and eight others badly injured at the Vermillion river, near Pembroke, Ont., through the breaking of a boom of logs.

An incipient fire occurred among the lumber piles of the Export Lumber Co., and Cox, of Liverpool, Eng., in Ottawa, a few days ago. No serious harm was done.

Vincent Decline, employed as a river driver by Mickle, Dymont & Co., was drowned in the Severn a week ago. He fell off a boom and being unable to swim drowned before assistance reached him.

At Rat Portage, Ont., Andrew Clegg, a mill-wright in Mather's lumber mill, while engaged oiling the machinery, was caught between two cog wheels and smashed to pieces instantly. So great was the strain as his body was passing through that it forced a pressure of 1,500 pounds, breaking some bolts and stopping the mill. The stoppage was the first intimation of the accident. Clegg was unmarried, thirty years of age, and came from Port Hope, Ont.

TRADE NOTES.

Mr. J. Drake, shingle machine manufacturer, Belleville, Ont., regrets that he will not be able to make a display of his machinery at the Industrial Exhibition, as had been announced, being so crowded with orders that these demand all his time and attention.

A half-page advertisement of the Eastman Lumber Company, Eastman, Que., in this month's LUMBERMAN, will be of interest to all engaged in the manufacture of lumber. The machines advertised have the endorsement of practical lumbermen who know whereof they speak. The Eastman Company is known as one of the most responsible firms in the province of Quebec.

STEAM PUMPS



Duplex AND SINGLE Steam AND POWER Pumps

If you require a pump for any duty, of the latest and most improved pattern, and at close prices,

WRITE US



NORTHEY

M'FG CO.

LIMITED

TORONTO - ONT.

A BAND SAW IN HIS MOUTH.

IT is a fortunate thing for man and the rest of the animal kingdom, naturalists have told us, that no large wild animal has a mouth constructed with the devouring apparatus built on the plan of the insignificant-looking snail's mouth, for that animal could out-devour anything that lives. The snail itself is such an entirely unpleasant, not to say loathsome creature to handle, that few amateur naturalists care to bother with it, but by neglecting the snail they miss studying one of the most interesting objects that comes under their observation.

Anyone who has noticed a snail feeding on a leaf must have wondered how such a soft, flabby, slimy animal, can make such a sharp and clean-cut incision in the leaf, leaving an edge as smooth and straight as if it had been cut with a knife. That is due to the peculiar and formidable mouth he has. The snail eats with his tongue and the roof of his mouth. The tongue is a ribbon which the snail keeps in a coil in his mouth. This tongue is in reality a hand saw, with the teeth on the surface instead of on the edge. The teeth are so small that as many as thirty thousand of them have been found on one snail's tongue. They are exceedingly sharp, and only a few of them are used at a time. Not exactly only a few of them, but a few of them comparatively, for the snail will probably have four thousand or five thousand of them in use at once. He does this by means of his coiled tongue. He can uncoil as much of this as he chooses, and the uncoiled part he brings into service. The roof of his mouth is as hard as bone. He grasps the leaf between his tongue and that hard substance and, rasping away with his tongue, saws through the toughest leaf with ease, always leaving the edge smooth and straight.

By use the teeth wear off or become dulled. When the snail finds that his tool is becoming blunted, he uncoils another section and works that out until he has come to the end of the coil. Then he coils the tongue up again and is ready to start in new, for while he has been using the latter portion of the ribbon, the teeth have grown in again in the idle portions—the saw has been filed and reset, so to speak—and while he is using them, the teeth in the back part of the coil are renewed. So I think I am right in saying that if any large beast of prey were fitted with such a devouring apparatus as the snail has, it would go hard with the rest of the animal kingdom.

CUTTING OF TIMBER.

DURABILITY of timber is increased by timely cutting. Even white birch cut in July and August in full leaf will remain sound for two years or more. Cut in March it will hardly last through the season. White birch will make fairly durable beam poles if cut in midsummer. Dr. Jabez Fisher, of Massachusetts's grape farm, uses chestnut logs for trellis stakes, and contracts that the trees shall be cut in late summer when in full leaf. The stakes are also stronger. Water seasoned lumber is durable probably because the water washes out the destructive acids of the sap. Logs cut in winter that cannot be sawed until there is danger of decay and damage from insects are safely preserved if thrown in the mill pond.

NO SMOKE.

A RECENT German invention for the purpose of preventing smoke when coal is used as fuel consists in reducing the coal to a powder and feeding this to the furnace with an air blast. The coal so prepared ignites at once upon entering the furnace and gives an intense flame. The dust does not fall, but floats in the furnace chamber and is entirely consumed. There are no ashes, and it is said there is no smoke from using coal in this shape. The fire can be regulated the same as when oil is used, and it can be started or extinguished at pleasure.

PLENTY OF OAK.

OAK is sometimes referred to as a timber that will some day in the near future take rank as one of the scarce woods of the country. In the opinion of the Timberman, of Chicago, taking the oak family as a whole, it will always be in supply, as long as a man occupies North America. Oak is said to be about the most common timber that grows. In its various varieties it supplies about forty of the 420 species of wood in the United States, and it is probably only exceeded in amount by the cone bearing trees, which include such as the pine, hemlock, spruce, fir, etc. It is possible that if the exact figures were at hand, oak might even surpass these, for it grows almost everywhere that trees are found. Certain kinds are of particular value. White oak is the favorite of all and is being more rapidly cut away than others, though all varieties have their uses. Where exceptionally well located or of especially fine quality, it may have a higher price as standing timber, but its quality is so great and widely distributed that very high prices are not to be anticipated. The measure of its value on the market depends mainly on the cost of getting it to the mills and of manufacture. These will continue to be the chief elements in its cost for many years to come, and we apprehend this generation will not see the permanent price much higher than that which prevailed during last year.

ADVERTISING IN TRADE JOURNALS.

A PROMINENT and very successful manufacturer was recently asked why he did all his advertising through the leading trade journals and never sent circulars or put up posters, says Drainage Journal, and replied: "Men who do not read their trade papers and keep posted in their business are usually poor customers. If I sell them a good lot of machinery, they do not know how to use it, and report it a failure, or we have to run after them, lose time and money, to get them a going and make the sale stick. But those who read and are posted know how, and succeed. Such men would not read circulars if I were to mail circulars to them. They see my 'ad.' regularly in the trade paper and know that I have an established business, and when they want anything in my line, write me, and don't whine about prices, or what time they can get from others, but buy, try, and have no trouble, and pay the bill. Give me such a class of customers as I get by such judicious advertising all the time."

PLANNING BUILDINGS.

WHEN you are about to build, rebuild, enlarge or remodel your saw, lath, planing or shingle mill, or your sash, door and blind factory, or any other wood-working plant, don't go about it wrong end foremost. It is a wrong way to go about it by putting up a building of any sort or size, and then trying to force your outfit of machinery into the misshapen building. You begin wrong when you begin without a plan. First, lay out what capacity you need. Then arrange your machines so that you secure the best possible economy. When all this is done, complete the scheme by building a suitable cover for the plant. Ignorant owners go at it the other way. Instead of putting all the care and attention on the machines, transmission, boilers and engines, they put up a building first. Very naturally, they find their buildings of the wrong shape or size. They really give second place to what should have first place in their calculations. The result is an unsatisfactory plant.

YOU ARE INVITED.

The Magnolia Metal Company, which sells its metal all over the world, extends to its friends an invitation to visit its exhibit at the World's Fair; it can be found at Section No. 10, column E 53, where all people who are interested in the running of machinery with the least amount of friction are most welcome.

PILING SAP LUMBER.

THE location where lumber is piled, and its surroundings, have much to do, says Mr. W. B. Henry, in the Wood Worker, toward aiding or preventing stained lumber. Where it is piled on low, wet or damp ground, or in hollow places, or surrounded by tall buildings or dense growth of timber, where there is not free circulation of air, one may expect damage from sap-stain unless the greatest care be taken.

My experience and observation have been that one of the best methods to prevent sap-stain is to get the lumber cross-piled as soon as possible after it leaves the saw. The piling sticks, or the timbers upon which the lumber is to be cross-piled, should be raised high enough so that there may be a clear space of 18 to 24 inches between the ground and lumber.

In lumber 12 feet long there should be three of these cross-bearing timbers, and with good pitch to allow the free carrying off of water or evaporations from the lumber. A pile of lumber should never be allowed to sag in the middle, for in so doing it not only prevents the free carrying off of the moisture, but carries from both ends towards the middle, where congestion ensues and sap-stain results.

In the centre of each pile of lumber I always leave a space of 12 to 18 inches for an air space or chimney; the sides of this space are carried up from bottom to top with almost plumb-line precision, or at least as much so as the sides of the piles. The air beneath the pile finds this chimney to act as a funnel and escape-valve for the moisture beneath the piles, as well as in the lumber itself throughout the pile.

Narrow pieces or strips should be used for the lumber to rest upon in the building up of every layer in the pile. Strips from three to six inches in width is probably the best width, and if they are over, all the better.

The widest board or plank should be put at the edge of the pile or the edge of the chimney, and there should be sufficient space left between each board or plank—owing to the thickness and width of the lumber—so that they are not crowded too closely together, for the main object throughout is to give plenty of ventilation and free circulation of air.

When the pile is finished it should be well covered, and all the better if the lumber used for covering be at least two feet longer than that in the pile, so that the roof may carry the water beyond the ends of lumber piled. Other piles should not be allowed to be nearer than six feet, and better yet if eight feet distant.

With these things carefully carried out, one will seldom have much badly stained lumber, unless the conditions be unusually bad, or with kinds of timber with which I have never had much practical experience in handling. I have never used unslacked lime thrown under and around the piles of lumber during hot weather, but have been told by those who have used it that it is an excellent preventive of sap-staining. The lime doubtless absorbs or dries up the dampness of the ground, and to some extent the lumber, but unless the lumber be piled somewhat in the manner I have mentioned, I do not think lime of itself would keep the lumber bright.

Several years ago it was suggested to me that by piling the sap-side—that is, the side of the board or plank next to the bark or the outside of the log, always turned up, and the heart side turned down, that one would have little stained lumber. As no plausible scientific theory was advanced, or that I was slow to believe, I did not readily adopt it. But others who claimed to have tried it, assured me of the good results, and during one month in winter time, and one month in mid-summer I piled the grades of selects and fine common, two grades having the most sap in white pine lumber, one pile being careful to turn the sap side up, and in the next pile just as it came, whether sap side or heart side, then the next pile sap side up, and thus alternating in that manner.

The piles contained 12,000 to 16,000 feet, owing to the lengths of the lumber. There was, during all the time this lumber remained in pile, from 3,000,000 to 5,000,000 feet in the yard, so that the surrounding conditions were about the same.

This sap lumber was allowed to season until in good shipping condition, and then shipped out to fill orders as they came in. If there was not enough to fill an order from one pile, it would be taken from the next, but I could see no difference in the brightness of the sap between the one pile or the other, nor in the weight of the lumber.

There was no sap-stain in any of the lumber, and I attributed it more to the manner in which it was piled, in accordance with the method I had adopted, than to turning the sap side of the board up.

THE OLD AND THE NEW.

MACHINERY, says the Age of Steel, has so far changed conditions that in the planing mill, the furniture factory, the cabinet shop, and in all other kinds of wood-working plants, the differences between the old methods and the new are little less than revolutionary. The room for ingenuity has been eminently favorable to its development, the working of wood into artistic forms requiring a wide range of special apparatus, and insisting on devices that in an economical and practical sense had to keep pace with changing demands and conditions. The work done by some of these mechanical appliances is little less than phenomenal, involving the most intricate and diversified operations, and doing the same with a precision and accuracy unequalled by the most expert mechanic. To name any as distinct from the rest would seem to be an invidious comparison, it being enough in the general sense to say that in every specialty of wood-working the ingenuity in device is simply remarkable. In planers and moulding machines, in sawing and tenoning apparatus, in boring and mortising work, in lathes of all kinds, in scroll and hand saws, in shaping, friezing, sand-papering and polishing contrivances; and, in fact, all the way from a hotel toothpick to the figure-head of a steamship, or the exquisite carvings that adorn the temple or the palace, the work of the brainless tool is supreme.

CATERPILLARS OF WOOD.

ONE of the queerest things found in New Zealand, Tasmania and other parts of Australasia, is the world-famous wooden caterpillar. This wonderful animal plant is a fungus, a sphaeria, which grows to a height of seven or eight inches above the ground, generally in a single stem, round and thickly covered with brown seed, the whole ending in a curved worm-like point. It is usually found growing at the roots of a particular tree, the "rata" of the natives.

When this singular plant is pulled up, its single root is found to be the exact counterpart of a large caterpillar, one from three to four inches long, and which although it preserves and exhibits every detail of such worms, dissection proves it to be only a woody, bulbous root. Intelligent persons of the countries named, as well as English, American and French naturalists who have been sent to report on this wonderful vegetable product, say that it is formed in the following unique and curious manner: A large species of moth feeds on the "rata" tree; the grub of this moth burrows in the ground; the seeds or spores of the sphaeria fungus find lodgment between the scales of the grub's neck, strike root and completely turn the interior of the creature into segments of solid wood.

In every case the shell or skin of the caterpillar is left intact, no small rootlets puncturing it at any point except at the eye, where hair-like roots protrude, giving the woody worm a very fierce expression.

3½ Cents a day—

That isn't much money, is it?

About twenty-five cents a week or so.

And a man must be pretty hard up if he hasn't that much to spend every week.

Times are hard, they say; but if they are hard now to your family and yourself, what will they be to your family without you?

That's worth thinking about.

We think that no man should be without life insurance when it can be had at such a low rate as 3½ cents a day from the Manufacturers' Life, Yonge Street, corner Colborne, Toronto.

Write to us and we will give you all particulars.

DONOGH & OLIVER



WHOLESALE DEALERS IN

LUMBER



OFFICE
Nos. 213, 214 and 215

Board of Trade Building

Toronto, Ont.

Representative Lumber Manufacturers and Dealers

| TOWN | Railway, Express, or nearest Shipping Point | NAME | BUSINESS | Power, Style and Daily Capacity |
|-----------------------|---|---|--|---|
| Ottawa, Ont. | Ottawa | Booth, J. R. | Lumber, Wholesale and Retail | Steam, Circular and Hand Mill |
| Ottawa, Ont. | Ottawa | Bronson & Weston Lumber Co. | 2 Sawmills, White and Red Pine, Wholesale | Water, Gang and Band, 450m |
| Ottawa, Ont. | Ottawa | OTTAWA LUMBER CO. | Lumber, Pine, Spruce, Hemlock, Wholesale | |
| Ottawa, Ont. | Ottawa | Parley & Pattee | Saw and Lath Mill, Pine, Wholesale | Wat., Gang and Band, Saw 400m, Lath 70m |
| Parry Sound, Ont. | Utterson | Coager Lumber Co. | Lumber, Wholesale and Retail | |
| Parry Sound, Ont. | Parry Sound | Parry Sound Lumber Co. | Saw, Shingle and Lath Mills, Pine, Wholesale | Water, Gang, Circular, Saw 90m, Shingles 70m, Lath 30m |
| Muskoka Mills, Ont. | Penetanguishene | Muskoka Mill and Lumber Co., Head Office, Arcade, 24 King St. W., Toronto | W. Pine Lumber, Lath and Mill Stuff, all lengths | 2 Mills, Water, 1 Band, 2 Gangs and 3 Circulars |
| Alexandria, Ont. | Alexandria | McPherson, Schell & Co. | Cheese Box Factory, Pine, Spruce, Cedar | Circular, 3m |
| Almonte, Ont. | Almonte | Caldwell, A. & Son | Sawmill, Pine, Spruce, Cedar, Hardwoods | Steam, Circular, 40m |
| Harrie, Ont. | Harrie | Dymont & Mickle | Saw, Shingle and Heading Mill, Pine, Cedar | |
| Harrow Bay, Ont. | Warton | Harrow Bay Lumber Co., Limited | Oak, Oak Railway Ties, Paving Blocks | Steam, Circular, 16m |
| Blind River, Ont. | Blind River | Blind River Lumber Co. | 2 Saw, Sh. and Lath Mills, Pine, Hem., Bl. Birch | Stm., Band, Cir., S. 75m, Sh. 60m |
| Hobcaygeon, Ont. | Fenelon Falls | Boyd, Mosson & Co. | Lumber, Wholesale and Retail | |
| Bracebridge, Ont. | Bracebridge | DOLLAR, JAMES | Lumber, Shingles, Wholesale | |
| Harrie, Ont. | Harrie | Burton Bros. | Lumber, Wholesale and Retail | |
| Wauhaushene, Ont. | Wauhaushene | Georgian Bay Consolid. Lumber Co. Hd. office arcade 24 King St. W., Toronto | Pine only | Wauhaushene mill, 4m., 200m; Pt. Severn mill, water, 120m |
| Calabogie, Ont. | Calabogie | Carwell, Thistle & McKay | Lumber, Wholesale and Retail | |
| Callander, Ont. | Callander, G.T.R. | John B. Smith & Sons | White and Red Pine Lumber, Mill Stuff, Lath and Shingles | Steam, 2 Circular, 80m |
| Collins Inlet, Ont. | Collins Inlet | Head Office, Strachan Ave., Toronto | Lumber, Pine, Oak, Ash, Birch, Whol. and Ret. | |
| Comber, Ont. | Comber | Collins Inlet Lumber Co. | Saw and Stave Mill, Pine, Hardwoods | Steam, Circular, 6m |
| Glanville, Ont. | Pinkerton | Ainslie, J. S. & Bro. | Saw, Shingle and Lath Mill, Timber Land | Steam, Cir., Saw 14m, Sh. 20m |
| | | McIntyre, W. & A. | Hemlock, Pine, Lumber, Hardwoods | |
| Hamilton, Ont. | Hamilton | BRADLEY, MORRIS & REID CO. | Lum., Tim., Pine, Hem., Hwds., Whol. and Ret. | Steam, Circular, 25m |
| Huntsville, Ont. | Huntsville | Beath, Taft and Turnbull | Sawmill, Pine, Spruce, Hemlock, Hardwoods | Steam, Circular, 4m |
| Hamilton, Ont. | Huntsville and Katrine | Thomson, Robert & Co. | Sawmill, Pine, Spruce, Hardwoods | Steam, Circular |
| Keewatin, Ont. | Keewatin | Dick, Banning & Co. | Sawmill, Pine, Hardwoods, Wholesale | Water, Band and Circular, 100m |
| Keewatin, Ont. | Keewatin | Keewatin Lumber & Mfg. Co. | Saw, Lath, Sh. and Pl. Mill, Moving Posts, Pine | |
| Lakefield, Ont. | Lakefield | Lakefield Lumber Mfg. Co. | Lumber, Wholesale and Retail | Steam, Circular, 25m |
| Little Current, Ont. | Sudbury | Conlin, T. & J. | Sawmill, Pine, Ash, Birch, Oak | |
| Little Current, Ont. | Sudbury | Bowry, J. W. & Sons | Lumber, Wholesale and Retail | |
| London, Ont. | London | Gordon, James | Exp. and dir. in Am. Hwds. made to specification | |
| Longford Mills, Ont. | Longford | Longford Lumber Co. | Saw and Plan. Mill, Hemlock, Hardwds., Whol. | Steam, Band and Circular, 100m |
| Mount Forest, Ont. | Mount Forest | Groeninger, W. S. | Cherry, White Ash, Hardwoods, Wholesale | |
| Norman, Ont. | Norman | Cameron & Kennedy | Saw and Plan. Mill, Tim. Lands and Logs, Pine | Steam, Circular, 40m |
| Norman, Ont. | Norman | Minnesota & Ontario Lumber Co. | Lumber, Wholesale and Retail | |
| Louise, Ont. | Elmwood, G.T.R. | S. H. Wilson & Son | Hardwoods, Shingles, Lath, Handles | Steam, Circular, 20m |
| Toronto, Ont. | Toronto | Campbell, A. E. & Co. | Lumber, Wholesale | |
| Toronto, Ont. | Toronto | P. H. Tennant | Lumber, Wholesale | |
| Toronto, Ont. | Toronto | Donogh & Oliver | Lumber, Wholesale | Com. Stm., Cir., Gang and Band, 140m Com. |
| Toronto, Ont. | Toronto | Victoria Harbor Lumber Co. | 3 Saw, Shingle and Lath Mills, White Pine, Whol. | |
| Toronto, Ont. | Toronto | W. W. McEachern & Co. | Lumber, Wholesale | Com. |
| Toronto, Ont. | Toronto | James Tennant & Co. | Lumber, Lath, Shingles, etc., Wholesale | Com. |
| Warton, Ont. | Warton | Miller, B. B. | 3 Sawmills, Lumber, Barrel Heads | Steam and Water, Circular, Portable and Stationery, 10m Circular, Gang and Band, 180m |
| Buckingham, Que. | Buckingham | Reas Bros. | 2 Sawmills, Pine, Spruce, Hardwoods | |
| Toronto | Toronto | DeLapante & Berwick | Pine and Hardwood Lumber, Whol. and Retail | |
| Cookshire, Que. | Cookshire | Cookshire Mill Co. | Saw, Shingle, Planing, Stave and Heading Mill | Steam, Circular and Gang, 60m |
| Montreal, Que. | Montreal | Dufresne, O. Jr. & Frere | Sawmill, Pine, Spruce, Hemlock, Hwds., Whol. | Steam, Circular and Band, 50m |
| Montreal, Que. | Montreal | Roberts, Joseph & Fils | Saw and Planing Mills, Sash, Doors and Blinds | Steam, Circular, 200m |
| Montreal, Que. | Montreal | SHEARER & BROWN | Int. Fin. Spruce, Hardwoods, Wholesale | |
| Montreal, Que. | Montreal | MOODYVILLE SAWMILL CO. | 4 Sawmills, Oak, Ash, Elm, Pine, Hem., Dim. | 2 Stm., 2 Wat., Band, Cir., 40m |
| New Westminster, B.C. | New Westminster | Branette Sawmill Co. | Saw and Planing Mills, Sash, Doors and Blinds | Steam, Circular, 20m |
| Canterbury, N.H. | Canterbury Stn. | James Morrison & Son | Fir, Cedar, Spruce, Hardwoods | Steam, Gang and Circular |
| Bridgewater, N.S. | Bridgewater | DAVIDSON, E. D. & SONS | Sawmill, Pine, Hardwoods | Steam, Circular, 32m |
| | | | 5 Saw, Shgle. and Lath Mills, Pine, Spr., Hwds. | Water, Circular and Gang, 200m |

LUMBER TRUCK WHEELS

The Montreal Car Wheel Co.

... MANUFACTURERS OF ...

Charcoal Iron Gilled

RAILROAD WHEELS

OFFICES:

NEW YORK LIFE INSURANCE BUILDING, MONTREAL

WORKS: LACHINE, QUEBEC

We make a specialty of Wheels suitable for the requirements of Lumbermen and Street Car Service, and can supply them Dressed, Finished and Balanced.

CORRESPONDENCE SOLICITED

OAK TANNED BELTING

TORONTO

THE J.C.M^cLAREN BELTING CO

MONTREAL

Lumbermen desiring of being represented in this Directory can obtain information in regard to rates by communicating with the Publisher.

MACHINERY

FOLLOWING LIST OF NEW AND SECOND-HAND Boilers, Engines and General Machinery for sale by The Canada Machinery and Supply Co., Brantford, Ont., dealers in new and second-hand machinery and supplies:—

- ONE BOILER, TO BRICK IN, 44 IN. DIA. x 11 ft. 7 in. long, 41 3/4 in. tubes, in first-class order.
ONE BOILER, TO BRICK IN, 44 IN. DIA. x 11 ft. 8 in. long, 38 3/4 in. tubes, in first-class shape.
THREE 25 H.P. PORTABLE LOCO. FIRE BOX boilers, in good order.
ONE 20 H.P. RETURN TUBULAR BOILER, to brick in.
TWO 6 H.P. FIRE BOX BOILERS FOR cheese factories.
ONE 12 x 16 SLIDE-VALVE ENGINE, BECK-ett's make.
TWO 9 x 12 SLIDE-VALVE ENGINES, Gouthe & McCulloch and Morrison makes.
ONE 6 1/2 x 9 SLIDE-VALVE ENGINE, COPP Bros & Barry make.
TWO 5 1/2 x 9 SLIDE-VALVE ENGINES, BECK-ett's make.
ONE 6 H.P. ENGINE, UPRIGHT, with 8 H.P. boiler combined on one cast iron base.
ONE 15 H.P. ENGINE, English make.
ONE 14 H.P. LEONARD MAKE ENGINE, nearly new.
ONE 12 H.P. HORIZONTAL PORTABLE EN-gine and boiler on skids; Ames & Co., makers, Oswego, N.Y.

MACHINERY: -

- ONE 24-INCH MCGREGOR, GOURLAY & CO. make heavy surface planer, almost new.
TWO 24-INCH GANT, GOURLAY & CO. MAKE light surface planers, in good order.
ONE GOLDIE & McCULLOCH THREE SHIP moulder.
ONE ONE-SIDE MOULDER.
TWO 34-INCH WHEELS BAND SAWING machines.
ONE ALMOST NEW VERTICAL SPINDLE boring machine, McGregor, Gourlay and Co.'s make.
ONE ALMOST NEW IRON TOP JIG SAW, Cowan and Co., makers.
ONE GOOD SHAPER.
SIX GOOD SAW TABLES.
ONE NEARLY NEW GOLDIE & McCULLOCH tenoner, with double copes.
ONE WOOD FRAME TENONER IN GOOD shape.
TWO UPRIGHT SWING SHINGLE OR or heading machines, with jointers.
ONE ALMOST NEW GENUINE "BAILEY" gauge or handle lathe, with countershaft.
ONE ALMOST NEW SPINNING LATHE FOR making spun metal work, with countershaft.
FOUR HOWELL MACHINES.
ONE 20-INCH WATEROUS CHOPPER COM-plete with double elevators, equal to new.
FULL PARTICULARS CHEERFULLY GIVEN upon enquiry at the Canada Machinery and Supply Co., Brantford, Ont.

WANTED FOR CASH

Ash and Soft Elm

MOSTLY ONE-INCH, SOME ONE-AND-A-QUARTER and one-and-a-half inch, strictly first and seconds; also common. Furthermore, Ash and Oak squares from one-and-a-half to four inches thick. Red Birch Lumber, 1 and 1 1/2, all thickness; also Red Birch Squares 4 x 4 and 6 x 6, ten feet and over long. Address all particulars as to dryness, quality, quantity on hand and price, to P.O. Box 2144, New York, N.Y.

35 CENTS

BUYS

FISHER'S GRAIN TABLES

—192 PAGES—

The book contains more valuable information and useful tables for Farmers, Millers, Traders and others than any similar book of its kind ever published, besides being a complete Ready Reckoner showing the value of articles of lbs. from one to 500; from a quarter of a cent to \$2.00. Also tables for Grain, Hay, Rent, Board, Wages, Interest, etc. Write for sample copy.

THE CANADIAN MILLER, Toronto, Ont.

THE NORTH SHORE NAVIGATION CO.

Royal Mail Line of Steamers

CITY OF MIDLAND CITY OF LONDON

... FAVORITE MANITOU ...

Running in connection with the G.T.R. and C.P.R., will sail during the season of 1893 as follows:

THE CITY OF MIDLAND AND THE CITY OF LONDON will leave Collingwood at 1.30 p.m. every Tuesday and Friday on arrival of G.T.R. morning train from Toronto and Hamilton, calling at Meaford. Leave Owen Sound same day at 10.30 p.m., after arrival of C.P.R. train from Toronto, connecting at Wiarton with night train from the south, and stopping at all intermediate ports to Sault Ste. Marie. Returning leave the Soo at daylight, making railway connections at Wiarton, Owen Sound and Collingwood.

The FAVORITE will leave Collingwood Monday and Thursday, at 1.30 p.m. for Parry Sound, Byng Inlet, French River and Killarney, connecting there with line steamers for Sault Ste. Marie. Returning stop at French River, Byng Inlet and Midland, making connection there with steamer MANITOU for Parry Sound and G.T.R. for south and east, and at Collingwood with G.T.R. for Toronto and Hamilton.

Commencing Thursday, May 4th

The MANITOU will make regular trips from Penetanguishene, connecting with trains from the south only at Midland, every Monday, Wednesday, Thursday and Saturday on arrival of G.T.R. from all points south and east for Parry Sound, making connection there with the steamer FAVORITE for Byng Inlet, French River and Killarney, where the latter connects with the line steamers for the Soo.

For tickets and further information see folders, or apply to all agents of the G.T.R. and C.P.R., or to

C. E. STEPHENS, M. BURTON, Sec. Treas., Collingwood, Mgr. Collingwood.

MILLERS' & MANUFACTURERS' INS. CO.

ESTABLISHED - 1885

32 Church Street, Toronto

The President, James Goldie, Esq., in moving the adoption of the report on the business of 1892, said: I have much pleasure in drawing your attention to the fact that this company has verified, in a marked degree, every expectation set forth in the original prospectus when organized in 1885.

Up to the present time the insurers with this company have made a saving, when compared with the current exacted rates, of \$91,004.20. And in addition thereto bonus dividends have been declared to continuing members amounting to \$21,522.72.

Besides achieving such result, we now also have, over all liabilities—including a re-insurance reserved (based on the Government standard of 50 per cent.—(50%)), a cash surplus of 1.93 per cent. to the amount of risk in force.

Such results emphasize more strongly than any words I could add the very gratifying position this company has attained. I therefore, with this concise statement of facts, have much pleasure in moving the adoption of the report.

The report was adopted, and the retiring Directors unanimously re-elected. The Board of Directors is now constituted as follows: James Goldie, Guelph, president; W. H. Howland, Toronto, vice-president; H. N. Baird, Toronto; Wm. Bell, Guelph; Hugh McCulloch, Galt; S. Neelon, St. Catharines; George Pattinson, Preston; W. H. Story, Acton; J. I. Spink, Toronto; A. Watts, Brantford; W. Wilson, Toronto.

HUGH SCOTT, THOS. WALMSLEY, Mgr. and Sec'y. Treasurer

CANADIAN

LUMBERMAN'S DIRECTORY

AND INDEX TO THE PLANING MILLS AND SASH AND DOOR FACTORIES OF CANADA.

THE Publisher is now open to receive subscriptions for the above Directory of the lumber trades. No effort is being spared to make this publication thoroughly complete and reliable in every detail, and it is hoped that all LUMBERMAN subscribers interested will fill in the following subscription blank and return to this office at as early a date as possible.

TO THE PUBLISHER OF

THE LUMBERMAN'S DIRECTORY

AND INDEX TO THE PLANING MILLS AND SASH AND DOOR FACTORIES OF CANADA:

1893

Please supply.....with.....copies of the above Directory as soon as issued, for which.....agree to pay Two Dollars per copy.

All owners of saw and planing mills, wholesale and retail lumbermen, coopers, etc., are earnestly requested to furnish information asked for in following blank and mail same as soon as possible:

Card of Enquiry to Lumbermen.

Manufacturers of lumber, shingles, lath, staves, headings, etc., will please fill in this blank:

Power, style and capacity of mill:
Class of manufacture:
Post Office: Shipping Point:

Dealers in lumber, shingles, lath, etc., will please fill in following blank:

Wholesale or Retail: Class of stock handled:
Post Office: Shipping Point:

Owners of planing mills, sash, door and blind factories, will please fill in following blank:

Power and style:
Class of manufacture:
Post Office: Shipping Point:

(Signed) P.O.

Province:

Address all communications to

DIRECTORY DEPARTMENT, CANADA LUMBERMAN, TORONTO, ONT.

WHY BAND SAWS BREAK

SIXTEEN

REASONS,

AND HOW TO

AVOID THEM



Being instructions to filers on the care of large band saw blades used in the manufacture of lumber.

A book filled with valuable information on the care of band saws. Giving the reasons for breaking; analyzing each reason; giving instructions to dispense with the causes as laid down in each reason; and full details on filing and brazing. The proper styles of hammers to use are illustrated and described, and views of blades showing the blows of the different styles of hammers form an important part of the illustrations. Improper and unequal tension are then treated, and the manner of properly setting irregular teeth is described. In connection with the treatise is a history of the invention, manufacture and use of the saw from its origin to the present time. The work in whole makes an accumulation of information such as has never before been published.

The book is printed on fine paper, good clear type, and is handsomely and substantially bound in cloth. It will be sent to any address on receipt of the price, ONE DOLLAR.

Address— CANADA LUMBERMAN, Toronto, Ont.

EVERY LUMBERMAN WANTS IT

35 CENTS BUYS IT

Scribner's Lumber and Log Book

SAVES TIME SAVES MISTAKES SAVES MONEY

BRIMFUL OF EVERY-DAY, PRACTICAL INFORMATION

Address: THE CANADA LUMBERMAN, Toronto

WANTED AND FOR SALE

Advertisements will be inserted in this department at the rate of 15 cents per line each insertion. When four or more consecutive insertions are ordered a discount of 25 per cent. will be allowed. This notice shows the width of the line and is set in Nonpareil type. Advertisements must be received not later than the 27th of each month to insure insertion in the following issue.

WE WANT ALL KINDS OF HARDWOODS. Will pay cash. ROBERT THOMSON & CO., 103 Bay Street, Toronto.

FOR HEMLOCK, DIMENSION LUMBER, hardwood flooring, cedar shingles, piles, sawdust, etc., write J. E. MURPHY, lumberman, Hepworth station, Ont.

WANTED

BASSWOOD LUMBER, BY CAR OR CARGO. Offers invited. Address "Basswood," care of CANADA LUMBERMAN.

COMMISSIONS

THE ADVERTISER CAN SECURE HIGH prices for black ash, basswood, elm and maple in New York and surrounding market. Best references given. Send lists of stock on hand. No shipment on consignment. Bona fide orders sent you before shipment. Address "Commissions," care of CANADA LUMBERMAN.

RAILS FOR TRAMWAYS

NEW AND SECOND-HAND STEEL AND iron rails for tramways and logging lines, from 12 lbs. per yard and upwards; estimates given for complete outfit.

JOHN J. GARTSHORE, 49 Front St. West, Toronto.

TO EASTERN STATES LUMBERMEN.

AN EXTENSIVE HANDLER OF PULP wood, fir, spruce, canoe birch and poplar, is desirous of finding a market for same in the Eastern States—New York or Boston preferred. Is prepared to ship any size required per schooner from Quebec. Parties handling same should communicate with I.C.L., care CANADA LUMBERMAN, Toronto.

FOR SALE

A HANDLE LATHE FOR MAKING FORK and rake handles.

Inch squares are cut out of slabs, piled one on top of the other in the machine, and it automatically takes the lowest, runs it between the knives and produces the handle without any more attention. Contracts can be secured for all the handles that can be produced with the machine.

WATEROUS, BRANTFORD, CAN.

FOR SALE

A STEAM CIRCULAR SAWMILL

WITH DOUBLE EDGER AND BUTTING saw, capacity 15 to 20 M feet per day, 40 horse power boiler and engine, lumber and wood cars, steel trolly on lumber track, horses, wagons, harness, sleighs, blankets, boom chains, driving plant, blacksmith's anvils, forge, bellows, vice, with all necessary tools for repairs. Everything in good order and as good as new. Also 100 acres of good land, with dwelling and boarding house, office, stables, sheds, etc. This property is situated on a good navigable stream, with an almost unlimited supply of black ash, basswood, soft elm, red birch, maple, hemlock, pine, etc., and is a rare chance, there being no opposition in buying stock, present stock being cut now. For full particulars apply to M. C. H.,

CANADA LUMBERMAN, Toronto, Ont.

WANTED FOR CASH.

ASH AND SOFT LUM DIMENSION STOCK cut to exact sizes. Apply for specification, prices, etc., to

P.O. Box 2144, NEW YORK.

SECOND-HAND MACHINERY FOR SALE

One right hand 12 x 14 straight line engine, our make run a very short time.
One pair of engines, right and left, 16 x 20, can be used separately or together, with two large pulleys and fly wheel and connecting shaft.

Three boilers 48 x 14 with large domes, full fronts all fittings, fixtures and stack.

One 60 x 12 ft. 6 in. steel boiler, with 64 1/2 in. x 1 1/2 in. tubes, boiler made of 6 sheets double riveted on side seams, furnished complete with all fittings, fixtures and stack, boiler and fixtures are in perfect order having been run but three months.

One 58 x 14 boiler, comparatively new, has been in use less than a year.

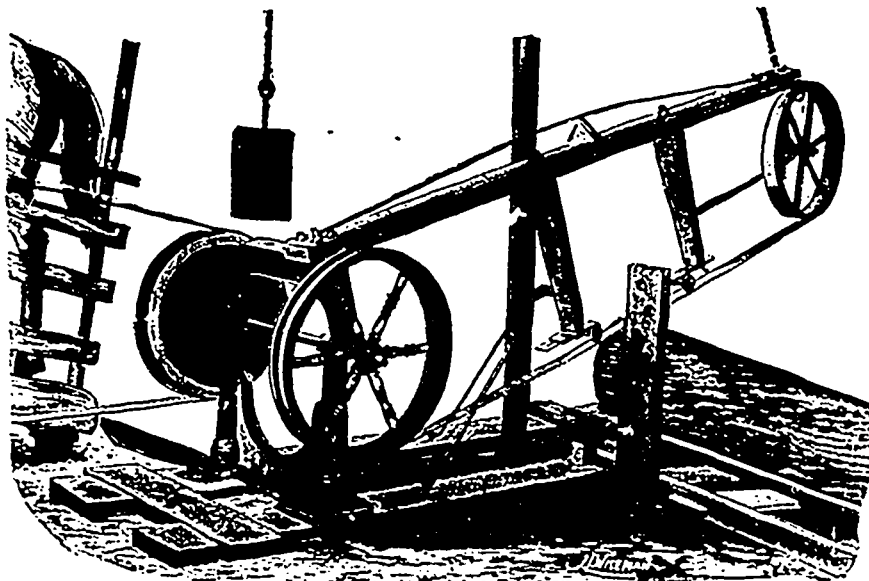
One right hand iron saw frame, with mandrel, pulley, boxes, three 5 1/2 in. saws, 56 to 100 teeth in each, and one 6 1/2 in. saw, suitable for steam or independent friction feed.

One 3-block heavy saw carriage, Sewry's make, with box dogs, V and flat track, frame and carriage are in good order, have averaged 35,000 to 40,000 ft. per day, only discarded to put in a hand mill and carriage suitable for same.

One left hand 3-block light medium sized saw carriage with V and flat track.

Several portable engines from 12 to 20 horse power.

WATEROUS, BRANTFORD, CANADA



Patent Rossing Machine

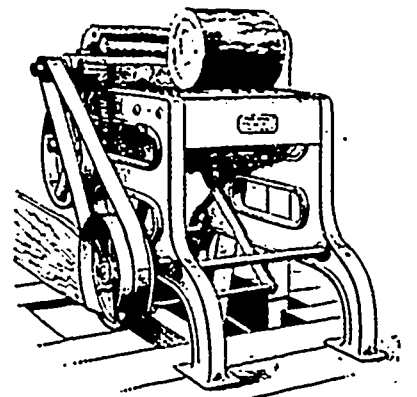
For removing the bark from all kinds of stock, especially Pulp Wood, Shingle Bolts, Butter Tub stock

.... WHAT WE CLAIM FOR THE MACHINE

It will do double the work of any other. It leaves the block in better shape. In shoving off timber it is unexcelled. It is a safe feeder and will soon pay for itself.

EASTMAN LUMBER CO. - - - EASTMAN, QUE.

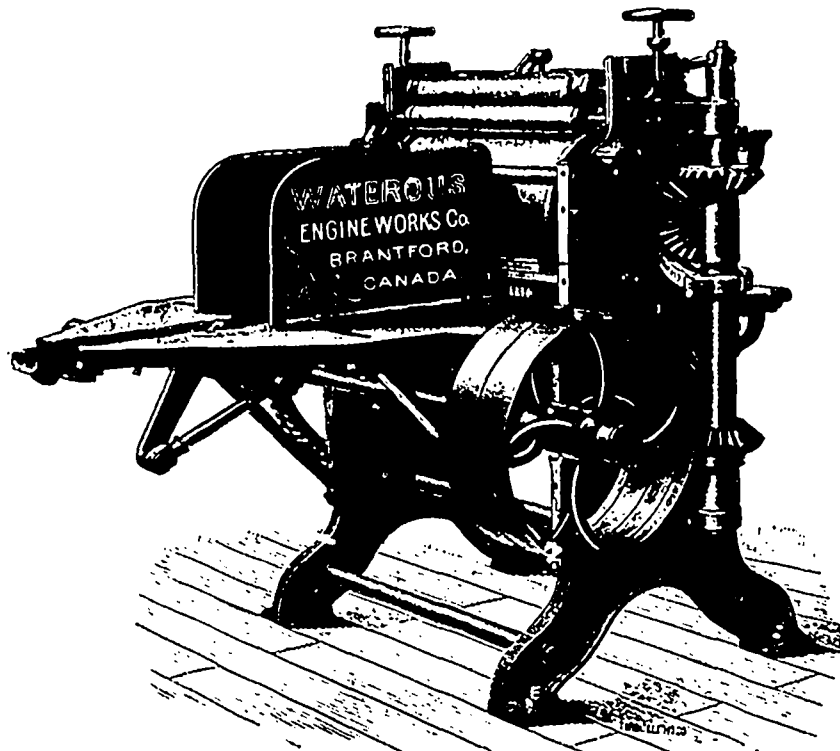
Sole Manufacturers for the Dominion



GROSS-GUT BAND SAW

For cutting Pulp Wood, Shingle Bolts, Last Blocks, Firewood, etc.

This new invention is worth the notice of any one who has cross-cutting sawing to do. It far exceeds any drag cross sawing machine ever made, and it takes the place of both drag and cutting off circular, as it is adapted to cutting both large and small stock, and far excels both in many ways, but especially in leaving the stock square and smooth.



NEW WOOD PRINTING MACHINE
(Several machines in stock for immediate shipment)

A HANDSOMELY printed box or package cover is a continuous advertisement. When printed on the wood it cannot be removed, and is less liable to defacement. Our New Wood Printer is the best method for doing this work.

It has a capacity to print from 50 to 70 boards per minute.

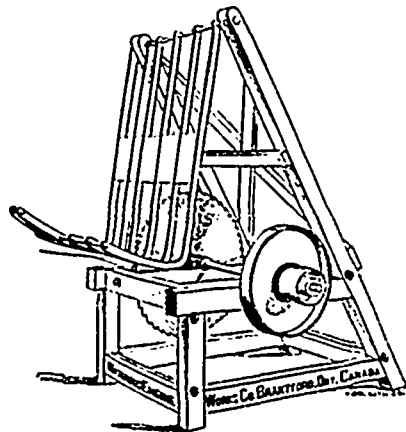
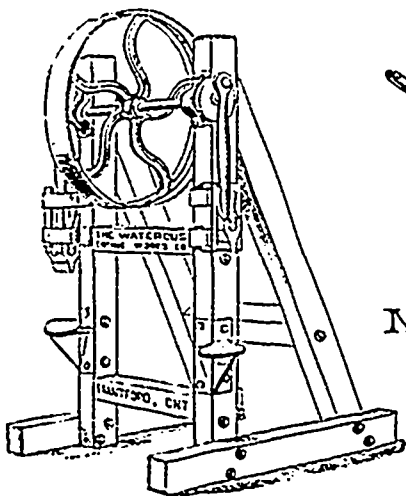
It will print a board up to 26 in. long, 24 in. wide, and 3-16 to 1 1/4 thick. The frame is extra heavy, and the gearing very strong. The type, in printing, can be pressed into the board 1/8 in. if desired without straining the machine.

A special feature of the machine is the improved positive crank feed. This is much

superior to the ordinary feed. This new feed is so positive that the same board may be printed any number of times without showing any deviation in the printing. The feed is also easily regulated to accommodate any size of board.

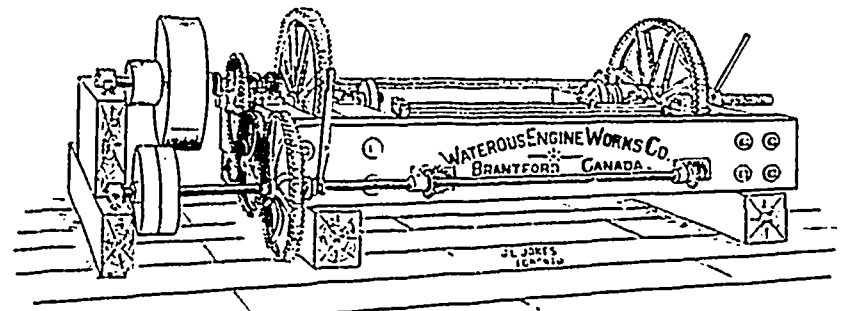
The type roller is adjustable to uneven thickness of the boards. Three inking rollers pass over the type, while ink is distributed by two distributing rollers. A brush cleans the boards as they pass under it. The inking fountain and rollers are arranged for easy removal.

WOOD
YARD



MACHINERY

CRADLE WOOD SAWS and
SINGLE and DOUBLE SPLITTERS
THREE SAW MACHINES with endless
chain carriers, capacity 70 to 80 cords
per hour; cut 10 in. and 12 in lengths



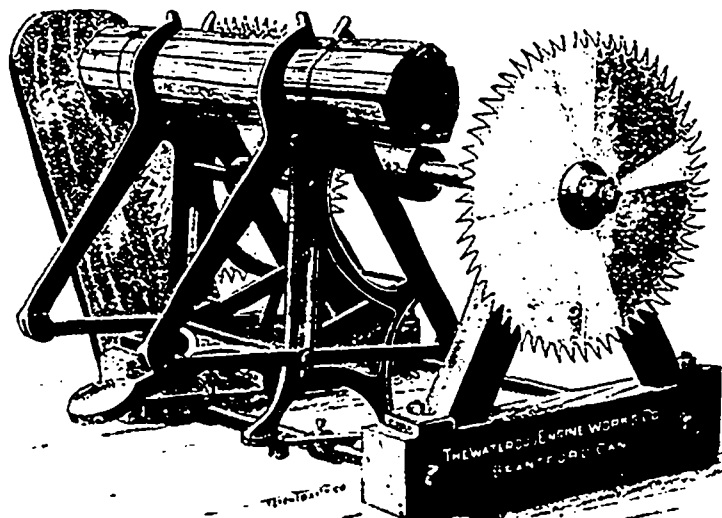
Veneer Cutting Machine

(Made with both heads adjustable to dog the log, or only one, as shown in cut)

No. 1 swings a log 48 in. x 60 in.

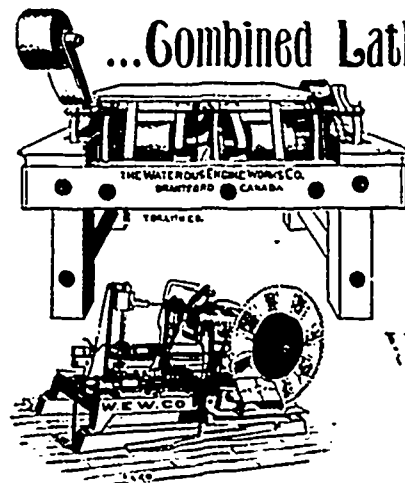
No. 2 " " 48 in. x 72 in. to 78 in.

Frame, very heavy oak, stiffer than the usual iron frame



LATH
BUNCHER
...AND...
TRIMMER

Improves the
appearance of
your lath,
increasing
sales



...Combined Lath Mill and Bolter

Also
Single ...
Iron Frame
... Lath Mills

Waterous and Boss
Shingle
Machines

WRITE FOR SPECIAL CIRCULAR AND PRICES

POROUS TERRA COTTA

Proved by actual and thorough tests to be the best fire proofing material in use.
 Unequalled for making buildings, vermin, heat, cold and noise proof.
 For partitions, costs no more than brick; weight, one-third that of brick.

SEND FOR CATALOGUE AND PARTICULARS

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 :::: MANUFACTURERS, DESERONTO, ONT.

H. G. ROSS & CO.

Real Estate, Fire and Life Insurance
 SHIPPING AND GENERAL COMMISSION AGENTS
 . . . TIMBER LIMITS AND FARMING LANDS A SPECIALTY . . .
 A.B.C. Code
 Care Address: H. G. ROSS NEW WESTMINSTER, B.C.
 CORRESPONDENCE SOLICITED Box 273

ROBIN & SADLER
 MANUFACTURERS OF
Leather Belting
 SPECIALTIES
 DYNAMO BELTS WATERPROOF BELTING
 MONTREAL TORONTO
 2518 & 2520 NOTRE DAME ST. 129 BAY ST.
 Send for sample of our new SAWMILL BELT

F. REDDAWAY & CO.
 MANUFACTURERS OF
CAMEL BRAND BELTING
 BREAKING STRAIN 6 IN. "CAMEL" HAIR BELT 14,181 lbs.
 " " 6 IN. ENGLISH OAK DOUBLE LEATHER 7,522 "
 ALSO MANUFACTURERS OF
LINEN FIRE HOSE
 MANCHESTER, ENGLAND. 37 ST. FRAS. XAVIER ST., MONTREAL

A. ALLAN, President

J. O. GRAVEL, Secretary-Treasurer

J. J. MCGILL, Manager

F. SCHOLES, Managing Director

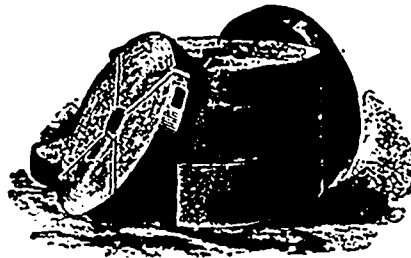
Canadian Rubber Company

Capital, \$2,000,000.00

of MONTREAL, TORONTO and WINNIPEG

MANUFACTURE

SUPERIOR QUALITY
RUBBER GOODS
 for Mechanical Purposes
RUBBER BELTING, PACKING, HOSE



FORSYTH
 Seamless Rubber Belting
 Seamless Tube Hose

These Patents we control for Canada

HEAD OFFICES AND FACTORY: MONTREAL

Western Branch: CORNER YONGE AND FRONT STREETS
TORONTO

J. H. WALKER, - - Manager



J. D. SHIER
 MANUFACTURER OF
Lumber, Lath & Shingles
 BRACEBRIDGE, ONT.

THOS. MCGRAKEN
 (Member Toronto Stock Exchange)
BROKER & FINANCIAL AGENT
 DEALS SPECIALLY IN TIMBER LIMITS
 No. 2 Victoria Street,
 Telephone No. 418. TORONTO, ONT.

Rochester Bros.
 :: COMMISSION AGENTS

Limits bought and sold on commission. Limits travelled and carefully prepared. Estimates given.
 Some first-class berths on the North Shore of Lake Huron and on the Upper Ottawa now in our hands for sale.
 Communications confidential. References given.
 36 Rochester St. **Ottawa**

Actual Results

NET PREMIUMS
 PAID TO THE

ONTARIO MUTUAL LIFE

on an ordinary Life Policy of \$1,000,
 No. 1230 during its first 20 years,
 issued for age 37:

| | |
|-------------------------|-------------------------|
| In 1872....Paid \$24.67 | In 1882....Paid \$11.29 |
| 1873.... " 26.47 | 1873.... " 12.12 |
| 1874.... " 26.47 | 1874.... " 11.69 |
| 1875.... " 24.21 | 1875.... " 11.35 |
| 1876.... " 24.64 | 1876.... " 11.35 |
| 1877.... " 19.19 | 1877.... " 12.09 |
| 1878.... " 17.12 | 1878.... " 12.51 |
| 1879.... " 14.02 | 1879.... " 12.41 |
| 1880.... " 12.65 | 1880.... " 11.91 |
| 1881.... " 11.29 | 1881.... " 11.33 |

Total Paid in 20 years....\$321.29

NEW & 2ND MACHINERY
 ILLUSTRATED CATALOGUE FREE
H.W. PETRIE
 TORONTO CANADA

... THE ... FLINT & PERE MARQUETTE RAILROAD

FROM
Port Huron and Detroit
 Is the Short Line to
SAGINAW AND BAY CITY
 (Centres of the vast lumber interests of Michigan)
MT. PLEASANT, CLARE, REED CITY
BALDWIN, LUDINGTON, MANISTEE
 AND
MILWAUKEE AND MANITOWOC, WIS.

The last two named are reached by the Company line of Steamships across Lake Michigan.
 The line thus formed is a short and direct route from
NEW YORK BUFFALO MONTREAL TORONTO
 to **ST. PAUL, DULUTH** and Pacific Coast points.
 Write either of the undersigned for Folders, which contain Maps, Train Schedules and much information of value to those contemplating a trip to any of the above-mentioned points.
W. H. BALDWIN, JR., General Manager. **W. F. POTTER,** Gen'l. Sup't.
A. PATRIARCHE, Traffic Manager.
 GENERAL OFFICES: - **SAGINAW, MICH.**



**SCRIBNER'S
 LUMBER AND LOG
 BOOK**
 OVER ONE MILLION SOLD
 Most complete Book
 of its kind
 ever published

Gives measurement of a kind of Lumber, Logs, Planks, Scantling; cubical contents of square and round timber; hints to lumber dealers; wood measure; speed of circular saws; care of saws; cordwood tables; felling trees; growth of trees; land measure; wages, rent, board, interest, stave and heading bolts, etc. Standard book throughout the United States and Canada. Get the new illustrated edition of 1892. Ask your bookseller for it. Sent post paid for 15 cents.

GEO. W. FISHER,
 Box 27, Rochester, N.Y.

or A. G. MORTIMER, Toronto, Can.

**FIRE PROOF
 ROOFING**
 ILLUSTRATED CATALOGUE FREE
METALLIC ROOFING CO
 MANUFACTURERS TORONTO

REGISTERED STAR BRAND PORTLAND CEMENT

Our own manufacture and unexcelled. Its use is authorized by Province of Ontario and Toronto City Engineers. Quality GUARANTEED, and always the same.

WORKS AT NAPANEE MILLS The Rathbun Co'y MANUFACTURERS, Deseronto, Ont.

GALT MACHINE KNIFE WORKS



MACHINE KNIVES OF EVERY DESCRIPTION FOR Planing, Moulding and Stave Cutting - Send for Price List -

PETER HAY, GALT, ONT.

J. W. MAITLAND - H. RIXON J. G. AINSIE - W. STODART

MAITLAND, RIXON & CO. OWEN SOUND, ONT.

Saw Millers and Lumber Dealers

All kinds of Building Material kept in stock WE MAKE A ... SPECIALTY OF LONG BILL STUFF IN ROCK ELM, PINE, CEDAR AND HEMLOCK Quotations furnished on application

The Rathbun Company DESERONTO, ONT.

MANUFACTURERS OF Doors, Sash, Blinds, Stairs And all kinds of House-Finishing Materials VENEERED DOORS a specialty CORRESPONDENCE SOLICITED

J. J. TURNER Sail, Tent and Awning Maker .. 251 George St. and 154 King St. PETERBOROUGH Canoe, Yacht and Boat Sails made to order. Perfect Fits Guaranteed. Every description of Lumbermen's Supplies and Waterproof Clothing.

WILLIAM FOSTER Lumber and Commission Merchant RECEIVER AND FORWARDER OF LUMBER, LATH AND SHINGLES ... CORRESPONDENCE SOLICITED ... OWEN SOUND, ONT.

PATENTS CAVEATS and TRADE MARKS Obtained in Canada. UNITED STATES AND FOREIGN PATENTS A SPECIALTY. Engineering Drawings Furnished. W. J. GRAHAM, 71 Yonge St. Toronto

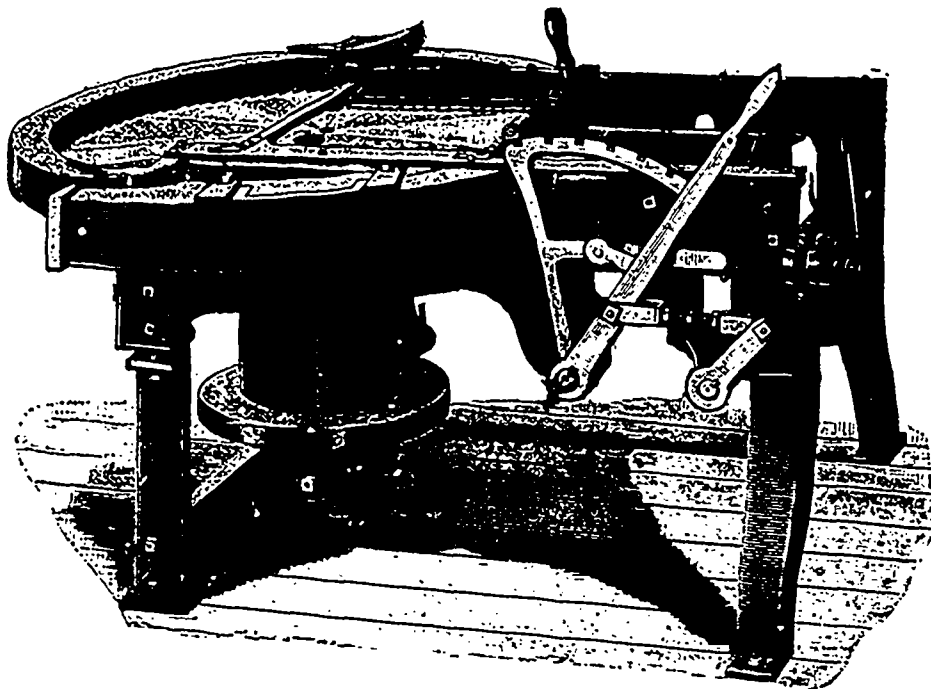
Lumbermen YOUR BUSINESS IS HELPED BY ... ADVERTISING ... IN ... CANADA LUMBERMAN ... WRITE FOR PARTICULARS

Dauntless Shingle and Heading Machine

::: WILL make more Shingles per day than any self-acting machine with vertical saw in existence, and more Shingles from the same quantity of timber.

THE FRAME ... Is of iron throughout, very heavy and rigid, strongly bolted and braced.

THE CARRIAGE ... Is very light and strong, made of forged Cast Steel Plate, running on steel ways or tracks. Will take in a block 18 inches wide and 19 inches long, adjustable for 16-inch or 18-inch shingles.



CAPACITY FROM 25,000 TO 50,000 PER DAY

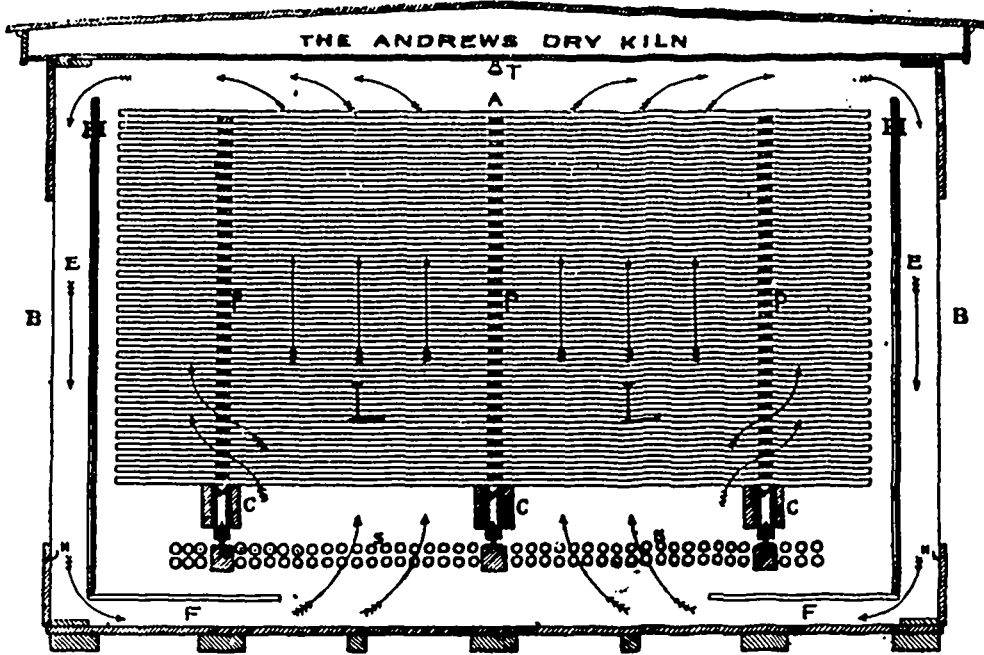
[cont.] LANDSAV, May 18th, 1893. Mr. F. J. DRAKE, Belleville. Dear Sir, The shingle machine we bought of you over a year ago is doing well. Last year we averaged over 32,000 shingles per day all through the season. We did not lose 15 minutes' time from all stoppages, and all repairs so far have not cost 50c. We expect to make a still higher average cut this year. All our other machinery purchased from you is as good as the shingle machine. Your drag saw, with friction drive, cannot be beaten. We run ours 180 strokes per minute; with 6 1/2 ft. saw it would easily make blocks for two shingle machines. The splitter, with balance wheel 4 feet diameter, weighing 1,000 lbs., is perfect and runs without the least jar. The iron frame shingle jointer with 40-inch saw is the only good jointer we ever saw. In fact, all your machinery, line shaft, pulleys, etc., give us the best satisfaction. We expect to require another mill in a few days, and, if we do, will send you the order for complete outfit. Truly yours, M. Down. P.S. - If any one wants to see a good working shingle mill send them to me. -M. D.

F. J. DRAKE

PATENTEE AND ... MANUFACTURER OF SAW, SHINGLE AND LATH MACHINERY BELLEVILLE, ONT.

THE ANDREWS DRYER

For Lumber, Shingles, Staves, Heading, etc.



THIS DRYER

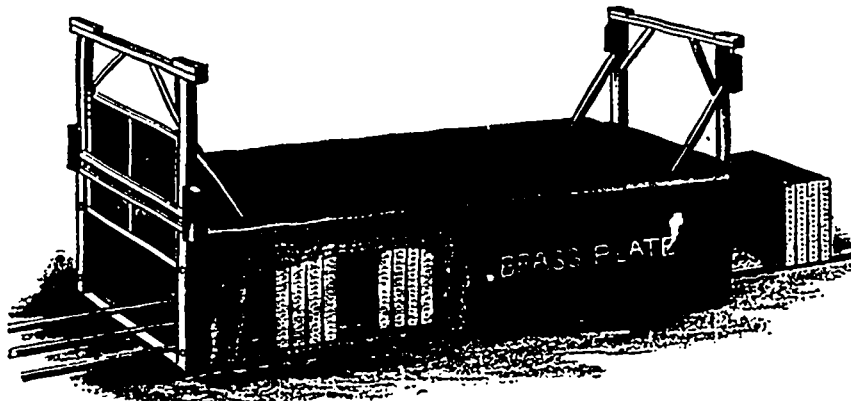
HAS PROVED TO PURCHASERS TO DO WHAT IS GUARANTEED IN SAVING THEM MONEY IN

Freight, Insurance, Time, Interest, Expense, Capital, Yard Room, Labor

There may be persons who do not appreciate the advantages of the artificial drying of lumber. But the shrewd men, in the manufacture of furniture and other woodwork where reputation would be sacrificed by a lack of proper material for good gluing and finishing, recognize a good system of drying as an important element of their success. High scientific authorities and thoroughly practical men are now agreed that the hot-blast and rapid-current systems ARE WASTEFUL, and that steam heat is the only safe means for artificial drying. The mode of applying steam heat most efficiently and economically is therefore now the essential point. The Andrews Dryer accomplishes this result more surely than any other known system.

This system and apparatus covered by letters patent.
 A-Drying-Room. BB-Brass Condensing Walls. CCC-Lumber Cars. DD-Down Air-Flues. FF-Bottom Air-Flue. HH-Inside Walls, protecting metal from heat. LL-Lumber on cars. NN-Brass Gutters for receiving condensed moisture. PPP-Sticks between lumber. SS-Double Steam-Coils. T-Automatic Steam Fire-Extinguishers. Arrows show direction of currents of air.

- NO FAN
- NO ENGINE
- NO SMOKE
- NO CHIMNEY
- NO SPECIAL FIREMAN OR FUEL
- NO EXPENSIVE BRICKWORK
- NO RISK OF FIRE
- NO CHECKING OR WARPING
- NO CASE-HARDENING
- ... NO EQUAL ...



Outside View of the Andrews Progressive Kiln, showing Lumber placed crosswise the building, on cars.

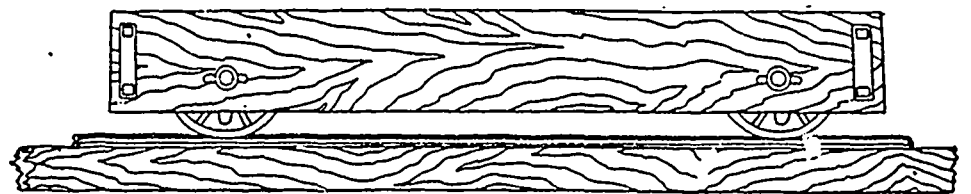
"WE PUT GREEN SPRUCE IN DRIPPING WITH WATER, AND IN EIGHTEEN HOURS IT WAS DRYER THAN LUMBER THAT HAD BEEN STUCK UP IN THE YARD ALL SUMMER."

This is the verdict of a Quebec lumber firm, and we can give equal results every time.

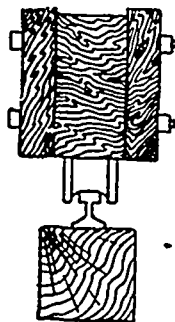
The Andrews Lumber Dryer

Has been proved to possess the following points of excellence:

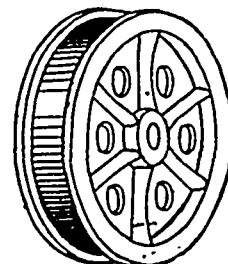
- 1st. That its drying is rapid and perfect.
- 2nd. That external and internal checking and discoloration are entirely avoided by this method.
- 3rd. That the drying is done by a CONTINUOUS system and the temperature of the kiln is under absolute control at all times.
- 4th. That our Dryer is free from the varying air currents (always wasteful) incident to all fan and open-draft kilns.
- 5th. That our drying is done by the slow continuous movement of a large body of slightly-moistened air.
- 6th. That our condensing surface is so very large as to be adequate to precipitating the moisture of the saturated air with the least amount of movement.
- 7th. That our piping is tested by high pressure and every outfit is fully guaranteed.
- 8th. That by our improved system of drainage the freezing of pipes becomes impossible.



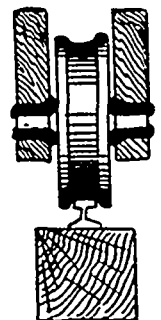
SIDE VIEW OF CAR AND TRACK.



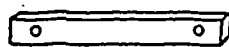
DOUBLE FLANGE WHEEL ON SINGLE TRACK



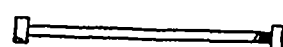
CAR WHEEL, DOUBLE FLANGE



SECTION OF CAR TRUCK, SHOWING AXLE BOX.



STRAP WASHER



BOLT



AXLE

SEND FOR CIRCULARS

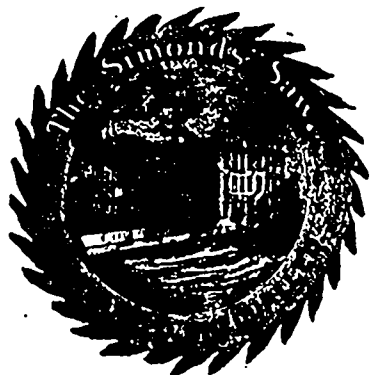
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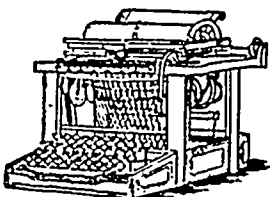
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Proprietors Sault au Regollet Paper Mills, making ROOFING, SHEATHING, FLOORING AND LINING FELT

1892 MODEL
Remington Typewriter



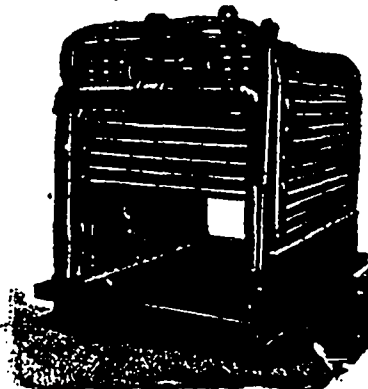
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