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# THE CANADA LUMBERMAN.

VOLUME VIII. }  
NUMBER 8. }

PETERBOROUGH, ONT., AUGUST, 1888.

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## THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER.

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### TERMS OF SUBSCRIPTION:

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### Advertising Rates Furnished on Application.

THE CANADA LUMBERMAN is published in the interest 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 of them 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 upon which it can rely in its operations.

Special correspondents in localities of importance present 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 effecting 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 ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three 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.

FROM advices received by the Government it appears that the Judicial Committee of the Privy Council expressed the opinion that the Dominion Government should be a party to the appeal of the St. Catharines Milling and Lumber Company v. the Province of Ontario. This suggestion has been acted upon and the Government will shortly appoint counsel to represent it in the appeal.

Messrs. Eckardt, Kyle & Co., wholesale grocers of Toronto, realizing the purchasing capacity of the great lumber trade of Canada in all staple lines of groceries, have contracted with THE LUMBERMAN for advertising space. Their first announcement appears on another page of this paper, and we have much pleasure in directing attention thereto. This firm is well known throughout Canada and has a reputation for upright dealing second to none.

It was said not very long ago that a squirrel could travel from St. Petersburg to Moscow without touching the ground, and there are still immense forests in Russia. But even there, in some districts, the axe has been too busy. The navigation of the Volga and other rivers has been impeded by their being silted up with sand set free by the denudation of the forest. On account of this and other evils the Ministry of Imperial Domains has issued strict orders controlling the tree felling and checking the destruction.

We particularly invite the attention of LUMBERMAN readers to the advertisement in the current issue relative to the sale of the Hawkesbury Mills property and plant, belonging to the estate of Messrs. Hamilton Bros. The executor of this estate Mr. Caledon F. Gilder, will receive tenders for the purchase of this property up to the 7th inst. The logs spoken of in advertisement are first class stock and as good as any yet taken out on the Ottawa. There is but little doubt that the competition for this property will be keen.

THE terms of the new agreement between the mill owners and the Government in regard to the lease of the water-power at the Chaudiere have not yet been decided upon. Mr. Bronson, M.P.P., is reported as saying that the position of affairs had not advanced at all, and that the mill owners were waiting to see what action the Department of Public Works would take in regard to the proposals made. Mr. Bronson thinks that the examination of the Ottawa river now being made will last pretty well all the summer and into the fall.

THE prospectus for still another United States lumber paper has reached us. This time it hails from the far south, New Orleans, La. It will be known as the *South-Western Lumber World*, by the Lumber World Co., publishers. The first issue of the new journal is announced for the 15th inst. and will be a monthly issue. It will be especially devoted to the lumber interests of the South-west, a field fast coming to the front as an important lumber producing point. While we think that the United States is overflowing with lumber literature, we nevertheless extend our best wishes for the success of the new aspirant for public favor, hoping it will have a long and prosperous existence.

THERE is to be an International Marine Conference and the New York *Tribune* thinks that it should take in hand the case of such monsters as the Juggins raft. Our contemporary fears that one successful experiment might lead to ocean rafts becoming a constant danger to steamships and call upon the conference to take action to check the practice before it becomes established. Certainly a solid mass of timber 600 feet long, 53 feet wide and 38 feet high, containing 22,000 logs, would be an awkward obstacle in the way of the largest and strongest steam ship. The experiment is soon to be tried now and another failure, which is anticipated, would probably put an end to the project.

WHILE every business man realizes to a greater or less extent the existing closeness in the money market and the consequent depression in trade, especially throughout Ontario, it is nevertheless a fact that no time in the history of the Dominion has our national credit been rated so high as it is at present time. The Dominion loan of four millions sterling at three per cent, has resulted most satisfactory. The tenders recently opened in London numbered about 400 and amounted to about twelve millions sterling at prices varying from 94½ to 95½, which was the minimum. So numerous were the high priced tenders that those at 95 only received 34 per cent. of the amounts applied for, while those above 95 receive the full amount. The average price obtained was 95 1-20 per cent.

THE improvements that are being made by the Dominion Government at the mouth of the Fraser River in British Columbia seem to have given an impetus to the lumber trade in the neighbourhood of New Westminster. We hear of large vessels coming up the river to the mills to load with lumber for Australia and Mexico, and the lead thus given is sure to be followed. New mills are going up and preparations are being made for others, some of those interested being lumbermen from Ontario and Quebec, among them being Mr. McLaren and Mr. Ross, and besides the export trade and the local requirements there is also a considerable demand for Pacific Coast lumber from the prairies on the other side of the Rocky Mountains. This demand must certainly increase and there is a bright future before the lumbermen of British Columbia.

SINCE the opening of navigation, says the Chicago *Timberman*, there has been a continuous running back and forward between this country and Canada, of capitalists in quest of pine. The Spanish river country has been honored recently by the presence of Mr. George Simpson, of Evanston, Ill.; Jas. S. Smith, of the Chippewa Lumber & Boom Company, Eau Claire, Wis.; L. H. Brown, Buffalo, N. Y., and Chas. Marthinson, of Grand Rapids, Mich., and rumor has it that these gentlemen are acting in concert in the purchase of a big tract of pine—a purchase involving an outlay of half a million of dollars. The Spanish river pine is said to be large, and of

fine quality, and will doubtless bring a good price in the stump from this time forward. Several Minnesota operators are said to be at the present time negotiating for a round block of pine on the Spanish river.

THE following striking item appears in the dispatches from Washington in the leading American papers, under date of June 15th: "The Post Office Appropriation Bill was taken up, amended and passed. Among the amendments agreed to is the inserting an item of \$500,000 for more efficient mail service between the United States and Central and South America and the West Indies." This is practical evidence of the manner in which the Americans regard the value of this market. Many of the metropolitan papers of Canada as well as some of the most influential business firms have of late strongly urged the Canadian Government to take some action towards securing these important markets for the benefit of our manufacturers. It is to be hoped that the proper steps will now be taken to counteract this enterprising action at Washington, and save this valuable market to our Dominion before it is too late.

THE French Department of Agriculture has recently issued statistics of the forest lands of Europe, showing their distribution. Two-elevenths of the area of Europe is said to be covered with forests, though the average varies greatly in different countries. Of the British Islands only four per cent. of the surface is woodland. Denmark, Holland and Portugal have a rather larger proportion. In France the forests extend over one sixth of the surface, in Norway nearly a fourth and Hungary nearly a third. In Russia forests cover nearly two fifths of her area, and Sweden, which stands at the top of the list, is still nearly the two-fifths. Evidently there is no probability of an early cessation of the competition of those countries with Canadian lumber. Taking the proportion of forest land to population the United Kingdom has an acre to eleven inhabitants, Denmark and Portugal are three times as well off, France seven times, Russia and Sweden about a hundred times, and Norway a hundred and twenty times. The forest statistics of Canada cannot be compared with those of Europe, for our woodlands have not been surveyed and estimated with any accuracy. The Governments interested should see that this is done for the information would be valuable.

THE San Francisco *Journal of Commerce* gives some particulars of the lumber trade of the United States Pacific Coast with Australia, showing the great importance and huge dimensions of the business. It says that there are not only large shipments from San Francisco but even greater from Puget Sound and Humboldt Bay. Australia takes nearly half of 132 million feet of timber exported in a year from the Pacific Coast of the United States. The export to Australia is from fifty to sixty million feet, and is still increasing. The business began to assume large dimensions as long as thirty-five years ago, with especially large increases in 1877 and 1878. The San Francisco *Journal* anticipates that the trade will be far greater in the future than ever it has been in the past. We hope our Pacific Coast contemporary is a little too sanguine. There is no good reason why its countrymen should monopolize this trade. In British Columbia we have forests from which Australia might well draw her supplies of lumber. These forests are practically inexhaustible and for quality they could not be excelled. Our lumbermen on the Pacific Coast should see that they are not left behind in the race. All that is needed is to see that the peculiar requirements of the Australian market are carefully observed.

THE action of Dr. DeGrosbois, M.P.P., in bringing in a bill in the Quebec Provincial Legislature to repeal the charter of the Quebec Ship Laborers' Society has had a useful effect. That society was originally formed as a benefit association, but having rather extensive powers under its charter it proceeded to make rules, which were so stringent as greatly to interfere with the business of the port. It has in fact been very generally admitted that the falling off in shipping was due to the difficulties and delays thus caused and to the

expense of loading and unloading as compared with those elsewhere. In fact at the beginning of July there were at Montreal four large vessels, the Grassbrooke, the Oxenholm, the Assyrian and the Iron Acton, taking on board cargoes of square timber, amounting altogether to 40,000 cubic feet, which had been brought from Quebec. This was avowedly to escape from the restrictions imposed by the Ship Laborers' Society. The bill of Mr. DeGrasbois was intended to remedy this evil, and he has attained his end though without legislation. While the bill was before the special committee that had been appointed, some of the merchants of the city anxious to see its business preserved, persuaded the laborers to make concessions by changes in their rules that would obviate the necessity for the measure. Deputations from the merchants and the laborers waited upon the committee and a long discussion took place. Finally the laborers agreed to amend the rules in several important respects. It was to be the rule henceforth that steamships might use their own steam winches to hoist and lower their timber, but not to move it by steam when on board. In the case of mixed cargoes captains are not to be obliged to take more than a deal gang, but the number of men that he decides to employ are to be retained until the ship is loaded, and any vessel taking one half or less of timber may employ a deal gang if wished. The members of the Society are to be free to work on holidays at the ordinary rates, but if from religious scruples they decline to do so, they are to be allowed their places without objections on the following day. The amendments removed the most objectionable features of the regulations made by the Ship Laborers' Society and the object of the bill being thus virtually secured Mr. DeGrasbois agreed to withdraw. The removal of these restrictions will be a very welcome improvement for the lumbermen who ship timber at Quebec, and the laborers even will soon find that they gain rather than lose by thus facilitating business.

THE Province of Quebec has taken a retrograde step in the management of its forests. The establishment of forest reserves was a regulation that was beneficial alike to the public treasury, the lumbermen and genuine settlers. Now, however, the forest reserves have been abolished in spite of the very sensible opposition of several members of the Legislature. The passing of the new Act does away with the reserves entirely, and permits settlers to locate anywhere where the land is fit for cultivation. A large number of these forest reserves are timber limits leased from the Government by lumbermen, and the passing of this Act permits settlers to locate themselves on these limits, clear land, and use and sell timber on their lots. Lumbermen have paid high prices to the Quebec Government for the privilege of cutting timber on these forest reserves, upon the distinct understanding that the reserves were to be protected from the settlers until such time as the limits should be denuded of all timber over twelve inches at the bases. It is not surprising therefore that the lumbermen are indignant at what they consider a most unjust and aggressive action on the part of the Provincial Government. The only saving clause to the lumbermen in the Act just passed was introduced in the Legislative Council by Hon. Mr. Garneau, giving the lumbermen two and a-half years, after the issuing of any location ticket, to cut off the timber on the lot located, the settler to clear only ten acres for his own use within that time. This clause is certainly an important amendment to the original Act, and the lumbermen in order to protest their interests will now be compelled to hasten the cut of this timber as rapidly as possible, in order to save as much as possible during the brief period allotted them. During the discussion of the Act at the recent session of the Quebec Legislature, it was pointed out that a door was being opened to fraudulent operations such as had formerly taken place, when pretended settlers only remained on their so-called farms till they had stripped them of their valuable timber, and then moved on to some new locality to repeat this device, leaving devastation behind them. These adventurers deprived the public treasury of dues, interfered with the operations of the lumbermen, and did not become farmers. The wise plan is to divide the forest and agricultural lands, and then the greatest value is obtained from the forests, and real farmers are not induced to settle on poor agricultural land when fertile districts far better suited for their purpose are abundantly sufficient. Quebec was ahead of the other Provinces in this respect, but now it has gone back on its own record.

## CORRESPONDENCE.

TORONTO, July 9th, 1888.

Editor Canada Lumberman.

DEAR SIR,—In your issue of July we read a letter signed Wholesaler, in answer to one Pinus, and we feel called upon to ask him to draw it mild. He makes assertions and classes dealers so widely that he will have to put on his check line, or he will find that there are people who claim to be retailers

that have paid up their paper last winter and every other winter for the last ten or twelve, as well, if not better than any wholesaler who does business in Toronto to-day. His assertion about fear of contradiction is very loud, and if he wishes to go further we are perfectly willing to take up the gauntlet with him.

He may be right in some cases, but evidently the class of customers he has been carrying are of the lame kind, and he should be ashamed to own up that he is and has been in such company so long. He should make a desperate effort to get into better, as there is no ability required to sell lumber to that class of men, and judging from his harsh remarks this wholesaler must be badly used. As to his remarks that the wholesale men do everything that is necessary for the retail men, all we have to say is that if the retail men were only energetic enough to place themselves in such a position that their credit was as good as the wholesale man (which to our minds is not a very hard job) they would find that the manufacturer would be as anxious to sell direct to them, if not more so, than to the wholesale men, as if the retail man cannot sell his lumber at a profit, and to men who will pay for it, he can keep it piled in his yard, and if the worst comes to the worst he can hand it back to the manufacturer. Whereas, if the wholesale man gets it and finds it slow sale, he is bound to unload, and those people he speaks of who only pay 25% gets it and the manufacturers get 30 or 40 cents on the dollar from the wholesaler, who holds as his share a lot of unpaid notes, and where do you find the retailer? He is the best off; he has the stock on hand, even if unsold, and the wholesaler stands between him and harm. This goes to show you that it lays with the retailer himself to deal with the mill man, who is only too anxious to do so if the mark is good. In conclusion, we would ask wholesaler that when he next throws any slurs on the retailers he will be kind enough to remember that there are as good as he who claim that title, and who feel thankful that they stand as high in the scale as he does. By inserting this you will much oblige.

Yours, respectfully,

DOCKIE.

TORONTO, July 9th, 1888.

Editor Canada Lumberman.

DEAR SIR,—Will you kindly allow me to correct an unintentional error which appeared in my letter in your last issue, wherein I say, "that not more than 25% of so called yardmen's paper was met at maturity during last winter." Whereas I intended to say, "that not more than 25% of so-called yardmen retired their paper at maturity during last winter." There are several firms doing a joint wholesale and retail business from car and dock, as doubtless some others who meet their engagements promptly, and I trust that all such will accept this prompt correction in the same spirit intended by the writer.

Truly, yours,

WHOLESALE.

LONDON, June 28th, 1888.

Editor Canada Lumberman.

Could you or any of your readers inform me of the places in Ontario or Quebec to secure the best grades of Hard Maple, the section of the country where the best quality grows, also how I can procure a copy of the Government Forestry Report?

Yours truly,

JAMES GORDON.

Answer (1)—Those of our readers who are interested in the class of wood referred to above, are in a position to give our correspondent the necessary information. (2)—Write direct to the Crown Lands Department, Toronto, for Ontario Forestry Report and to the same department at Quebec for the report of the Province of Quebec.

## New Brunswick Matters.

MADAWASKA, July 4th, 1888.

Editor Canada Lumberman.

By some mishap one or two of the latest numbers of your valuable journal failed to put in an appearance, and we are now looking forward to receiving the July issue.

The winding up of our last winter's operations is being carried on successfully, and the drives, with a few exceptions, have already reached the Fredericton booms. Owing to the late breaking up of the lakes, through which the logs had to pass, operations have been delayed, but on the whole there has been no reason for serious complaint. There has, without doubt, been an unusually large quantity of logs handled since the commencement of operations last winter, and the lumbermen's prospects look bright.

No doubt inside of two years a great reaction will take place in the business of small lumber operators, those who have been engaged in picking up the culling of the larger operators. The work of thinning out our forests has been going on at

such a rapid rate of late years, that before long there will be literally nothing left to cut. As a consequence the trade will rapidly diminish, and heavy losses will be the order of the day.

There is no disputing the fact that we have too many novices engaged in the lumber trade, and as a result they have to pay dearly for their experience. It requires many years of experience to become a successful lumber operator, and among the many requisites necessary is the knowledge of how to economically saw lumber, at the same time placing the proper value on the good article, and how to avoid loss in sawing inferior stock. He requires to thoroughly cruise his limits and exercise enough judgment to know a good chance from a poor one when he sees it, and not say I think it will hold out a good supply. The next thing to be considered is a good camping ground handy to water and advantageous for log hauling. Another, and the next important move, is to select first class choppers and teamsters. The choppers should be taught not to cut a faulty tree, or one too small; if they do charge them with the expense of hauling to the brow. No man is capable of successfully conducting a lumber business of any importance unless he can teach his men their duty from the cook to the stream-driver. What robs our lumber operators more than anything else is the cutting of poor quality and small timber. Instead of quantity the main consideration should always be quality, as one-half the quantity of good timber pays better than double the amount of poor material.

It requires an age to learn the lumber trade, and not a theoretical but practical training is essential to success. I had an old Yankee in my employ at one time who told me that when he had driven oxen for about twelve years he considered that but few if any could excel him, but that after 25 years experience, he had come to the conclusion that his knowledge of teaming was very limited. A good lumberman will sooner or later come to the same conclusion. The more experience he has the more he will find out that he has still much to learn.

P. O. BYRAM.

TORONTO, July 25th, 1888.

Editor Canada Lumberman.

It may be presumptuous for a retail man to reply to the oracle "Wholesaler," but being constituted as we are we will try, in becoming humility, Oh Wholesaler, and venture to express our opinion, even at the risk of being cut in two by a few more old saws, badly set and recklessly set in motion by this wholesale man.

Retail men, one and all, will not buy at the mills—from whom, the mill men or the wholesale purchasers of the stocks? As the lumber must be seen; consequently the lumber must be brought here to be inspected, examined, etc., etc. As the mill men do not, to any alarming extent, send lumber to this point on speculation, it must be the wholesalers who do so. In paragraph number two we are gravely informed that on condition of not going to the mills the wholesale men promise not to break bulk nor sell to consumers. Again in the same paragraph we are told that during the past winter retail men did not retire more than 25% of their paper as it matured and wholesale men had to carry them through.

Observe, firstly, one and all retail dealers decline to purchase at the mills; secondly, that without exception they all require the wholesale dealer to pay the entire freight charges, excess included, still more the wholesale men had to carry 75% of the retailers paper, from all of which we infer that all without exception buy from the wholesale dealers. Such being the admission of "Wholesaler" (*vide communication*) whence the necessity of the condition required and which the most important men in the retail branch decline. In other words, the wholesale men ask the retailers to do what they are not doing. Is Lord Dundreary redivivous? This is something "no fellah can understand."

As the wholesale men sell to the best consumers we have, the retailers have the men who possess but small capital and to whom they are compelled to grant renewals, hence the necessity for the retail men in turn requesting renewals. The price to the consumer supplied by the wholesale men being the same as to the retailers we are thus precluded from selling them and are hampered by the wholesaler. We must not raise any objections or we will be treated to the wisdom of the ancients (not by Bacon) in a condensed form.

One esteemed friend in classing the sale of a car of lumber with wholesale transactions is immensely humorous.

While still of the opinion that the R.R. yards should not be kept as a preserve for wholesale men, we are glad to know that they have actually condescended to make an offer to the R. R. Co.; and that they are desirous of paying for what they receive, although, sad to relate, sometimes they pay for more than they get. Unfortunately this occurs frequently in these degenerate days. With this communication, adieu.

PINUS.

**THE FIRE RECORD.**

The shingle and heading factory of Mr. D. Tennant, Hepworth, Ont., was destroyed by fire July 11. Loss, \$2,000.

The saw and shingle mill of Mr. J. S. Levericht, Sturgeon Lake, Ont., was destroyed by fire June 21st. Loss, about \$4,000.

McLellan's saw mill, in the twp. of Burpee, was destroyed by fire, together with a valuable horse, on the night of the 2nd July. The loss is estimated at \$5,000.

A large boat belonging to the Georgian Bay Lumber Co. was burned at Waubushene July 17th. A storehouse belonging to the same company was also consumed.

A warehouse owned by J. C. Schliehauf, at West Lorne, was destroyed by fire on July 8th, together with about 4,000 feet of lumber and the M. C. R. cattle schutes.

Lafrenciere's immense sawmills at Louisville, Que., were burned July 13th. A large number of logs were lost. The damage, it is expected, will reach \$100,000; partly insured.

Bush fires at Carron's siding, Midland railway, burnt the station, 6,000 telegraph poles, a large quantity of cedar posts, several thousand cords of wood and a steam saw mill. Loss \$15,000.

Callaghan Bros' shingle and saw mill at Emily creek, on the south shore of Sturgeon lake, were destroyed by fire recently. A Mr. Leveridge of Port Hope owned the buildings. Loss about \$5,000, with a slight insurance.

Mr. Geo. Thompson's steam sawmill, near Wingham, Ont., was destroyed by fire July 24th, together with about eight hundred cords of hard and soft wood slabs, sawn for firewood. Insurance on mill is said to be \$1,000. Loss about \$3,000.

A fire broke out in the engine house of Heap's cabinet factory at Oshawa on July 6th. Considerable damage was done as a good deal of lumber was being dried in the kiln at the time, but the loss is covered by insurance.

On June 27th the saw mill belonging to Kramer Bros. a few miles from Teeswater, Ont., was completely destroyed by fire. Loss on mill, logs, lumber, lath and shingles, about \$5,000; no insurance. An effort is being made to enable the late owners to rebuild.

A most disastrous fire occurred at Southampton, Ont., the first week of July, through which about four thousand ties, two cars belonging to the Grand Trunk railway, and about one hundred and fifty feet of the south landing piers, the property of the government, were burned.

The town of Gravenhurst had another very narrow escape from being destroyed by fire on July 10th. Sparks from extensive bush fires on the south-west side of the lumber yards of Messrs. Mickle, Dymont & Son, Isaac Cockburn and Thomson & Baker nearly proved disastrous not only to the extensive piles of lumber just mentioned but also to the town. By the prompt response, however, of the firemen no serious damage was done.

A most disastrous fire occurred at Milmay, Ont., July 26th, by which the large roller mill, saw mill and private residence of Messrs. Eidt & Schmidt were totally destroyed. In the roller mill were about two thousand bushels of wheat and a large quantity of lumber was also destroyed. Burning shingle were carried a great distance and were the cause of two or three small fires in the village, which were luckily extinguished before gaining any headway. The loss is estimated at \$20,000; insurance, \$5,000.

A dispatch from Montreal under date of July 6th, says. Terrible forest fires are raging on the line of the Canada & Atlantic Railway, between here and Ottawa. Eighteen miles of track have been destroyed and cars were burned at McCaullay's Landing; also three mills and many houses were destroyed, and many thousand feet of lumber were swept away. The settlers are clearing out. Wade's saw mill, 5,000 cords of wood, five freight cars, five houses, and thousands of cords of tan bark have been destroyed. The country on each side for some days has been utterly impassable.

On July 7th a very disastrous fire raged at Corson's siding on the Midland railway, destroying the station and everything in the vicinity of it. The property destroyed consisted of 4,000 telegraph poles, an immense quantity of cedar posts and ties, several thousand cords of wood, a large quantity of lumber, together with Decatur's steam sawmill and outbuildings; also Capt. Corson's coal house with a considerable quantity of coal. The loss is roughly estimated at \$10,000, and so far as can be learned the property was not insured. The fire was caused by a spark being carried by the wind from bush fires two miles distant.

During the early part of July, Mr. T.B. Tait's saw and shingle mill at Germania, together with the season's cut of lumber—about 500,000 feet, was totally destroyed by fire. It

is supposed to have been caused by sparks from the refuse burner which caught in the mill and spread from it to the lumber yard. The high wind which prevailed at the time rendered it impossible to do anything to check the fire. Very general sympathy is felt for Mr. Tait in his serious loss which will amount to about \$10,000, insurance only \$2,000. This is the second mill on this site that Mr. Tate has lost by fire, besides the boarding house at Germania two years ago, and his residence at Gravenhurst. It is understood that he will not re-build at Germania.

**CASUALTIES.**

Eli Michaux was drowned a few days ago at Eldy's boom in Hull.

A man named Joseph Morceau had his leg badly jambed by one of the log carriers in Booth's mill at Ottawa recently.

A man, whose name we have not learned, had his hand cut off in Day's shingle mill, Manitowaning, at few days ago, and died the following day.

A colored man named Chas. Johnston, engineer at A. Dallas' stove mill, Chatham, Ont., was instantly killed July 19th by being caught in the belting.

While hewing a stick of timber at Rodd's new saw and shingle mill, near Lindsay, Ont., J. P. Miller allowed the axe he was using to slip which cut in the nape severing an artery. He had a narrow call, but is now doing well.

A despatch from Minden, Ont., says that John Massales, a young man working on one of J. M. Irwin's drives, was drowned while breaking a jam in the rapids on Gull River, about four miles from Minden. His body was found about a quarter of a mile from where he fell in. His parents live near Haliburton.

Mr. Darwin Stevens, chief millwright at Hamilton Bro.'s mill, and one of the most respected citizens of Hawkesbury, Ont., was accidentally drowned there on July 23rd. He was walking on a boom at the edge of the Yule and slipped off into the rapids, the strong current sweeping him down quickly beyond help.

On July 20th Master Charles Kerr while attempting to put on a belt on a pulley in Messrs. Bick & Sons planing mill at Cannington, Ont., his right hand caught in the belt and was wound around the shaft till his arm was pulled clear from the body at the shoulder. The unfortunate lad is reported as doing well under his trying ordeal.

On Friday, July 13th, six men employed by the Eau Claire Lumber Co., Calgary, lost their lives in Kamanskis rapids on the Bow river, 45 miles west of Calgary, while driving logs. At that hour nine left the camp in a boat for the opposite shore to commence the day's work. The point at which they attempted to cross, though not considered dangerous, is only a short distance above a chute of some five or six feet. When the boat got within a few feet of the shore the hands attempted to snub her to a stump on land by throwing a line. In this they failed, the boat became unmanagable and swung around in the current, instantly acquiring such a momentum of speed that before anything could be done to stop her she shot over the fall like an arrow. In the leap over the first falls she only shipped a little water and she passed the second fall without shipping any more. Just after passing the third fall, however, she struck a rock and capsized. Three men managed to catch the upturned boat, but the other six were carried down stream and drowned. The three shortly afterwards were rescued.

**ITEMS OF INTEREST.**

A dozen trees planted each year may change the appearance of a farm greatly in a generation, and lead along to income, very satisfactory as well.

An exchange says it takes \$60 each year to provide a farmer with fuel in Dakota. The stumpage question does not bother the authorities out there.

The Dodge Wood Split Pulley Company, of Toronto, of which Mr. Samuel May is president, have purchased a site for their new works at West Toronto Junction, near that city, and will, during the present season, erect extensive buildings thereon.

A Pittsburg mechanical engineer, 52 years old, is said to have invented a novel movable dam, by which he claims a boating stage of water may be obtained in shallow rivers at all seasons of the year, and old river men have pronounced the invention practical.

It is most desirable that encouragement be given to the cultivation of trees, and in order to prove more effective, some other system than that of appointing an arbor day will doubtless have to be resorted to. The granting of prizes in each municipality, for the best ten acres or more of trees, might have a good effect.

Ebony can be imitated on wood by first painting with one

per cent. solution of sulphate of copper. When perfectly dry, the wood is painted over with a liquid consisting of equal weights of aniline hydrochloride and spirits of wine. The blue vitrol acts on the aniline, and forms nigrosin, a black which cannot be affected by acids or alkalies. A luster can be added by coating with simple copal varnish.

Log drivers are important personages at this time of year, and are being talked about by everyone. The Menominee (Mich.) Herald says they have a nomenclature of their own, containing words unintelligible to the uninitiated. We have heard a few, but cannot perhaps give the correct idea of their meaning. "Wing-jam" is said to be a collection of logs on the shore of a stream, while a "center" is a jam of logs on an island. "Breaking a center" is, of course, dislodging logs "hung up" on an island. "Tow head" is reported to be a small island, invisible at high water, but sticking up as the water recedes, just enough to catch logs floating down stream and stop them. A "sweeper" is an uprooted tree which has fallen into the stream, and oftentimes as a log or boat containing the men comes upon such an object unexpectedly the poor fellows are swept off into the flood.

**THE LATE STRIKES.**

Since the part of THE LUMBERMAN containing a report of the strike among lumbermen in the Georgian Bay and Ottawa districts went to press we learn that the difficulties in both places have been amicably settled. The men in the Georgian Bay district, it is stated, have succeeded in making a compromise with their employees which enables them to draw their wages fortnightly instead of monthly as heretofore. They will, however, work eleven hours per day as in the past, not having succeeded in getting the reduction asked for.

The men in the employ of J. R. Booth, of Ottawa who went out on strike for an increase of wages, have returned to work on the old terms on the understanding that if upon examination of the pay sheets of the business it is discovered that the employees of Mr. Booth are receiving less pay for the same work as is paid elsewhere that the deficiency, whatever it may happen to be, will be made up.

**GENERAL NEWS NOTES.**

—The British steamer, Alaska, recently arrived at Boston, Mass., from Chaleur Bay, N. B., had a cargo of 32,000 railway ties, which is said to be the largest cargo of the kind ever taken to Boston and the Alaska is the first steamer to engage in the business.

—A feature of the London (Eng.) Board of Trade timber returns is that affording us an insight into the enhanced value which importers have given for this year's purchases. The chief increase seems to have been on hewn descriptions, which represent intrinsically over £120,000 more value than pro rata they did June twelvemonth. The sawn wood exhibits an increase in cost of over £60,000. These values are estimated from the shipping documents, and therefore are fairly accurate.

The following is a comparative statement of Timber, Masts, Bowsprits, Spars, Staves, etc., measured and culled to July 18th at the Port of Quebec:

	1886.	1887.	1888.
Waney White Pine.....	1,007,646	604,648	586,948
White Pine.....	744,676	456,588	162,902
Red Pine.....	157,364	355,877	170,689
Oak.....	450,015	335,557	557,270
Elm.....	384,175	160,012	109,095
Ash.....	92,159	30,136	68,212
Basswood.....	218	64	.....
Butternut.....	192	55	419
Tamarac.....	3,285	3,047	1,257
Birch and Maple.....	153,742	114,228	124,995
Masts and Bowsprits.....	—pcs.	—pcs.	—pcs.
Spars.....	—pcs.	—pcs.	—pcs.
Std. Staves.....	36.1.3.1	38.3.2.2	18.9.2.27
W. I. Staves.....	8.1.2.17	65.9.1.26	168.8.2.5
Brl. Staves.....	.....	13.5.3.3	11.4.3.5

**Hardening Wood.**

"The recently invented process," says Iron, "by which wood is made to take on some of the special characteristics of metal, has been turned to practical account in Germany. By this process the surface becomes so hard and smooth as to be susceptible of the high polish, and may be treated with a burnisher of either glass or porcelain: the appearance of the wood being then in every respect that of polished metal, having, in fact, the semblance of a polished mirror, but with this peculiar and advantageous difference namely, that, unlike metal, it is unaffected by moisture. To reach this result the wood is steeped in a bath of caustic alkali for two or three days together, according to its degree of permeability, at a temperature of between 165 and 197 degrees Fahrenheit. It is then placed in a second bath of hydrosulphate of calcium, to which a concentrated solution of sulphur is added after some twenty-four or thirty-six hours. The third bath is one of acetate of lead, at a temperature of from 95 to 120 degrees Fahrenheit, and in this latter the wood is allowed to remain from thirty to fifty hours. After being subjected to a thorough drying, it is in a condition for being polished with lead, tin or zinc, as may be desired, finishing the process with a burnisher, when the wood apparently becomes a piece of shining polished metal.



## THE NEWS.

## ONTARIO.

—The Collingwood Dry Dock has been disposed of at Baillif's sale.

—Bush fires have been very bad in the country surrounding Byng Inlet.

—River driving on the northern waters is said to be three months ahead of 1887.

—Pierce & Co's mills, at the Chaudiere, are now running at night by electric light.

—The machinery for the Neebing Lumber Company's saw mill at Port Arthur has been shipped.

—Burton Bros., of Byng Inlet report that their cut up to July 21st amounted to over 5,500,000 feet.

—The Spanish River Lumber Company lost \$12,000 by the extensive fires which totally destroyed their two camps.

—David H. Cameron, lumberman, Boundary Line, has assigned. His liabilities have not yet been ascertained.

—McLachlin Bros., the well known lumbermen, have generously granted to Arnprior a site for the new town hall.

—A Detroit firm is now shipping several thousand cords of spruce and other soft wood, for paper making, from Port Findlay.

—The McBurney & Laycock Lumber Co.'s mill at West Gravenhurst recently cut 250,000 feet of lumber with one circular in a week.

—About 22,000,000 feet of logs are adrift in Lake of the Woods. The break was caused by a raise in the water letting the logs out of the booms.

—From almost every section we learn that the drives are progressing very favorably, and in some localities are months ahead of previous years.

—Messrs. Burton Bros. steam tug "Metamora" has brought to Byng Inlet three tows of logs this summer, each tow exceeding 16,000 pieces.

—Messrs. Cummer and R. Young, sawmillers, of Arran, were each severely fined recently for allowing sawdust from their mill to fall into the river.

—The Algoma Mining and Lumber Syndicate will shortly commence work on some of their valuable properties at Goulias Bay and Garden River.

—Graham, Horne & Co., of Port Arthur, have secured the contract for supplying all the lumber necessary to complete the new elevator at Fort William.

—A fine drive belonging to the Rathbun Co., of Deseronto, consisting of about 160,000 logs, passed down the Otonabee river during the early part of July.

—During the recent storm the tug Superior had 12,000 logs in tow for the Victoria Harbor Lumber Co. The logs broke loose and were lost near Giant's Tomb.

—The smoke stocks of the Midland & North Shore Lumber Co's timber and shingle mill has been raised and the new mill will be ready to commence cutting in a short time.

—Thirty feet addition is being built to the saw mill at Young's Point by Mr. C. Young. He has a big order for shingles which will tax the capacity of the mill to supply.

—The steam barge *W. B. Hall*, owned by the Midland & N. S. Lumber Co., was recently loaded with 500,400 feet of lumber in a little less than seventeen hours. This is a good record.

—At a recent meeting of the directors of the Lakeside Lumber & Manufacturing Co., Mr. A. V. R. Young, chartered accountant, of Peterborough, was appointed auditor for the Company.

—Messrs. Hurdman & Co's new mill at the Chaudiere is now running, and will increase this season's cut by about 30,000,000 feet. The mill is lit by electricity and will run day and night.

—Bush fires have been doing an incalculable amount of damage throughout the country during the past month. The recent rains have done much, however, towards putting a quietus to the flames.

—Mr. Archie Brook's raft of 25,000 feet of square timber rafted at Belleville, has recently reached Quebec. It was a fine lot of timber and the Quebec papers note its quality in announcing its arrival.

—John Hoff, night fireman in the Cedar mill, at Deseronto, has received notice from Washington, D.C., that he is entitled to a pension and will hereafter receive \$20 per month; besides he will get \$3,000 back pension.

—The Madawaska Improvement Co. is about to purchase a steam boat for use on the improvements on the Madawaska

river. The company begin its operations next spring when it will bring the Madawaska drive into the Ottawa river.

—Sawdust explosions are becoming a very common occurrence in the Ottawa river. A few days ago the sawdust seemed to concentrate in one place and suddenly rose ten feet out of the water in a large column accompanied by a loud report.

—Some of the mills at the Chaudiere are being supplied with a new patent fire alarm apparatus, which will locate the exact vicinity of a fire a few seconds after it starts. In various parts of the buildings, thermometers are attached to an electric wire.

—The Upper Ottawa Improvement Company and Capt. Goulet have gathered together nearly 44,000 logs which broke loose from the tows on Deschenes Lake during the recent storm. They have been pocketed along the shores and towed into the booms.

—N. Dyment has already put in his Goderich yards 1,150,000 feet of lumber this season, and expects to handle five and six million more feet before the season is over. Besides the schooner *J. N. Carter*, it is expected that he will have two more boats put into the harbor carrying trade shortly.

—The drive consisting of 100,000 logs, belonging to the Messrs. Gilmour, of Trenton, now on its way down the Otonabee river, is made up of some of the best logs which have passed through these waters for a considerable time. All the drives in this direction, so far, have made good headway.

—Lumber operations in Toronto are reported quiet and likely to continue so for some time. It is said that sooner or later the manufacturers will be compelled to reduce prices as the margin for middlemen is considered very meagre. Out of town shipments are slow, freight rates being nominally the same.

—The canal statistics for 1887 shows that the Canadian Pacific and Canada Atlantic railway have become formidable competitors to the canals in the Ottawa district. The quantity carried from Ottawa by these two railways in 1886 was 99,000,000 feet, which increased last year to 100,000,000 feet, while the canal traffic decreased 22,000,000 feet in the same period.

—Mr. D. A. Martin, Messrs. Bronson & Weston's upper Ottawa agent, who returned from a four weeks' canoe voyage on the upper reaches of the Ottawa reports extensive fires on Wm. Mackay's limit near Mattawa, and also on the limit of the Messrs. Klock Bros., near Klock's mills. There are other extensive fires, he says, on the south side of the Ottawa, but none on the north side.

—The Commission appointed by the Dominion Government to investigate the proposed course of the Trent Valley Canal have been over the ground thoroughly and will doubtless soon present their report to Parliament. The T. V. canal would if constructed prove a great boon to the section of country through which it passes, and would be of particular benefit to the lumber trade.

—The dam built by the Dominion government at the Lake of the Woods, near Rat Portage, last spring, gave way recently carrying with it the colonization bridge, built by the Ontario government. The loss will be over \$10,000. The lake is very high. There is plenty of water power without the dam, to run the mills, the dam only being of use when the water is very low, in occasional seasons.

—The losses from rafting on the lakes are very great. Recently on Lake Huron a large raft belonging to Dellar, of Marquette, en route to Bay City, was run into just above Lake George in the St. Mary's river by the C. P. R. boat Athabasca, and the logs were scattered all over Lake George. The raft contained between 2,000,000 and 3,000,000 feet. It is said that a legal contest will probably determine just what rights a raft has.

—Messrs. Vansickle & Bro., of Barrie, write the LUMBERMAN that their cut of lumber this year will be about 2,000,000 feet, made up as follows: 700,000 feet of Black Ash, 200,000 feet of Basswood, 100,000 feet of Elm, and the balance of stock pine and hemlock. They expect to get through cutting about the first of October, and will then send their men to the bush, to get out another stock about the same as the present one. They report trade good so far this season.

—Some of the mills at the Chaudiere are being supplied with a new patent fire alarm apparatus, which is said will locate the exact vicinity of a fire a few seconds after it starts. In various parts of the building thermometers are attached to an electric wire. When the heat in the vicinity of a thermometer rises above 110 degrees the glass breaks. This starts a bell in the watchman's room ringing. Each of these alarm bells has a number by which the watchman can tell exactly the location of the fire.

—West Toronto Junction is becoming quite an important

lumber point, several yards being already in full swing. From what THE LUMBERMAN can learn, however, it takes about as long to transmit a car of lumber from Toronto to that point as it would if it came from across the sea. Purchasers at that junction have evidently made up their minds that in order to secure a stock of lumber by a certain date they have to give the order a month ahead. The railway company is of course to blame, and it is high time that some better service should be inaugurated.

—Messrs. Barnes & Co., proprietors of the large box shoo factory at the Chaudiere have received an offer from the City Council of St. Albans, Vt., of a complete new factory, fully supplied with power, exemption from taxation and in addition a bonus of \$10,000 if they would consent to remove their business to that point. The offer has been refused. The firm employ about 300 hands, all of whom reside in the city of Hull and at the rate they are now manufacturing they will purchase about 18,000,000 feet of lumber a year from the Chaudiere lumbermen.

—The latest estimates of this season's cut by the Ottawa mills makes a total of 405,000,000 feet, the largest, it is said, for ten years. The estimates of the different firms are as follows: E. B. Eddy Manufacturing Co., 90,000,000 feet; J. B. Booth & Co., 75,000,000; Hurdman Bros., 70,000,000; Perley & Pattee, 60,000,000; Bronson, Weston & Co., 55,000,000; Pierce & Co., (formerly G. B. Grier & Co.) 35,000,000; Conroy & Co., 30,000,000. Down the river the Gilmours will saw about 50,000,000 feet, and Edwards & Co., of Rockland, 40,000,000. All the mills are running day and night.

—Mr. J. M. Irwin, of Peterborough, has three magnificent drives on the way to his mills at Nassau. We understand there is a total of eight million feet in all, principally made up of dimension timber. The superintendent, Mr. G. S. Thompson, informs us that they have had exceptionally good success in their stream driving this year, there being abundance of water to float all the logs without trouble. The foremen of the three drives referred to are C. Austin, G. Johnston and T. Preston. This timber comes from the Canadian Land & Emigration Company's lands in the township of Harburn, Guilford. The total cut at the Nassau mills this season will be about 14,000,000 feet.

—A raft of white pine; says the *Ottawa Journal*, belonging to Hale & Booth spoken of in those columns as passing over the Deschenes rapids on Monday last, and which was said to be of unexceptional quality and size, was yesterday sold to arrive at 38 cents per foot. This is said to be probably as big a price as ever paid for white pine on the Ottawa, and shows what quality and a clearing Quebec market will do for the enterprising lumbermen. The total amount paid for the pine was \$53,000. The excellent quality is accounted for by the fact that the timber is the first cut on the new limits on the Amable du Ford, sold by the Ontario Government last season. Another raft from the same section the property of Mr. Mackay, of equal if not so large quality, is coming down in good shape. The raft was sold to Dobell & Co., of Quebec.

—Advices have been received by Messrs. Perley & Pattee from Little Basin depot, on the Bonchere river, that on Tuesday, July 17th, the bush fires which were burning there destroyed the Little Madawaska depot on the Petewawa and about \$10,000 worth of provisions, stock, shanty implements, etc. The communication received by the firm here says that the fire began on the back of the limit, near Cedar Lake, and swept right across the country past Little Madawaska depot and was within a mile of Little Basin depot when Wednesday's rain damped but did not extinguish it. Had it not been for the rain on Wednesday a gang of one hundred men from the timber drives, who were engaged trying to stay the fire, might have perished about a mile from the depot. They were completely surrounded by masses of burning timber. The rain dampened the fires sufficiently to allow the men to escape from their dangerous situation.

—The Longford Lumber Co. write as follows to the *Northwestern Lumberman*:—"Our Company this season has taken out its usual stock of logs, about seventeen million feet. We found last winter to be one of the best for taking out stock, their being continual steady cold weather. Fears were entertained early that the supply of water for driving would be short, but on account of the dull backward spring the water in our streams has held up well, and our drives are fully one month ahead of other seasons. Our three mills started running about May 1st, and so far our stock is coming out fully up to the average, both in quality and manufacture. The demand for dry lumber is good, many lines being already cleared out of our yards, a large portion going to Boston by all rail route. We are anxiously waiting the action of Congress on the tariff question, and we presume our neighbors must be in the same mood, as we have not seen reports of many sales of the new cuts."

QUEBEC.

—The first cargo of white pine shipped for the season from Montreal to the River Plata, South America, cleared June 19, and amounted to about 450,000 feet.

—The E. B. Eddy Manufacturing Co. have taken a new departure in manufacturing from sawdust vessels in the shape of a pot capable of resisting heat and fire.

—Reports from Montreal go to show that there has been more activity in lumber and sales have been more frequent of late. The sales so far have been in excess of the same period last year, and prices continue satisfactory.

—The prohibition of the passage of cribs through the Grenville canal was owing to the rafts impeding boat traffic and causing injury to the canal works. In view, however, of the construction of the dam across the Ottawa river at Carillon, free passage will be given to rafts through the Carillon canal. At low water it has been decided to allow rafts to use the old Ste. Anne's canal.

—At the annual meeting of the shareholders of the Quebec and Lake St. John Railway Lumber and Trading Company, the following were elected directors: Hon. J. G. Ross, Hon. I. Thibaudeau, E. Beaudet, Sir A. P. Caron, Hon. P. Garneau, Thos. A. Paddington and Gaspard Lemoine. At a subsequent meeting of the directors Hon. J. G. Ross was elected president, and E. Beaudet vice-president.

—Application has been made by Mr. J. T. Lewis to admit to probate in Ontario the will of the late Hon. John Hamilton, of Montreal, lumber merchant. The personal property of the deceased gentleman in Ontario, exclusive of real estate, was sworn to at \$600,000. This amount does not include the \$600,000 worth of limits sold a few days ago, which are in the Province of Quebec, nor any of the other Hamilton property in Quebec.

—Mr. J. B. Charleson, inspector of forests for the Province of Quebec has returned from a lengthy examination of timber lands around the head waters of the Ottawa river. He found that a firm of square timber makers, having headquarters at Mattawa, and with whom a prominent M.P.P. is said to be closely allied, trespassed upon government limits around Lake Expance stumpage and took therefrom 3000 valuable trees, for which no stumpage dues were paid. It is also hinted that the trespass was committed with knowledge and connivance of officials of the Crown timber office there; that the parties trespassing are not regular lumbermen, but speculators.

—R. H. Klock & Co's raft of square timber is now a considerable way below the Mountain Rapids on its way to Quebec. This timber was taken out on the shores of Lake Quinze during last winter. It is a fine lot of timber, being sound and well made. The raft consists of 135 or 140 cribs and although it was driven through the Quinze rapids, (the roughest rapids on the Ottawa river) it sustained little or no damage therein. The drive was under the management of Mr. Wm. Wade, the well known pilot of Grenville. It is credibly stated that this was the fastest drive that has ever been made without leaving a single stick behind, and it is alleged the sweep would have been less arduous had not Messrs. Gillies Bros. let down their logs on the top of the timber. Mr. Wade expects to reach Quebec before the last of July.

NOVA SCOTIA.

—It would take fifty trains of fifty cars each to transport the lumber contained in Leary's log ship. The ship will in all probability be launched before this paper goes to press. The cost of this log ship if landed successfully in New York is as follows: Timber's cost in Nova Scotia, \$13,000. The towage will cost \$100 per day, and the logs will be sold in New York for \$50,000.

MANITOBA AND THE NORTHWEST.

—The planing mill at Selkirk, Man., is now completed, making another addition to the industries of that town.

—Owing to the dry weather, bush fires have been doing a great deal of damage lately in the timber country east of Winnipeg, in the vicinity of Whitemouth, where there are lumber mills.

—Tree-planting is being carried on to a considerable extent throughout the Northwest. The present has been a very favorable one for this kind of work. Steady cultivation when this is practicable, or a heavy mulching where the grass needs to be kept down, are necessary to complete the work well begun.

Following are the list prices, f. o. b. at Rat Portage, Keewatin and Norman:—Dimensions—2x4 to 8x8, 12 to 16 ft. long, \$14; do. 10, 18 and 20 ft. long, \$15; 2x10 to 12x12, 12 to 16 ft. long, \$15; do. 10 and 20 ft. long, \$16. Fifty cents per M advanced on each foot over the above length up to 24 feet long. One dollar per M advanced on each foot over

24 feet long. \$1 per M advanced on each inch over 12 inches surface Surfacing, 50c. per M; Surfacing and siding, \$1 per M. Boards—1st, common, rough, \$15.50, dressed \$16.50; 2nd common rough \$14, dressed, \$15; Culls, rough, \$10; dressed, \$11; 1st common stock, 12 in. rough, \$18, dressed, \$19; do. 8x10 in. rough, \$17, dressed, \$18; 2nd common, 12 in. rough, \$16, dressed, \$17; do. 8x10 in. rough, \$15, dressed, \$16. Ten feet long and under, \$1 less per M. Shiplap—10 in. \$17; 8 in. \$16.50. Siding, ceiling and flooring—1st, 6 in., \$31; 2nd, do., \$26; 3rd, do., \$20; 4th, do., \$17; 1st, 5 in., \$31; 2nd, do., \$26; 3rd, do., \$19; 4th, do., \$16; 1 1/2 in., \$31; 2nd, do., \$26; 3rd, do., \$18; 4th, do., \$15; 8 and 10 in. flooring, at \$1 per M advance. \$1 per M advance for dressing on both sides. \$1 per M less for lengths 10 feet and under. Bevel siding—No. 1, 1st siding 1/2 in. x 6 in \$20; No. 2, do., \$17. Stock—B, \$35; C, \$30; D, \$25. Clear, 1 inch—1st and 2nd, \$32; 3rd, \$28. 1 1/2, 1 3/4 and 2 inch—1st and 2nd, \$40; 3rd, \$35; selects, \$30; shop, \$25. Mouldings—Window Stops, per 100 feet lineal, 75c.; Parting Strips, do., 50c.; 1/2 round and cove, per 100 feet lineal, 60c. Casing—4 in. O. G., per 100 feet lineal, \$1.50; 5 in. do., \$1.75; 6 in. do., \$2; 8 in. do., \$3; 10 in. do., \$3.75. Lath, \$1.75. Shingles—1st quality, \$3; 2nd do., \$2.50; 3rd do., \$1.50; 4th do. \$1. Dealers are requested to order by number.

BRITISH COLUMBIA.

—The Royal City Mills, New Westminster, B. C., has been shipping fir sill timber to some of the larger car works in the United States, and lately shipped a lot 65 feet long, and without knot or flaw, to the Crossen Car Works, Cobourg, Ont.

—About a month ago the collector of customs at Vancouver, in interpreting the customs law imposing an export duty on logs, included piles. In one instance the duty was exacted and paid under protest by the shippers, who held that piles were manufactured timber and as such not subject to duty. The matter has since been referred to the department at Ottawa, and information has been received that the decision of the local collector has been over-ruled and the money refunded.

—The industries and resources of Vancouver are many in number and diverse in their character. The production of lumber on Burrard Inlet is the largest on the British Pacific coast. Great as it is a considerable addition is expected to be made to its amount in a short time by the erection of one or more large mills. Within the last year sash and door and furniture factories have been started and already their productions are being shipped to the far east both to the Dominion and to the United States. Several other wood-working industries are expected to be commenced shortly.

AMERICAN NOTES.

—A syndicate of Michigan lumbermen have bought up 50,000 poplar trees in North Carolina and Tennessee quite recently.

—The present season in Cheboygan is one of the best in the way of manufacturing and shipping lumber, experienced for years past.

—The J. E. Pott's Salt & Lumber Company, Au Sable, Mich., will likely extend its logging road from its pine timber in Oscoda county, to Au Sable, 50 miles below.

—In Kansas City cypress is being used for stringers for sidewalks and yellow pine for planking, and cypress is also used for the bed planking under the cedar block paving.

—Each year it takes 500,000 acres of timber land to supply cross ties for United States railroads. For all purposes the decrease of their timber area is over 50,750,000 acres per year.

—The publication of a paper has just been commenced at St. Paul, Minnesota, called the *Western Tree Planter*. The paper will advocate the planting of trees on the western prairies, and will give special directions as to tree planting.

—Mr. A. Latch, at one time engaged in the wholesale lumber trade at Toronto, Ont., but now in Mexico, has been in New York buying a complete saw mill equipment, and intends going somewhat extensively into the manufacture of mahogany.

—Fire originating in a sawdust pile at H. R. Morse's mill, Alpena, Mich., July 11th, rendered 1,500 people homeless and in a few hours had destroyed 200 houses. The loss exceeds \$300,000, with but slight insurance. At least 3,000,000 feet of lumber were burned.

—A cargo of timber and deals loaded at Mobile, Ala., by Donald Bros. & Co., for Queensboro, Eng., valued at \$8,000, was lost by the abandonment of the American ship Zouave, at sea. Two of those on board were drowned, and the others were rescued in a half starved condition.

—The immense raft owned by Mosher & Fisher, lost on

Lake Superior last season, has not yet been recovered, though it is said that men are now engaged in that work. The logs are scattered for a distance of 30 miles on the north shore of Lake Superior, and also for some distance on the south shore.

—The struggle between the buyers and manufacturers of poplar in the United States. It has been generally acknowledged that a lumber which can so successfully replace pine as poplar should sell at prices more nearly corresponding to those of pine.

—American lumbermen are preparing to develop the Cuban forests. One man who several years ago bought 30,000 acres there for \$50,000, is now worth \$5,000,000. One half of Cuba is covered with virgin forests. Its stumpage is thought to be worth fully \$15,000,000.

—One of the most extensive schemes for rafting logs on the great lakes is that proposed by a Saginaw firm. It involves floating 10,000,000 to 15,000,000 feet of logs the entire length of Lake Superior, running them down to the Sault Rapids and through the river into Lake Michigan, and thence to and up Saginaw Bay. The logs were cut by the C. N. Nelson company of Cloquet.

—White pine is arriving in New York and the West, and so far as heard prices remain unchanged. The buyers proceed carefully but do not show by their actions that they expect lower prices. They will be conservative buyers this season. Export is just middling. It cannot be called dull as there is an average amount being loaded for foreign parts, the most of it destined for the West Indies and South America.

—The lumber and shingle receipts and shipments at Buffalo, N. Y., from the opening of navigation to July 1, were as follows:

RECEIPTS BY LAKE.			
	1888	1887	1886
Lumber, ft	68,181,000	72,165,000	78,607,000
Shingles, no	4,067,000	3,355,000	4,426,000
SHIPMENTS BY CANAL.			
Lumber, ft	12,416,700	15,435,200	13,925,113
Shingles, no	1,434,750	2,153,000	1,166,000

The exports of lumber, exclusive of hardwoods, from the port of New York, during the month of June last and since January 1, were as follows:

	Feet.
To West Indies	1,538,000
To South America	5,742,000
To East Indies	1,712,000
To Europe	12,000
Total feet	7,342,000
Previously reported this year	27,141,000
Total since Jan. 1, 1888	31,485,000
Total same time, 1887	35,766,000

EUROPEAN NOTES.

—Chartering has been active during July and most of the coast and London importers have now made fair progress towards the completion of their tonnage requirements.

—We learn from Farnworth & Jardine, of London, that the demand for both waney and square has been on a moderate scale, and quite of a retail character; prices have been steady, and the stock is now reduced within a very small compass. In red pine nothing has been done, and the stock is almost exhausted. Oak: The consumption of logs has been fair, and has consisted chiefly of prime wood, recently imported from New Orleans, for which good prices have been obtained, but in Quebec wood little has been doing and the stock is moderate. Oak planks from the States have been imported very largely, much in excess of the demand, consequently prices have declined; sales are difficult to effect, and the stock has accumulated, and is now very heavy. Elm has been rather more enquired for, and the stock is moderate. Ash is in moderate request, and the stock is light. Pine Deals: The new import has begun to arrive this month by the steamers, and so far have all been under contract, so that no wholesale transactions have been recorded; the consumption has been fairly satisfactory, and has slightly exceeded the import, and the stock is about the same as last year. In staves nothing has been doing; the stock of pipe is heavy, but of puncheon the market is bare. Speaking of New Brunswick and Nova Scotia spruce deals they say that the import has been on a moderate scale, and the deliveries from the quays have been large, having been more than double the import, leaving the market with a remarkable light stock, only half that of last year and a quarter of the previous year; in spite of this it has been impossible to establish an advance in value, although prices have been steady, and the sales during the month have consisted chiefly of cargoes to arrive; shippers should act with caution and confine their operations to a moderate compass, otherwise present values will be with difficulty maintained. Pine Deals: Nothing has been doing, and the market is somewhat bare of stock. Birch, both in the log and in planks, is in active demand, the import has been considerable, and has all gone into consumption at better prices; the market is almost bare, and moderate shipments should sell well.

### Millions of Logs Lost.

Recent rains have caused the greatest flood ever known in Northern Minnesota. Along the banks of logging streams tributary to the St. Louis river millions of acres of land have been overflowed. The immense saw mills in and around Cloquet were completely flooded, with 200,000,000 feet of logs jammed together. The latest reports state that the great booms at Knife falls gave way, letting loose about 80,000,000 feet of logs, which were swept down the river to Duluth. Some of them were caught in St. Louis Bay. The whole 80,000,000 feet were carried out in less than two hours. The damage is enormous, and can only be estimated in a general way.

The loss in the sweeping away of the booms, piers, etc., to the Knife Falls Boom Company and the lumber companies of Cloquet is put at about \$150,000, while the loss on lost logs, the extra expense of handling them, and to business will be \$300,000, and the damage in other ways will be enough to raise the total to \$500,000 at least. The C. N. Nelson Lumber Company lost about 30,000,000 feet, saving about 6,000,000 feet. The Cloquet Lumber Company lost 35,000,000 feet, saving 6,000,000 or 7,000,000 feet, and the Water Power Company 6,000,000 feet, saving 600,000 or 800,000 feet. It is hardly possible that anything like a great proportion of the logs will be saved at all.

### The Fall of the "Forest King."

A woodman wended his way thro' the wood,  
Till he came to a spot where a great tree stood.  
The bright sun flashed on the autumn trees,  
Whose gay leaves fluttered away on the breeze.  
And soon o'er the hills thro' the silence awoke,  
The far-reaching echo of each mighty stroke.

The timid squirrels all scampered away,  
And with a shrill scream off flew a blue-jay;  
But the woodman steadily wielded his axe,  
And the great tree groans and creaks and cracks.  
There it has stood for years three score,  
But the place thereof shall know it no more.

As "King of the Forest" it held its sway  
O'er valley and hill for many a day—  
But now it groans in anguish of soul,  
As each stroke grows nearer the heart of its bole.  
The breeze that so oft has passed o'er it before,  
Now sadly sighs thro' its branches once more.

Its last "farewell" is a mimic gale,  
That slowly dies in mournful wail:  
The noble tree sways and rocks with the breeze,  
And it bids "farewell" to its kindred trees.  
Then straining, rending, grunting it fell  
With a thundering, echoing, crashing knell.  
All its stately length stretched far o'er the ground,  
And the hills repeated the echoing sound.

COLLEEN BAWN.

### Railway Matters.

Negotiations are said to be on the tapis for the purchase, by a syndicate, of that part of the C. P. R. line extending from Ottawa to Montreal and Quebec. Mr. Beemer, Hon. Mr. Church and, it is reported, Mr. Chapleau, are interested in the scheme, which is to utilize the line between Ottawa and Quebec as the basis of a huge railway system to include the various colonization railways running north. A part of the scheme is to colonize the districts the railway will traverse. The Canadian Pacific company are said to find the working of the north shores line too expensive for the receipts it gives them owing to the lively competition of the Canada Atlantic. It is said that the C. P. R. will attempt to acquire the control of the Canada Atlantic in order to thwart the plans of the G. T. R.

The fact that Sir George Stephen, president, Sir Donald Smith, director, and Mr. Van Horne, general manager of the Canadian Pacific road, together with the officials of the Duluth, South Shore and Atlantic road, accompanied by Mr. Farrar, a prominent banker of London, England, and Col. West and Capt. Rich, of Minneapolis, are making an extended and critical examination of all parts of the Duluth, South Shore and Atlantic road, gives good reason for the belief that a stupendous magnitude between the two roads is now pending. Nothing can be learned from the gentlemen as they refuse to talk. They are travelling by special car, and are extending their investigations thoroughly from the Soo to the great mines on the Mineral range line. The presence of Mr. Farrar is taken to indicate that foreign capital is interested in the deal.

### Simson & Mason vs. the New Brunswick Trading Company.

In the Queen's Bench Division of the High Court of Justice on Tuesday, before Mr. Baron Huddleston and Mr. Justice Charles, the case of Simson & Mason vs. the New Brunswick Trading Company came on for hearing.

Mr. Pike said this was an appeal on behalf of the plaintiffs against an order of Mr. Justice Cave at Chambers, setting aside an order of the Master refusing defendants leave to issue

a commission for taking the evidence of two witnesses on their behalf.

The learned counsel said the action was brought for fraudulent misrepresentation against the defendant company by the plaintiffs, who were also a company, and it was an action to recover £15,000, which was paid by the plaintiff company to the defendant company, upon, it was alleged, a number of false representations, which were set out in the statement of claim. One of the alleged misrepresentations, was that Guy & Co. and Stewart Brothers were separate and distinct firms, whereas, in fact, they were not. Another alleged false representation was that each of the firms was abundantly solvent, that Guy had a large property and that Stewarts were making £40,000 a year profit. Instead of that it had turned out that Guy suspended payment with a large deficiency, as had also Stewart Brothers. A material witness in the case was a Mr. Benn, who resided at Mobile, Alabama, and plaintiffs particularly wished to have him examined and cross-examined at the trial. On the other hand defendants wished that he should be examined by commission, and this Mr. Justice Cave, reversing the Master, had ordered. Hence plaintiffs' appeal.

Mr. Tyrell Plaine, for the defendants, contended that, *prima facie*, a party and especially a defendant, was entitled to a commission for the examination of a material witness, who was out of the country, except in certain particular cases, where, in the interests of justice, the importance of having a witness examined and cross-examined in this country outweighed the inconvenience of bringing him from abroad. Having cited decisions to bear out his view, the learned counsel said in this particular case the defendant, who was called upon to defend himself, had shown sufficiently by his affidavit that it was impracticable, although perhaps not absolutely impossible, to bring Mr. Benn over to this country to be examined. Mr. John Stewart in his affidavit, said Mr. Benn was carrying on his business and was permanently resident at Mobile, and in his opinion would not come over to this country.

After considerable argument the Court directed that the matter should stand over, to enable a better affidavit to be filed, showing the impossibility of getting Mr. Benn over to this country.  
—London Timber Trade Journal.

### An Australian Pen Picture.

Wood and Iron gives some valuable pointers about the Australian timber trade, saying that "as Australia is a large and growing market for lumber from this coast, a description of the lumber markets of the antipodes may be found interesting to those in the trade. The timber areas of Australia, which furnish trees from which the native lumber is made, are all situated on the coast between the shore and the crest or the coast range which extends along the whole eastern side of the continent—from southern New South Wales to northern Queensland. In this timber belt there are about seventy saw mills from small to large, and all the lumber used throughout this extent of country is of local manufacture. The lumber trees of this belt are cedar (so-called), various kinds of pine, and black butt (a species of eucalyptus) from which a good quality of hardwood lumber is made. The prices of native lumber vary in different places, and it sells in Sydney at the following rates when reduced to our money: native cedar \$7 @ \$8 per hundred feet, pine \$5 @ \$6, and black butt, \$3 @ \$4 per hundred. In New South Wales the duty on foreign lumber is 24 cents per hundred feet, and in the other colonies it is higher. The lumber belt of Australia is pretty well culled throughout its limited extent, and in a very few years all the Australian colonies will have to depend wholly upon American lumber. When that period arrives, Australia, including New Zealand and South Pacific Islands, will form by far the best market in the world for American lumber, and its prospective value should not be underrated."

### Ottawa Shipments of Lumber.

[Reported for THE LUMBERMAN by T. W. Hotchkiss, U. S. Consul.]  
Shipment of forest products from Ottawa for the 3 months ending June 30th, 1888, as declared through the U. S. Consulate.

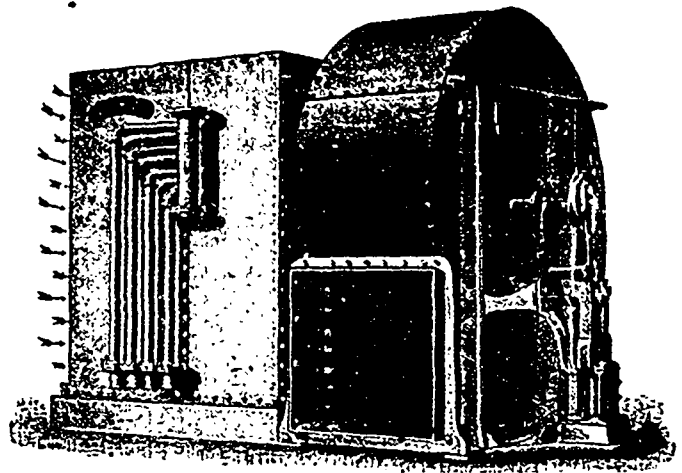
	Value.
Total Sawed Lumber, 44,425,796	\$632,714.64
Shipped by Water, 23,922,012 feet	
Rail, 20,503,784 feet	Value.
Shipped for Consumption, 39,253,760	\$560,122.88
Re export, 5,142,036	32,581.76
	632,714.64
Lath M. 12,488,700	15,475.00
R. R. Ties, pcs. 87,332	18,274.95
Fence posts, 18,477	924.40
Shingles M. 683	1,603.07
Pickets	8,449.76
Match Blocks	1,076.00
Box Shooks	29,159.42
Henbark, cords, 2,598	14,490.00
	\$722,207.24

### The Sturtevant System of Heating Wood-Working Establishments.

The subject of heating is one that is of interest to every wood worker, and as it is often the case that the stable door is closed after the horse is stolen, so it may be wise now that the back of a very severe winter has been broken, to consider how we might keep ourselves more comfortable and thereby be enabled to do better work. The primary consideration to which every wood-worker has to give attention in deciding upon the means of heating, is that of danger from fires. The inflammable nature of both buildings and stock is such that any protection against fire, results in a corresponding decrease in insurance rates. Stoves and furnaces although so often used are too obviously dangerous, while steam piping as it is often put up in a mill cannot be relied upon with absolute security. To avoid all danger wood work must not be exposed to a temperature equal to that of live steam of 85 lbs. pressure. Any means of heating which removes these objections has claim to introduction, provided it is equal to direct steam-heating in other respects that should be carefully considered by every interested party.

It is well known that the most certain way of heating a room or building is by securing a circulation of heated air within it. This the direct steam heating system is incapable of doing, and for this reason it is slow of action in heating up a cool building. A forced circulation of the heated air overcomes this difficulty and renders the system positive, for the air by means of ducts, flues or pipes is conducted to any desired points and compelled by the pressure behind it to do its work of heating by circulation. The only satisfactory means of compelling the air is by means of a fan of suitable construction.

From the nature of work carried on in them, wood working shops are generally provided with a system of shafting from



THE STURTEVANT STEAM HOT BLAST APPARATUS.

which such a fan may be driven. In some cases, however, where heating is desired such arrangements may be lacking and an independent engine is required for fan propulsion. Such an engine may be connected directly to the fan shaft and all loss of power through intervening shafting and belting thereby avoided. In fact, all things considered, it will be found preferable as a rule to drive the fan by a direct connected engine. It then becomes independent of any other source of power, may be run at any speed and at any time. The ordinary objection raised to this means of propulsion is that it costs too much. But a moments consideration will show that it costs practically nothing to drive the engine when the exhaust steam is utilized (as it always should be) in the steam heater connected with the fan. The heating power of live steam 70-lbs pressure, is only about three per cent. more than that of exhaust steam, hence pound for pound it makes but little difference in the expense which is employed. For this reason the engine cylinder may be considered as simply an enlargement of the steam pipe on the way to the heater, and the exhaust steam leaving it practically as efficient for heating as live steam direct from the boiler. The fan for propelling the air should be of the type which delivers the air around the periphery, for the disc or propeller fan cannot force air against pressure and often becomes negative in its effect when exposed to a strong wind. The heater fan and engine for this work are usually made up into a combined apparatus. Through the courtesy of Mr. B. F. Sturtevant, of Boston, Mass., who was the first in the country to put such an article on the market, a cut of his "Steam Hot Blast Apparatus" is here presented. He has been the pioneer in the introduction of the system to meet the requirements of which his apparatus was designed. The direct connected engine is stiff and substantial, of good workmanship and capable of running at high speeds. The fan meets the requirements of a ventilating fan, namely, ability to handle large volumes of air at low pressure with the

expenditure of power. The heater, however, is the most distinctive part of the apparatus. It consists of a section of hollow cast iron section or bases divided by a diaphragm midway of their length and into which is screwed a triple verticle row of wrought iron pipes which by means of horizontal connecting pipes at the top (seen in the cut of the heater) serves as a means of communication between the ends. Steam is admitted at one end of these sections by independent supply pipes and finds its way up over and down through the pipes of the other end of the section whence it is removed by means of a steam trap. This arrangement insures a positive circulation of the steam through the entire heater.

Air from out-of-doors is led by means of suitable passages to the end of the heater (or air when pure enough may be taken from the apartments in which the apparatus stands) through which it is drawn by the suction of the fan, the inlet of which connects with the heater. The steam pipes are so arranged that the air is compelled to take a more or less zig zag course in passing between them, being thereby brought into intimate contact with every foot of pipe. The result as one of the marked characteristics of this method of heating. The constant bringing of cooler air in contact with the pipes causes a condensation of the steam much greater than that which takes place in the open radiator. The amount of heat given out is measured by the weight of steam condensed, hence the greater the amount condensed per square foot, the less the number of square feet required to do a given amount of heating. In the "Sturtevant Hot Blast Apparatus" this efficiency is increased three to five-fold, or in other words 2-3 to 50 per cent. of the pipe is saved when the system adopted in place of one of direct radiation by means of steam coils strung around the rooms. Furthermore, instead of having air cocks and valves all over the building, and steam pipes liable to leak, freeze or cause a fire, and to which an engineer must give the closest attention, there are required in this system only a few valves on the engine and heater, and these are but a few feet apart.

The entire heater (pipes and bases) is enclosed in a steel plate jacket, entirely removed from wood work and the air leaving the blower mouth is only of moderate temperature. This point is of special importance, when the apparatus is used in a dry kiln, the reduction in insurance rates often being sufficient to pay the interest on the cost of the plant.

The heated air discharged from the mouth of the fan is conducted to the various parts of the building by a system of pipes or flues dependent in their arrangement upon the construction of the building and the use to which it is to be put. The entire apparatus is very compact and occupies but little space, can be made of any desired form and placed in any position. In one story shops the monitor pitch in the roof affords an excellent place for the apparatus, entirely out of the way, leaving the floor unobstructed, where such location is not possible the apparatus may be placed in any convenient position within the building or in the basement, when such exists or (as is very often the case) in a small special building adjacent to the main building.

The manner of warm air distribution in wood-working establishments is very clearly shown in the accompanying cuts which represent two decidedly different classes of structures. The one story building is the planing mill of the P. C. & St. L. R. R. at Columbus, Ohio, and forms one of the plant of six independent buildings recently fitted with heating apparatus by B. F. Sturtevant. The other cut illustrates, as arranged by the same party, the extensive furniture factory of the Matton Mfg. Co. of Sheloygan, Wis. These buildings, among many as heated by the Sturtevant system, have been chosen as typical of their classes. The former stands for the ordinary class of mill buildings of one story with pitch-roof. In this case the apparatus is seen to be well out of the way, interfering

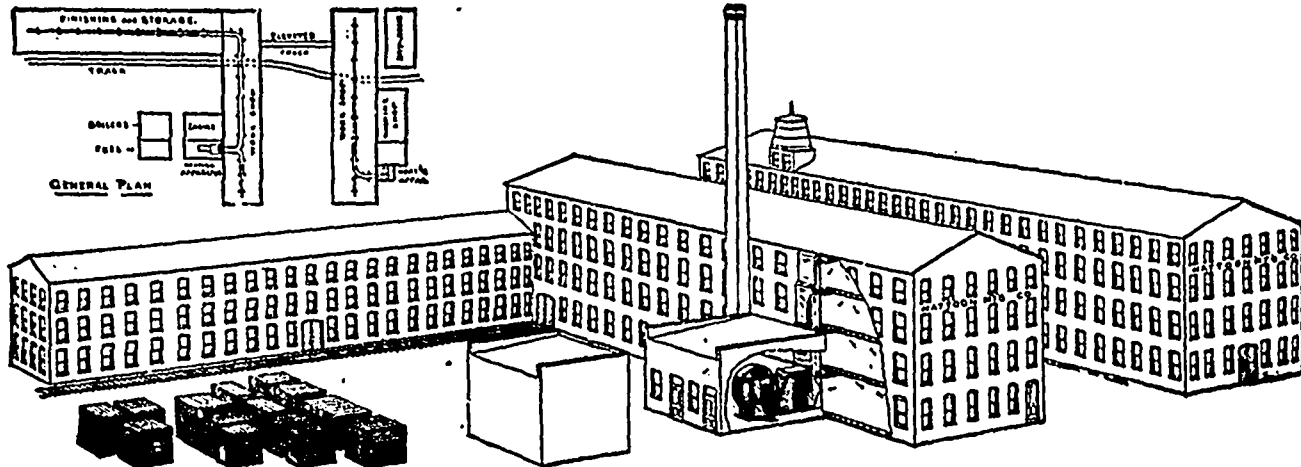
with none of the machinery and being driven direct from line shaft. The air is distributed through a system of galvanized iron pipes extending entirely around the interior of the building close to the walls and just below the level of the eaves. The complete circuit made by these pipes insures an equal and constant distribution of the air, any lack from one direction being made up from the other direction. Economy of material as well as more uniform pressure is secured by gradually reducing the sizes of the pipes (proportionately to the outlet from them) as they recede from the blower. The position occupied by these pipes is such that they are entirely out of the way, interfering neither with workmen, shafting or belting. From these mains the heated air is delivered through small verticle pipes extending down to within a few feet of the floor. By proper designing the velocity of the air, and the relative area

amount of steam consumed.

The plant of the Matton Mfg. Co., is representative of that class of buildings devoted to the manufacture of various articles from wood, being comparatively narrow with considerable longitudinal extent, and having several floors. As will be seen by the small plan a separate apparatus was provided for each building and as shown in perspective, the fan is driven by a direct connected engine in any projections within the rooms, a delivery flue was built into the side of the building and the pipe main for the various floors are taken out from this, the vertical flue being proportionally reduced in area. On account of their narrowness a central distributing pipe was adopted from which the air is delivered through properly spaced outlets. This arrangement results in the greatest saving of pipe, the diameter being reduced proportionally to the outlets, thereby securing both economy of material and uniformity of pressure and discharge. In both cases here, shown the system has met with unqualified approval, accomplishing successfully all that was required of it.

Briefly summarized the principal advantages of the Sturtevant system of heating are—compactness. The entire Hot Blast apparatus is so closely combined that no steam piping is required throughout the

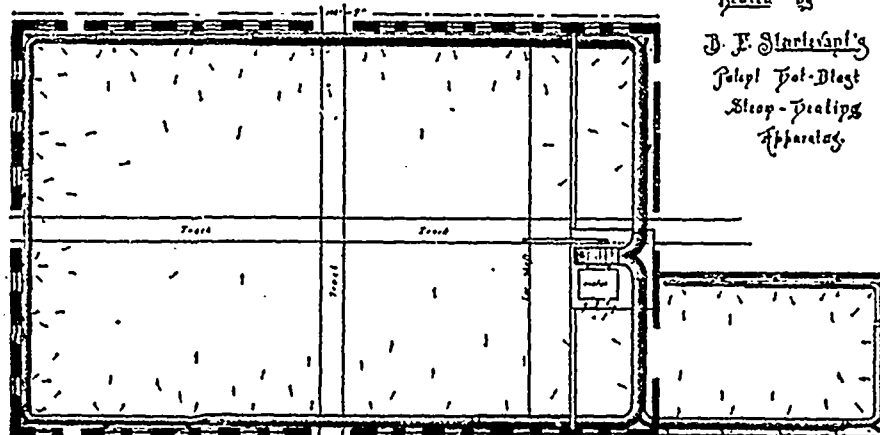
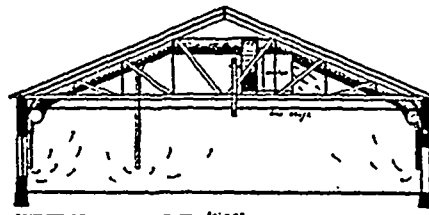
building, and all valves are near at hand. Economy—Only one-third to one-fifth the pipe is required that would be necessary in a system of open steam coils in the various parts of the building. It costs nothing to run the engine for the exhaust steam is used in the heater. Safety—All the steam pipe is enclosed in a steel jacket entirely removed from proximity to any wood work and all danger from fire is absolutely avoided. The lessened insurance rates often pay the interest of the plant. Efficiency—Being the heated air reaches all parts of the building and the occupants are not only warmed but when desired are provided with constant changing fresh air. Controlability—The entire system is under immediate control. The amount may be varied by the dampness or by changing the speed of the engine, while its temperature is dependent upon the amount of steam admitted to the heater.



PLANT OF THE MATTON MFG. CO., SHELOYGAN, WIS.

of the pipes is such that the air is discharged with just sufficient impulse to fall to the floor which is thereby warmed. The natural circulation caused by the cooling action of the outer walls aids in this action as it also does in causing the warm air delivered from the pipes to move gradually towards the center of the building and thence to raise to the pitch of the roof where it may be allowed to escape if desired.

By placing the heating system near the outer walls the vulnerable point is attacked, and currents of cold air through crevices in the walls must encounter a warm body of air before reaching the workmen. Dampers or registers may of course be placed in the outlet pieces to regulate the delivery of the air.



P. C. & ST. L. R. W. PLANING MILL, COLUMBUS, O.

Although as originally designed provision was to be made for taking fresh air from out of doors and passed it through the heater, yet up to the present time, all air has been taken from within the building itself. Owing to the comparatively small number of workmen in such shops the fresh air which enters through cracks, open doors and windows, keeps the atmosphere sufficiently pure and decided economy is secured by repeating the already warm air. The amount of steam required in the heater is proportional to the number of degrees through which the air is heated. If then air of 60 degrees temperature can be taken from the building in place of air at 0 degrees from out of doors, and if in either case it is to be heated to 120 degrees there will be a resultant saving of 50% in the

**P. C. & ST. L. R. W.**  
**C. ST. L. & P. R. R.**  
PLANING MILL  
COLUMBUS OHIO.  
23 Wall, 501 7th, 7th.  
Heated by  
B. F. Sturtevant's  
Improved Hot-Blast  
Steam-Feeding  
Apparatus

**The Sault Ste. Marie Canal.**  
The great water power canal at Sault Ste. Marie is finally a fixed fact. At a very enthusiastic meeting held recently the balance of the \$100,000 asked from the citizens, as a bonus, was cheerfully subscribed, and with a like sum from the LaCrosse syndicate—the amount necessary for start will be secured. The work begins on the 16th inst., and will be pushed to a final completion as rapidly as men and money will accomplish the work and it is anticipated that it will be finished within a year. The undertaking is a gigantic one, and in magnitude the "Soo" power canal will far exceed anything of the kind on the continent. The total length is 14,100 feet; average width, 100 feet, with a depth of fifteen feet. The mill pond to this great raceway is quite large, being 32,000 square miles in extent, viz., the whole of Lake Superior. This is beyond question the largest mill pond in the world, and affords an exhaustless supply of water for the multitude of industries projected at the "Soo." Apart from the possibilities of Niagara, that of Sault Ste. Marie far transcends all the world beside. The canal will give 18,000 horse-power and has a current of four miles per hour. Its course runs back of the present village, but within a few years the "Soo" will be densely built up, so as to place the canal in the center of the fast growing city. The work of making it will be one of great labor, as for 2,000 feet it will have to be cut through solid trap rock. But the work when completed will be one for countless ages to come, and as a manufacturing centre, Sault Ste. Marie will have no successful rival in the world.



TRADE REVIEW.

Toronto, Ont.

TORONTO, July 27th, 1888.

CAR OR CARGO LOTS.

Table listing various lumber products and their prices in Toronto, Ontario, including items like 1 1/2 inch clear pickers, 1 inch dressing, and various shingles.

YARD QUOTATIONS

Table listing yard quotations for various lumber products such as mill cull boards, shipping cull boards, and different types of shingles.

Ottawa, Ont.

OTTAWA, July 28th, 1888.

Dimensions, l. vs. Per M.

Table listing dimensions and prices for various lumber products in Ottawa, Ontario, including mill culls, cull strips, and shingles.

Hamilton, Ont.

HAMILTON, July 28th, 1888.

Table listing prices for various lumber products in Hamilton, Ontario, including mill cull boards, shipping cull boards, and shingles.

St. John, N. B.

ST. JOHN, July 29th, 1888.

Deals, Boards, Scantling, etc.

Table listing prices for various lumber products in St. John, New Brunswick, including spruce deals, pine, and shingles.

Goderich, Ont.

GODERICH, July 28th, 1888.

PRICES IN CAR LOTS.

Table listing prices in car lots for various lumber products in Goderich, Ontario, including 1 inch mill culls and different types of flooring.

Montreal, Que.

MONTREAL, July 28th, 1888.

Table listing prices for various lumber products in Montreal, Quebec, including pine, spruce, and shingles.

Saginaw, Mich.

SAGINAW, July 26th, 1888.

CARGO LOTS.

Table listing cargo lot prices for various lumber products in Saginaw, Michigan, including uppers, common, and shipping culls.

YARD QUOTATIONS—CAR LOTS DRY.

Table listing yard quotations for various lumber products in Saginaw, Michigan, including clear, flooring, and shingles.

Philadelphia, Pa.

PHILADELPHIA, July 28th 1888.

White Pine.

Table listing prices for white pine products in Philadelphia, Pennsylvania, including 1 1/2 inch dry and 1 1/2 inch barn quality.

Cargo Lots.

Table listing cargo lot prices for various lumber products in Philadelphia, Pennsylvania, including yellow pine edge bds and heart face boards.

Hemlock Boards and Scantling.

Table listing prices for hemlock boards and scantling in Philadelphia, Pennsylvania, including edge boards and scantling.

Shingles and Posts.

Table listing prices for shingles and posts in Philadelphia, Pennsylvania, including cypress shingles and cedar shingles.

HARDWOOD.

Walnut.

Table listing prices for walnut products in Philadelphia, Pennsylvania, including Nos. 1 & 2, 1 in. good and dry, Indiana.

Poplar.

Table listing prices for poplar products in Philadelphia, Pennsylvania, including Nos. 1 & 2, 1 1/2 in. good and wide, Indiana.

Oak.

Table listing prices for oak products in Philadelphia, Pennsylvania, including Nos. 1 & 2, 1 in. good and western, straight.

Ash.

Table listing prices for ash products in Philadelphia, Pennsylvania, including Nos. 1 & 2, 1 in. good and western.

Yellow Pine—Yard and Wholesale.

Table listing prices for yellow pine products in Philadelphia, Pennsylvania, including 2x4, 2x4 to 12x14, and 1 1/2 inch.

Cherry.

Table listing prices for cherry products in Philadelphia, Pennsylvania, including Nos. 1 & 2, 1 in. good and up.

New York City.

NEW YORK, July 28th, 1888.

Black Walnut.

Table listing prices for black walnut products in New York City, including 1 1/2 inch all clear and 1 inch and 1 1/2 inch culls.

Poplar, or White Wood.

Table listing prices for poplar or white wood products in New York City, including 1 1/2 inch to 2 inch and 1 inch to 2 inch.

Dressed Poplar.

Table listing prices for dressed poplar products in New York City, including 1 1/2 inch panel and 1 inch panel.

Ash.

Table listing prices for ash products in New York City, including 1 inch white and 1 1/2 to 2 inch.

Oak.

Table listing prices for oak products in New York City, including 1 inch plain sawed and thicker.

Cherry.

Table listing prices for cherry products in New York City, including 1 1/2 inch white & clear and 1 inch.

Miscellaneous.

Table listing prices for miscellaneous lumber products in New York City, including chestnut, basswood, maple, birch, and cottonwood.

Boston, Mass.

BOSTON, July 30th, 1888.

Western Pine—by car load.

Table listing prices for western pine products in Boston, Massachusetts, including uppers, selects, and moulding boards.

Eastern Pine—Cargo or Car Load.

Table listing prices for eastern pine products in Boston, Massachusetts, including Nos. 1, 2 & 3 and ship's bds.

Spruce—by Cargo.

Table listing prices for spruce products in Boston, Massachusetts, including scantling and plank, yard orders, and clear floor boards.

Lath.

Table listing prices for lath products in Boston, Massachusetts, including spruce.

Shingles.

Table listing prices for shingles products in Boston, Massachusetts, including spruce and pine.

Oswego, N. Y.

OSWEGO, July 30th, 1888.

Pine.

Table listing prices for pine products in Oswego, New York, including 1 1/2, 1 1/2, 2 and thicker uppers.

Table listing prices for pine products in Oswego, New York, including 1 inch selected sidings and 1 1/2 inch box or No. 2 culls.

Table listing prices for pine products in Oswego, New York, including 1 & 1 1/2 sidings No. 1 dressing and better.

Table listing prices for pine products in Oswego, New York, including 1 & 1 1/2 inch strips 4 to 7 wide selected.

Table listing prices for pine products in Oswego, New York, including 1 1 1/2 1 1/2 2 & 3 in. 1st & 2nd quality.

Table listing prices for pine products in Oswego, New York, including 1 & 1 1/2 1st & 2nd quality.

Table listing prices for pine products in Oswego, New York, including XXX 18 inch pine standard thickness to 2 1/2.

Buffalo and Tonawanda, N. Y.

BUFFALO, July 27th, 1888.

Table listing Norway Pine-Rough and Stocks No. 1, 2, 3 with prices per 1000 ft.

Table listing White Pine-Rough and Stocks No. 1, 2, 3 with prices per 1000 ft.

Table listing Dressed Lumber with various sizes and prices.

Table listing Shingles and Lath with various sizes and prices.

Detroit, Mich.

DETROIT, July 28th, 1888.

Table listing Uppers, Selects, Stocks, etc. with prices.

Table listing Flooring, Siding, Ceiling, etc. with prices.

Table listing Bill Stuff and Culls with prices.

Table listing Shingles and Lath with prices.

Burlington, Vt.

BURLINGTON, July 28th, 1888.

Large table listing various lumber products like Canada Pine Siding, Stocks, Sheathing, etc. with prices.

The Perils of Stream Driving.

The young man who was drowned last week while working on the drive of Mr. F. Tracy, on Wassataquoick stream, was named Pray, and belonging in a town on the St. John River near Fredericton, New Brunswick.

water. Down the stream he went till he struck another jam below, under which he was drawn and was never seen alive again. The body was soon found bruised and disfigured, and was sent to his home in the province.

SQUARE TIMBER.

A Big Cut of the Valuable Product.

The amount of "square timber" taken out of the limits on the Upper Ottawa during last season, and now coming down the river, is larger than the cut of any previous season for four or five years.

Most Ottawa people know exactly the difference between ordinary timber or logs, and square timber. The ordinary timber or logs go to the saw mills; the square timber doesn't, but travels straight from the forests to the English markets.

THIS YEAR'S SQUARE TIMBER.

The increase this season in the square timber cut is due to the big demand in England for No. 1 grade, red and white pine lumber, and some of the rafts taken out this summer contain the finest quality of pine seen in the shipping booms at Quebec for a number of years.

The following is a correct list of the firms who have taken out square timber this season on the Ottawa river and its tributaries, with an approximate of the number of cubic feet in each firm's output.

Table listing lumber firms and their output of square timber, including E. D. Moore, A. Fraser, Barnett & Mackey, etc.

1,420,000 745,000 365,000 2,530,000

This timber is worth approximately 25 cents per foot taken all in all, so that the above estimate represents between \$600,000 and \$700,000. In addition the above estimate of timber taken out last winter, and which is now on its way to the Quebec market, there is also a large quantity of timber cut in the season of 1886-87 coming down.

STOCK AT QUEBEC.

The following rafts are now in Quebec, on hand and sold: Booth, Hale & Co., a raft of 1886-87 timber containing about 150,000 feet, sold for 38 cents per cubic foot; and A. Frances

a raft of timber cut on Whitefish river of about 150,000 feet sold for 31 1/4 cents per cubic foot. The prices obtained for these two rafts are unusually large and the timber in them is considered to be the finest that has come down the Ottawa in ten years.

THE BIG RAFT SUCCESSFULLY LAUNCHED.

The 24th of July was the time set for the launch of Robertson's great timber ship on the Joggins shore, and the effort was made with the greatest success. Thousands of people, some from very long distances, were present to witness the success or failure of the undertaking.

Mr. Robertson, who built the raft, says it contains 41 tons of chain and four miles of steel wire, which it is hoped will hold it together in spite of any possible strain at sea.

A spectator says the raft started almost as soon as the work of wedging up commenced and ran 2,000 feet after headway was secured in less than a minute.

Wood for Decorative Purposes.

It is evident that much as we know about woods there; it remains much to learn that may be of value in the arts. The secret of making good veneers which will not warp is only now becoming known, and until lately it was considered impossible to emboss wood; but now beautiful embossed panels, whose work resembles carving and whose richness compares favorably with the more costly art, are found in many places.

Wood may be cut as thin as the 300th part of an inch, but in this state it is not useful. That which is cut to the thickness of the 100th or the 150th part of an inch and lined with paper is used for the decoration of walls and ceilings.

A checkerboard pattern of curled maple is about as thick as a piece of cardboard. To produce this strips of wood are first woven in and out and then subjected to heat and pressure, which makes a smooth body, varied in hue as if it were made of two kinds of wood.

## EXTENSIVE SALE OF LIMITS.

As announced by advertisement in the last issue of THE LUMBERMAN the big sale of the estate of Hamilton Bros., consisting of 1,700 square of timber limits and estates, at Hawkesbury, took place at the Russell House, Ottawa, on July 6th. Next to the recent sale of timber limits by the Ontario Government at Toronto, it was one of the largest gatherings of wealthy men ever brought together in Canada. It has been estimated that the combined capital of those present would foot up to the enormous sum of seventy million dollars.

Prominent among those present were: Messrs. R. Hurdman, G. B. Pattee, E. B. Eddy, E. H. McLaren, William Mackay, P. White, H. Conroy, Hiram Robinson, Alex. Fraser, Westmeath, J. Saxe, Albany, N. Y., John Monroe, Hawkesbury, C. F. Gedee, R. Klock, Geo. Perley, William Kennedy, R. Stewart, R. Nagle, Hugh Grant, P. Colton, Wm. Kennedy, Olive Latour, Thos. Mackie, H. K. Egan, R. L. McLaughlin, Arnprior, W. C. Edwards, A. Foster, A. McCormick, R. Cox, J. Gilmour, Sheriff Haggart, Chas. Reid and R. Rawley.

The property is divided into two districts one being 750 square miles on the Dumoine river and its tributaries, the Black and Schyan, and the other consisting of 935 square miles on the Gatineau and its tributaries. These limits have fine farms, plants and stock in connection with them, in addition to which there is a large property at Hawkesbury, known as the Hawkesbury mills, used for manufacturing timber from above mills. These mills are situated on the Ottawa river, Ontario, mid-way between Ottawa and Montreal consisting of four saw mills with lath and scantling mill additions, driven by water, with sawing capacity of over 2,000,000 feet weekly. Extensive wharfs and piling space for forty million feet of lumber. Large brick dwelling houses with extensive grounds; ditto stone house, and seven good houses built of wood, and one hundred tenements now occupied by employees. Valuable farm in the vicinity of over 1,000 acres, a large portion of which is covered with excellent timber.

The Dumoine river limits proved to be the favorite property. Although worked for some twenty-five years there is still a large amount of valuable timber to be cut. The Gatineau limits have been worked for over fifty years, and were not looked upon with much favor.

The whole property was put up in a lump to start with, but as the only bid—\$200,000—came from Mr. W. C. Edwards, the property was taken down, the reserve bid being \$650,000.

The Gatineau limits were then put up in one parcel. W. C. Edwards made the first bid—\$15,000. Mr. Carter, agent of the Rathluns of Deseronto bid \$16,000. Mr. Edwards and Mr. Carter bid odd and even up to a hundred thousand dollars. Then E. B. Eddy bid \$101,000. On it went up to \$114,000 when John Gilmour bid \$115,000. Up it went still, until Mr. Edwards bid \$125,000. There was silence, and the Gatineau limits went to Mr. Edwards. The price included the lumber only, the plant, stock and provisions on the limits being extra, and having to be taken by the purchaser of the limits at scheduled prices. Following this sale the Dumoine limits were put up and after a lively competition were knocked down to H. K. Egan of the firm of W. R. Thistle & Co., for \$395,000, exclusive of plant and supplies, worth about \$30,000, which are to be taken at a valuation. It is said that Mr. Egan made the purchase on behalf of a syndicate composed of himself, W. R. Thistle, Hiram Robertson and Robert Blackburn.

Mr. Edwards, M.P., proposes to commence cutting operations this fall on the limit he purchased on Friday. Lumbermen say he has got a bargain.

The Hamilton Bros. estate, including mills, limits, farms, together with the private estate of the late Hon. John Hamilton, is valued at two and three quarters million dollars. There are seven heirs, among whom the estate will be equally divided. The youngest son of the late senator has obtained a commission in the Imperial service. He is applying to be appointed to the 13th Hussars, a crack English corps. His income, it is said, will be \$50,000 a year. The engagement of Mr. Caedon Childer, of Hawkesbury, one of the trustees of the estate, and Miss Hamilton, daughter of the late senator, is announced.

The townspeople of Hawkesbury are keenly agitated over the sale of the Hamilton Timber limits. Hawkesbury a pretty village of 2,000 inhabitants situated on the Ottawa opposite Deseronto, about half way between Ottawa and Montreal, has practically been built up in the Hamilton business. In the advertisement offering the Hamilton property for sale, it is stated that there are four sawmills, a farm of 1,000 acres, six or eight good houses and 100 cottages to be disposed of. Besides the inmates of these cottages, who have all been dependent on the Hamilton business, there are scores of other families dependent on the business. If the business is stopped there won't be much left of Hawkesbury. It is stated that

Hawkesbury people fully realize this, and the real estate is going a-begging in the place. There is little chance of any lumber business to speak of being now done at Hawkesbury. The timber limits have been sold to parties who do not seem to want the Hawkesbury mills. At any rate, no bid was received for them on Friday. Certainly Mr. Edwards, who has bought half the limits, does not, as he will work his timber at his own mills at Rockland. The syndicate which bought the other half of the limits, those on the Dumoine, does not seem to want the Hawkesbury mills either. In default of attached limits the mills will be of comparatively little value. The firm of Hamilton Bros., composed of the late Senator John Hamilton, of Montreal, and Robert Hamilton, of Quebec, started sawing lumber at Hawkesbury fifty years ago.

## LABOR TROUBLES AMONG LUMBERMEN.

Following the celebration of "our natal day" throughout the North Shore, Georgian Bay, and Midland districts, there came a re-action in the form of a strike among nearly all the mill hands in those localities. The strike is for a reduction of the hours of labor from eleven to ten. It is said that although the mill operatives commenced work at the first of the season it was not their intention to continue on the same arrangement as last year; accordingly negotiations have been going on for a reduction in the hours, and wages to be paid fortnightly instead of monthly as before. The lumbermen, it appears, would not entertain the proposition. During the last week of June a representative of the Knights of Labor visited Gravenhurst and tried to effect a settlement of the difficulties, but did not succeed. As the above was the ultimatum decided upon by the local organization and concurred in by the brotherhood generally, the next move was to go out on strike, which was done on July 3rd.

From latest reports nearly 2,000 men are now out, and the situation still continues without much change. A few of the mills have given in but the majority refuse to do so. The ranks of the strikers seem firm, and every man seems confident of victory. The mill owners it is understood, have asked the government for police protection for the men they are bringing in from Quebec and Michigan. How long this trouble may continue it is impossible to determine, but even if a settlement is made at once the loss to the lumber trade must of necessity be very heavy.

## ANOTHER STRIKE AT THE CHAUDIERE.

The following particulars of the labor troubles at Ottawa are furnished by the *Journal* of that city:

"A stir was caused at the Chaudiere this morning by the shippers, carters and some of the pilers in the employ of Mr. J. R. Booth, going on strike. The strikers, some eighty in number, assembled in front of the office of the firm this morning instead of going to work, and Mr. Wilson the shipping foreman conveyed the demands of the men to Mr. Booth. It seems that among the Chaudiere lumbermen there is no scheduled scale of wages. Each firm pay their men what they think they are worth. Mr. Booth was paying the men who struck \$6.50 a week and they demanded \$7 and \$7.50 a week according to their positions. Mr. Booth refused to comply with the demand and paid the men off.

"The strikers showed a disposition to be troublesome afterwards. They threatened the shippers and pilers who remained at work. This threat had the effect of making quite a number of men quit work. Mr. Wilson, the foreman, tried to induce them to go to work again, but the men were afraid.

"The strike is in a measure caused by the lack of an understanding among the lumber firms as to the rates of wages. Messrs. Bronson & Weston and Pierce & Co. are paying pilers, shippers and teamsters from \$7 to \$7.50 per week while Messrs. Perley & Pattee and J. R. Booth are only paying \$6.50 and \$7 for men doing the same work. The strikers have no complaint except as to wages.

"The ball was started rolling the day before yesterday, when the wheelers of the Perley & Pattee concern struck for \$7 a week, and after holding out for a day got what they demanded, with some exceptions. Then the pilers and shippers employed by Perley & Pattee and J. R. Booth, began grumbling about their wages, and announced their intention of demanding the same wages as Bronson & Weston were paying their men. The strike this morning was therefore not a surprise.

"The strikers although very much in earnest and most of them fighting drunk have no organization and cannot hold out any length of time, but the ringleaders who know that they will not be taken back are doing their best to influence the other hands to strike and make the affair as big as possible. The lumbermen fear that the strike may spread through all the mills which are not paying the following schedule of wages, which prevails with Bronson, Weston & Co.:—Teamsters and shippers, \$7 to \$7.50 per week, laborers, \$7; men in the mill from \$7 to \$10 according to positions; men in charge of

the gates \$9; edgers, \$10; saw-filers, \$10.50 to \$15.00 and millwrights, \$12 to \$18. The firms to which the strike may spread are Perley & Pattee, Pierce & Co., Hurdman Bros. and the E. B. Eddy Manufacturing Co.

Attention was directed to the mill gang by the organizers of the strike, and about two o'clock the 300 employees in the mill including sawyers, wheelers, loaders, edgers and carriers struck work. Mr. Levi Booth foreman of the mill asked the men if they were going to work. They replied they were not unless their demands were acceded to. The mill was accordingly shut down. The men fully four hundred in number then assembled on the street in front of the mill."

## A Floating Sawmill.

Along the layons and lagoons of Florida grows some of the finest timber in the South, much of it in places considered entirely inaccessible until J. L. Maul & Son hit upon the plan of constructing a floating sawmill. This idea they carry into execution, and their mammoth mill, which now lies off the banks of Burton & Harrison's hammock, near Palatka, is, according to the *Southern Lumberman*, a marvel of mechanical ingenuity. It has a length of eighty and a breadth of forty feet, and is so solidly built that the motion of the machinery has no more effect on it than if it were built on solid land. Although it stands five feet out of water, its draught is only about a foot and a half, which permits it to be taken into the shallowest lagoons, where timber could not be floated. It is equipped with the latest machinery, planer, box heading, shingle saws, and a fine forty-horse power engine and boiler. On the hurricane deck is the office for the proprietor, while the cook house, where the men board, is in the corner of the deck, which is otherwise free for the piling of lumber, the machinery being all below it. This floating mill has so far proved eminently successful, exceeding the expectations of the proprietors in this respect, and is probably the pioneer of numerous craft of the same kind.

## EXCHANGE ECHOES.

Chicago Timberman.

Puget Sound lumbermen are betwixt and between on the question of free trade in lumber. "They do not want free trade nor do they want a continuation of the war tariff." British Columbia has a large lumber trade in Australia, Japan, China and South America, with which the Puget Sound millmen seek to compete, but British Columbia lumbermen have the advantage in being able to sell at lower figures. These countries are the legitimate markets for Puget Sound lumber and the removal of the tariff would enable our millmen to successfully compete with their British neighbors. There is a strong measure of sensible reasoning in this, as these Puget Sound men cannot ship their board lumber east, so from this standpoint they are in favor of free lumber. On the contrary timber for car sills, bridge chords, etc., find a ready market in the western states and in consequence of the tariff prices keep up. So the dilemma presents the two horns, with the free trade in lumber one seemingly the easier of the two, but "you pays your money and takes your choice."

Chicago Timberman.

Our Manistee correspondent touches upon a feature of trade not commonly noticed in the lumber journals—the foreign demand which comes through Canadian sources. He speaks of a call for "longitudinals," an item not frequently discussed, but an important article in the list of material used for railway building in England, where the bed work of the road is often of solid masonry; and the necessity exists for something that will "give," on which to fasten the rail. The longitudinal lays on the stone work averages 32 to 34 feet in length; in dimension 5x7, as a rule, and has to be clear stuff—good lumber.

Northwestern Lumberman.

Last week mention was made in these columns of a man on a drive who was drowned because he could not swim. To follow the drives is a dangerous vocation for a man unable to swim. A treacherous log is liable at any time to give a driver a cold bath, in a deep and wide bath tub, and it is sometimes not only necessary for him to swim upon the surface of the water, but under it, in order that the swift running logs may pass over him. No man on the drives can be too much of a water duck for his own safety. Swimming is taught too little everywhere. Every boy and girl should be taught how to swim as well as to play base ball and the piano.

Northwestern Lumberman.

The reported let up in the movement of pine stumpage is the result of the dullness in the lumber trade, and the weakening of prices. With lumber at about \$2 a thousand on the average less than last season, and the awful apprehension of a still further decline in the thermometer of the market, there is a widespread opinion that prices for stumpage must also come down from the roof upon which they have been elevated by the speculative sentiment the last two years.

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ONE small grist or chopping mill with power, in good locality.

ONE pair 62 inch burr stones with parts.

ONE 30 inch portable burr mill.

ONE 20 inch Waterous burr chopper.

3 corn shellers by different makers.

ONE 60 inch Tyler water wheel in scroll case.

48 inch Lefel, with the sun.

48 inch Selater wheel, new.

48 inch Tyler wheel in iron case.

TWO 42 inch Sampson water wheels

40 inch Lefel water wheel, with the sun.

35 inch Lefel wheel, left hand.

30 1/2 inch Lefel, wheel left hand.

30 inch Burnham, a fine wheel.

26 inch Lefel, runs against the sun.

20 inch Lefel, with the sun.

17 1/2 inch Lefel, runs with the sun.

15 inch Archimedian, in iron case, left hand.

13 1/2 inch Lefel wheel, against the sun.

ONE water wheel governor, Galt make.

4 head block saw mill, iron saw frame. Waterous make.

2 block saw mill, Waterous make.

4 lath mills, new and second hand.

8 shingle machines, different kinds and makes.

2 stave cutters.

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2 spoke and axe handle lathes.

5 drag sawing machine.

12 shingle jointers.

2 shingle packers, latest make.

NO. 5. Sturtevant exhaust fan.

LOT of bevel and spur gears. Send for descriptive lists.

ONE 60" stave jointer.

CIRCULAR saws, 66, 60, 55, 52 and 50 inch, and several smaller sizes.

LOT of lumber and log cars.

SEND for my descriptive list of engines, boilers, iron tools, wood working machinery, etc. H. W. PETRIE, Brantford, Ont.

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Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance. For three or more consecutive insertions of the same advertisement a discount of 25 per cent. will be allowed. Eight words should be counted as one line.

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TIMBER LIMITS FOR SALE IN ONTARIO, Quebec and Manitoba. W. J. FINSTON & Co., 50 Adelaide Street, East, Toronto.

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**RECEIVE TENDERS**  
for the purchase of the  
**HAWKESBURY MILLS**  
**PROPERTY AND PLANT,**

the latter of the value of some £3,000, together with the

**SAW-LOGS and BOOM TIMBER**

now lying on the Ottawa river and bays thereof, between the mouth of the Dumoine and Hawkesbury Mills, and in Leamy's Lake, say about 150,000 pieces of White Pine Sawlogs, 12 ft. 5 in. and 13 ft. 5 in. long, and 2,000 pieces Red Pine Sawlogs, chiefly 10 ft. 5 in long, and some 200,000 lineal feet of flat timber, at a price per piece or standard for sawlogs and a price per lineal foot for the flat timber, all free of duty and delivered at Hawkesbury this season, and season of 1889.

Parties wishing to tender for logs and timber separately from mills may do so at so much per piece for the sawlogs and so much per foot for the timber, and take delivery of the same wherever they may be lying at the time of sale, count and measurement, where not already known to be established by sellers and buyers at nearest dividing booms.

Separate offers for logs and timber above Chaudiere, and logs and timber between Chaudiere and Hawkesbury Mills will be entertained, but tenders for the whole quantities afloat will receive first and more favorable consideration, and no tender for any other sub-division of the logs and timber will be received.

In all cases the lowest or any tender will not necessarily be accepted.

Terms for Sawlogs and Timber sold separately for mills will be cash on delivery thereof to purchasers, whenever such delivery may take place. More favorable terms will be granted in the case of a sale of the Hawkesbury Mills property and plant, together with the Logs and Timber.

CALEDON F. GILDER,  
For Executors.

Hawkesbury Mills, July 18, 1888.

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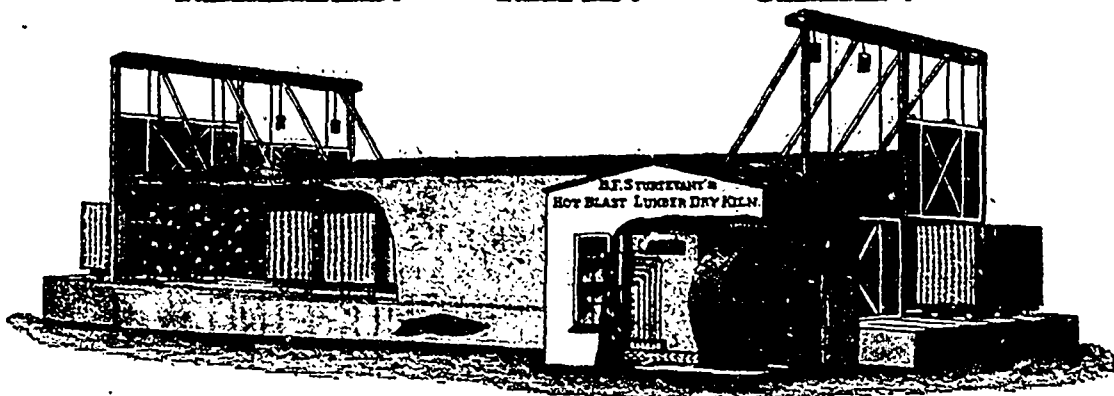
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*Our goods, the customers being the judges, are not equalled in the market and will continue to maintain the high position they now occupy, our aim being to still conduct the business on strictly legitimate principles.*

*With thanks for past favors and the request for their continuance, we are,*

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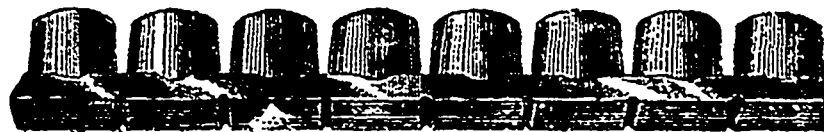
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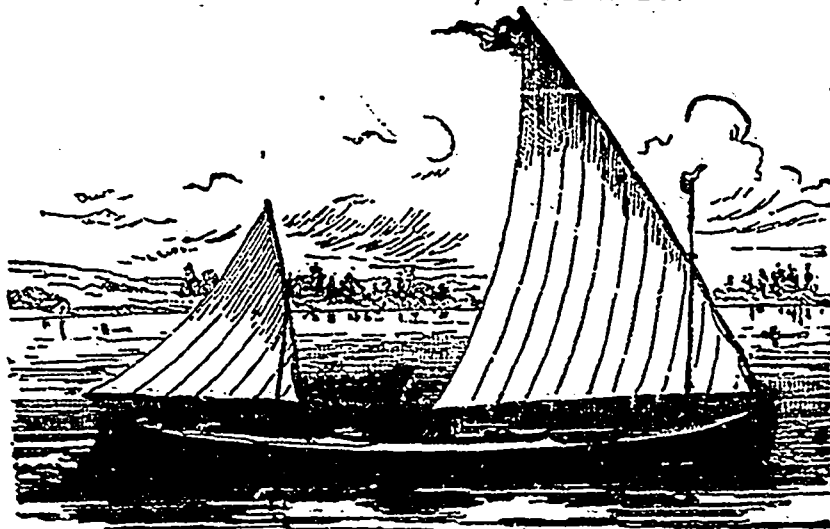


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SEALED tenders addressed to the undersigned, and endorsed "Tender for Coal, Public Buildings," will be received until Friday, 10th August next, for Coal Supply, for all or any of the Dominion Buildings.

Specification form of tender and all necessary information can be obtained at this Department on and after Wednesday the 15th instant.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department will not be bound to accept the lowest or any tender.

By order, A. GOBEIL, Secretary.

Department of Public Works, Ottawa, July 14th, 1888.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Heating Apparatus, New Departmental Building, Wellington Street, Ottawa," will be received at this office until Monday, 6th August, next, for the several works required in the fitting up, etc., of a Hot Water Heating Apparatus at the New Departmental Building, Wellington Street, Ottawa, Ont. Specifications and drawings can be seen at the Department of Public Works, Ottawa, on and after Monday, 23rd instant, and tenders will not be considered unless made on the form supplied and signed with actual signatures of tenderers.

An accepted bank cheque payable to the order of the Minister of Public Works, equal to fifteen per cent. of amount of tender, must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for and will be returned in case of non-acceptance of tender.

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At a very reasonable sum one half interest in the Strathclair Saw and Grist Mills, situated on the Little Saskatchewan River, six miles from Manitoba & Northwestern Railroad in the district of Riding Mountain Timber Limits, comprising 22 square miles, river running through the center only 14 miles from the mills. All owned by Whitmer & Kayll, Mr. Kayll wishing to retire. A first class opening, good references can be obtained.

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The Pike Pole handles are twelve and thirteen feet long; made of the best Straight Rock Maple; are turned in a machine made expressly for the purpose, and are 1 3/4 inches in diameter for one-half their length, being then tapered to one inch at small end, and chucked to fit furrel. We are the only manufacturers in the world who have the system and machinery for turning out Taper Pike Poles successfully.

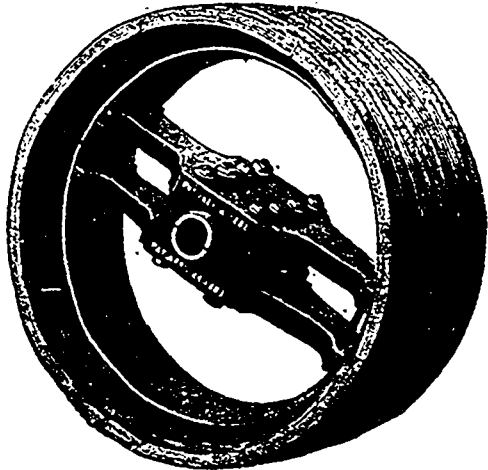
### THEY SELL ON SIGHT AND GIVE THE BEST OF SATISFACTION.

Price of Pike Poles, Peevey Stocks and Cant Hook Handles, \$25.00 per Hundred. Sample Pole sent for 25 cents.

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BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.

### With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.



As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities:—

Portion of Circumference embraced by belt.	Rel. value of leather belt		Portion of Circumference embraced by belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.		On Wooden Pulleys.	On Iron Pulleys.
.20	1.80	1.42	.30	1.90	1.40
.30	2.43	1.69	.40	2.40	1.70
.40	3.26	2.02	.50	3.30	2.00
.50	4.38	2.41	.60	4.40	2.40
.60	5.88	2.87	.70	5.90	2.90
.70	7.90	3.43		7.90	3.40

Morin—Appleton's Encyclopedia; Haswell—Engineers' and Mechanics' Pocket Book.

A Dodge Patent Wood Pulley is better than iron from the

fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already-up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are: It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or

set screw in the ordinary way, cannot be screwed without tilting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus: The ratio is friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

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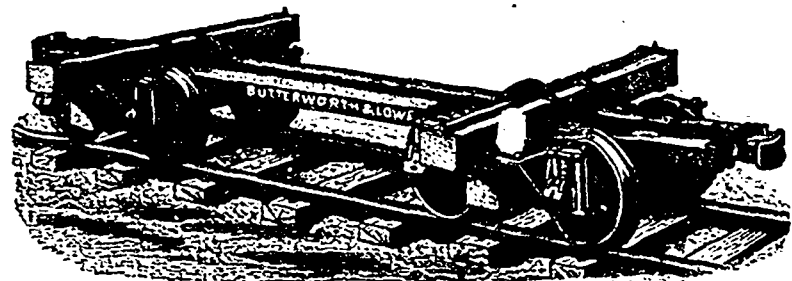
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