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VOL. 2.

PETERBOROUGH, ONT., JULY 15, 1882.

NO. 14.

On June 22, the steamer *Astrubal*, of London, 1,194 tons burden, with a cargo of cedar from St. John, N. B., collided with an iceberg and went down off Point Lance. The crew was saved.

Forty thousand dollars worth of spruce chow ing gum is gathered in Maine every year. The clear, pure lumps are worth \$1 a pound. In the large mill cities of Massachusetts the girls consume enormous quantities, one dealer selling \$1,400 worth in a year.

The new kindling-wood factory at Lock Haven, Pa., is 37 x 76 feet in size, and has a kiln that holds 100 cords of wood, which is cut in pieces 1½ x 3 inches, and thoroughly dried before it is packed. There are 30 improved packing machines employed, operated by boys, who are thus enabled to pack 16,000 bundles of wood per day.

The Stockholm correspondent of the *Timber Trades Journal* says that several large ships are now in course of loading between Gefle and Sundsvall for Australia, with deals, while planned goods have also been shipped thither to some extent. The consumption in Australia must be increasing rapidly to judge by the quantity of goods now going there.

The *Northwestern Lumberman* says Mr. T. W. Harvey, of this city, has just purchased 35,000 acres of timber limits in the Georgian Bay country, from which he will draw heavy supplies in the near future. Not content with handling more lumber than any other individual operator on American soil, Mr. Harvey, in reaching out for more worlds to conquer, has stumbled against Canada. We shall expect to hear any day that he holds in his capacious pocket title deeds to what little yellow pine there may be left standing down in Louisiana and Texas, with an eye out for the timber Putman is "discovering" in the neighbourhood of Puget Sound.

The *Green Bay (Wis.) Advocate* says: Rafting on Lake Michigan is considered extremely risky even for short distances, and to raft 425,000 feet of logs in one lot, for a pull of 40 miles, takes as much sand as a glass factory; yet the Messrs. Spear, of this place, took this big risk recently. Under the careful management of Capt. Wm. Anger, two days was spent in making the raft at North Bay, when the *Gregory* hitched on and in 14 hours had the raft safe within the canal, without losing a log. The raft was 90 feet wide and about 1,200 feet long, and valued at over \$30,000. Then the *Gregory* took the same boom sticks to Europe Bay, where another still larger raft is to be made and it will be towed here. It is expected that half a million feet will be put in this, the second great raft.

THE PORT OF GRANGEMOUTH.

Grangemouth is situated at the junction of the River Carron with the Clyde and Forth Canal, opened in 1790, and through which so much of the traffic to Glasgow passes as almost to justify the styling of Grangemouth the eastern port of Glasgow.

As a timber port Grangemouth holds a leading position, in proof of which it may be mentioned that in the year 1881 no less than 87,670 loads of hewn and sawn timber were discharged there. There are several firms of timber merchants in the port doing a considerable business, whilst the extensive saw mills of Messrs. Alexander Thompson & Nephews, Macpherson & McLaren, W. Kerr & Co., and others, afford ample facilities for dealing with the large importation.

The ground acquired for the construction of the new docks extends to nearly 60 acres, and while 19½ acres of this is the water area of the new docks and timber basins, the actual dockage area is about 10½ acres. This, in addition to the old docks with timber basin, will give about 28 acres, a large portion of the old area being available for graving dock purposes should the trade of the port so increase as to render it necessary for it being required for such a purpose.

THE SEASONING OF WOOD.

Wood requires time in which to season very much in proportion to the density of the fibre. But this rule is not without an exception, for pitch pine, which is not at all a densely fibered wood, requires a long time in which to season, even when the process is conducted under favorable circumstances.

This occurs probably in consequence of the resinous character of pitch pine, the resin clogging the pores of the wood and thus stopping up the channels through which the moisture would otherwise exude. There are some woods—and mahogany, ebony, and some other of the tropical woods are of the number—that even in their living state contain very little moisture.

Plants that are of slow growth contain less moisture when in a living state than do those whose growths are rapid. A mahogany tree requires 500 years in which to mature, and, as a consequence, its texture is exceedingly dense. Being dense in texture, it requires a long time to properly season, and during that lengthened period it shrinks very little. Mahogany should not be kept longer than necessary in the log, because inasmuch as the outside portion of a log contains the greatest amount of moisture, and it being the exposed part, it will, as the wood dries, shrink more than the inner wood, and so, to allow for the outside shrinking, outside shakes will and must occur.

The same remark applies with equal force to all log timber, but we name the circumstance in

connection with mahogany particularly for the reason that it is a general practice for some to keep their mahogany logs in an unseasoned state, under the misapprehension that the logs will not deteriorate. When it is required to keep the logs in comparative bulk, it will be found to be a convenient method to have one cut put down the centre of them, which, as a rule, will be sufficient to obviate any tendency to outside shake that may arise in consequence of their shrinking on the outside. When cut, mahogany boards should always be laid aside to season in the same order as they left the saw. Strips of accurately sawn wood should be placed at intervals of a not greater distance than 12 inches from each other, and we are inclined to advise that the strips of wood be placed even closer together than that.

It is advisable that some woods should be seasoned quickly, and others should dry slowly. Mahogany must be seasoned slowly. To season it thoroughly and well, periods should be allowed in something like conformity with the following table:—

Thickness of boards.	Months.
¾ inch.....	12
1 inch.....	12
1½ inch.....	16
2 inch.....	20
2½ inch.....	24
3 inch.....	30
3½ inch.....	36
4 inch.....	48
4½ inch.....	56

Pine boards should be seasoned on very much the same plan as that we have recommended for the seasoning of mahogany boards. We suggest only this alteration, that they should be placed where the wind can reach them, for they should be dried quickly. The reason for this is that pine is a wood which is prone to rapid decay, and therefore the quicker it can be placed in an absolutely dry position—such, for instance, as being made up into internal joinery work—the better.

Whitewood cannot be satisfactorily dried by artificial means, for it twists under the action of heat. Whitewood hardens very much by being exposed to the weather. The reason of this is that from its sponge like texture the pores of the wood rapidly close when evaporation ensues.

The system of stacking flooring boards to dry in triangular fashion is much to be condemned for several sufficient reasons. The first is that, when so piled, boards will hold an inconsiderable quantity of snow or rain water.

The second is that they do not dry in those places where the boards must necessarily touch each other in the crossing.

The third reason is that when the boards are in long lengths they have a natural tendency to "swag" in their centers, and so to dry in a twisted or crooked form.

It is to be borne in mind that although wood the grain of which is of a twisted character has a natural tendency to dry crooked, yet that it can, by being judiciously weighted, be kept straight.

This fact suggests to us that even straight-grained wood will dry in a crooked form, if when left to season it be allowed to assume a bent form, and that this being so it is imperative that the piling of wood into position for seasoning should be directed by care and intelligence. —*The Builder*.

STAVELESS BARRELS.

The logging camp of the Mattulath Manufacturing Company is located at Carson, a half mile from Puyallup. They are getting out 20,000 feet of cottonwood logs per day, using the labor of seventeen men and four yoke of cattle. These logs are made into rafts and towed to the factory at Seattle. The company think they have a great improvement in the sheet barrel, which is made by cutting a log into barrel lengths, softening them by a steam process and then shaving each piece into a long sheet, unrolled like a carpet. Each sheet is then crosscut into such a length that when the two ends are brought together it is given the size and form of a barrel, without heads, the whole being done by machinery. This has proved a great improvement over the stave barrel in cost of manufacturing as well as in merits for use. The only drawback, if drawback it may be called, is that clear timber is required in this case, all the knotty timber being rejected, whereas for staves knotty timber may be used. Consequently the best of the cottonwood is now being culled out, and unless the supply of virgin forests of this kind proves illimitable, they will after a while be compelled to return to the manufacture of staves exclusively. —*Ledger*.

Puget Sound Business.

Lumber is reported higher in the Puget Sound district than ever before, while stone and brick have declined to the lowest notch. This curtails the lumber demand for building purposes, which some time ago was quite considerable, owing to the then low prices of lumber. Notwithstanding this decrease in a branch of the demand, there has been an extra good volume of trade in lumber on the Sound all the season, which goes to show that the uses of lumber are so many and extensive that one item of consumption is a small matter in the general result, even though it be the important one of building. The Puget Sound product goes largely to supply the coast trade, particularly for shipbuilding. —*Northwestern Lumberman*.

A LARGE portion of the Kippewa district is flooded owing to defective dams. Considerable damage has ensued.

THE FORESTRY SOCIETIES.

NORTH BRND, Hamilton Co., O., July 4.

Messrs. Toker & Co., Peterborough, Ontario:

GENTLEMEN,—Allow me to acknowledge with my sincere thanks the receipt of your excellent and very interesting paper. The number for July 1st is before me with its reference to the Catalpa. I send by this mail a pamphlet monograph of this tree which you may not have seen.

The Montreal papers of June 15 are a little mixed in regard to the two forestry societies, both of which have adjourned to meet in Montreal, August 21, of which you should be advised.

The American Forestry Association was organized at Chicago, Ill., in 1875, and thus designated so as to gain the talent of the Dominion. This society recently met at Rochester, N. Y., (June 20) and adjourned to Montreal with the hope of combining the talent present there.

The American Forestry Congress organized at Cincinnati, Ohio, as you have already noted, April 25-29.

Anxious to aid in the success of the undertaking, circulars were issued to those interested in the A. F. A., asking their attendance and papers, and they contributed largely, but had no time for discussion, hence the necessity for the Rochester meeting on June 20, when an election was held, and the President of the Congress was elected in prospect of a consolidation of the two bodies, toward which result a committee of conference was raised to effect such a desideratum. The Association adjourned to meet at Montreal on August 21.

I write this to enable you to understand that, though two societies exist, there is no disagreement; both are anxious for the success of forestry.

I am waiting to hear of Dr. Loring's acceptance of the office, not yet received.

Yours respectfully,

JNO. A. WARDER, M. D.

Ex-Pres. & now 1st V.-Pres. A.F.A.

MONTREAL NOTES.

The Gazette, of July 7th, says:—During the past week or ten days quite a fleet has left port with deals for the United Kingdom, and lumber for South America. The barques *Nyham*, *Sheldon* and *Rendez* have sailed with deals for West Hartlepool, the barques *Cupid* and *Suez* with lumber for Montevideo, the barque *Wimera* with part cargo of deals for London, the brig *Excel* with deals for Cardiff, and the brigantine *Zeno* with lumber for Rosario, Buenos Ayres. A number of other vessels are being loaded, and we hear of charters to South American ports at \$15 to \$17, a small vessel having been engaged at the outside figure. The lumber trade in this city during the past week has been fair for the season, and the month of June closed much better than was expected, the sales footing up a good aggregate. The receipts of both hard and soft woods during the week have been pretty full, and the yards are being rapidly replenished with new stock. Arrivals have been liberal from the Ottawa, as well as from ports between here and Quebec. We hear of great complaints regarding the slow traffic over the Q. M. O. & O. Railway, shipments of lumber in some instances having taken as long as a week in coming from Ottawa to this city, which is causing great annoyance to dealers here who sell to customers for delivery within a certain reasonable time. The prospects for building up an extensive lumber trade with Manitoba are increasing. During the week a number of cars of red and white pine have been shipped from this city to Winnipeg, white costing from \$20 to \$25 per M. feet delivered on cars, a choice lot having commanded as high as \$30, and red at \$16, average quality. Besides pine we notice a demand for hard woods is springing up in the Northwest, and sample lots of cherry, ash and walnut have already been shipped to Winnipeg on the basis of \$20 for cherry, \$100 for walnut, and \$20 for ash. There is still a demand for hardwood on American account, the sale being reported of a boat load of ash at \$20. Shipments are being made to Lake Champlain ports and through to Boston. We also notice shipments of eight cars, chiefly white pine, to Portland, Me., last week. We quote prices at the city yards as follows:—Hardwood—Black walnut, per M. feet, \$80 to \$100; oak, \$45 to \$60;

maple, \$25 to \$35; birch, \$20 to \$35; rock elm, \$30 to \$35; ash, \$20 to \$25; butternut, \$35 to \$40; cherry, \$60. Soft wood—Hemlock, per M. feet, \$9 to \$10; spruce, \$10 to \$12; basswood, \$15 to \$18; pine, 1st quality, \$35 to \$40; pine, 2nd quality, \$20 to \$30; pine, mill culls, \$10.50 to \$12; shipping culls, \$15 to \$16; pickings, \$20 to \$25; first and second qualities, \$30 to \$40. These prices of course would be shaded for large quantities.

QUININE TREES.

During the last two or three years a bark containing quinine and quinidine has been imported into England from Columbia in such enormous quantities as to equal or even sometimes exceed the whole of the importations of cinchona bark from all other countries. The botanical source of this bark, which is known in commerce under the name of *Cuprea Cinchona*, on account of its peculiar coppery tint, has hitherto been a mystery. M. Triana, the well known quinologist, has recently succeeded in tracing it out, and has stated, in the *Pharmaceutical Journal* for April 22, that it is derived in great measure from two species of the nearly allied genus *Remijia*, none of the members of which were previously known to contain quinine. Several species of *Remijia* have leaves resembling those of the true cinchonas, and of these M. Triana has determined that *R. purdieana*, Wedd., and *R. pedunculata*, Karst., certainly yield cuprea bark, the former being the species which contains the alkaloid cinchonamine, recently discovered by M. Arnaud. It appears probable that other species also yield the cuprea cinchona of commerce, but definite information on this point is still wanting. The value of this bark has led, according to M. Triana, to a great devastation of the forests in which the trees grow, and has produced a financial stagnation, business being neglected in order to follow the more profitable occupation of collecting the bark. Fortunately seeds of the tree have been received and are now in cultivation at Malvern House, Sydenham. The tree is likely to prove valuable for cultivation in countries where malarial fever abounds, since it grows at an elevation of 200-1000 meters above the sea, at which even red cinchona bark will not flourish.

READY MADE HOUSES.

The *Winnipeg Times* says:—"The great demand for building and sleeping accommodation experienced by everybody coming to this country—caused by the immense influx of people—has set inventive minds to work, and many plans in the way of tents, portable houses and impromptu erections, etc., etc., have been brought into service, but the most practical arrangement yet offered is a portable house of large dimensions, which has just arrived and has been placed in our midst, within, it might be said, a few hours. L. Forrest, of Belleville, Ontario, is the inventor of a plan, which has been pronounced, by some of the best architects and builders to be the most practical and at the same time best adapted for our North-west climate yet offered. It being not only warmer and stronger than the ordinary plan of buildings, but cheaper, and, what is still better, is in the true sense about the only portable house of any great dimensions, that has been offered, can be erected and taken down at will, it is just the thing for those wishing to follow up the advance of the boom westward, or a farmer wishing a house put on his farm, can take it with him, and without the aid of a gang of carpenters, can put up his own house in a few hours, all complete, and if desirous can change his locality in the same length of time. A model house of over 100 feet long and two stories high, fitted out with rooms and furnished with beds, bedding, carpets and everything, has just been put up on the corner of Logan and Mary streets, near Main, complete, sufficient for the accommodation of 250 guests, and all done in an almost incredibly short space of time. The foundation was not all on the ground until Tuesday forenoon, when the work of erection was started, and the last piece of roofing was placed on Thursday forenoon about the same hour, showing what can be done on this plan. A detailed description of this modern edifice would, perhaps, take more space than we can afford, but

suffice it to say that it is all put up in three foot sections on the principle of dovetailing and grooves, which is the most substantial way of putting wooden structures together. A company has been formed at Belleville for the purpose of manufacturing these houses. Mr. Forrest, although a Canadian by birth, is somewhat an American in his movements, and is prepared to push his enterprise to its utmost.

RAFTS AT QUEBEC.

The *Quebec Chronicle*, of July 7, has the following lists of rafts arrived:—

June 30—D. C. Thompson, staves, sundry coves.

Sundry lots, oak, elm, ash, &c., Indian cove west.

McLean Stinson, pine, oak, &c., Dobell's (Sillery).

Hilliard & Dickson, white pine, St. Lawrence docks.

Thos. Buch, pine, oak, &c., New Liverpool.

W. Hunt & Son, walnut and oak plank, Drum's wharf.

Sundry lots, deals, &c., sundry places.

J. Francis & Co., white and red pine, Cap Rouge.

July 3—R. & G. Strickland, white pine, Dobell's cove.

Wm. Mackey, white pine, Hadlow cove.

Alex. McEwen, white pine, etc., Hadlow cove.

David Moore, white pine, etc., Cap Rouge.

E. L. Kelsey, staves, New Liverpool.

Jno. Burstall & Co., masts, Woodfield cove.

July 6—J. Burstall & Co., masts, Woodfield cove.

Thos. Buch, white pine, New Liverpool.

W. McClymont, white and red pine, Cap Rouge.

W. Henry Row, white pine, &c., Bridgewater cove.

Jas. Gibson, jr., birch and ash, Hadlow cove.

FOREST TREES OF CANADA.

Prof. Bell, assistant director of the Geological Survey of Canada, has compiled a neat little work, showing the geographical distribution of the forest trees of Canada. The book is accompanied by a map on which the general northern limits of the principal forest trees are marked. This is the first work of the kind that has been issued in Canada. The tree-lines have been laid down chiefly from observations made by Prof. Bell during the last twenty-five years, extending from Newfoundland nearly to the Rocky Mountains, and from the northern United States to the eastern and western shores of Hudson's Bay. The continent of North America possesses a great variety of forest trees. About 340 different species occur within the United States. All the kinds which we have in Canada, amounting to about 90, including those on the Pacific slope, are also met with in that country. Prof. Bell points out that in the western peninsula of Ontario the forests present a remarkable richness in the number of species to be found growing together. In some localities as many as fifty different kinds may be counted growing together on a single farm lot. A more varied mixture is probably not to be met with in any other part of the continent, or perhaps in the world. One of the principal uses of Prof. Bell's map is to indicate the area within the Dominion throughout which each kind of timber exists. A knowledge of the limits of our different trees is also valuable as indicative of climate. Certain trees cease to exist when they come to regions subject to severe spring or summer frosts, or where early autumn frosts prevent them from maturing their fruits.—*Toronto Telegram*.

MAINE LOGS.

The Bangor, Me., correspondent of the *Northwestern Lumberman* writes as follows:—The cut of logs on this river the past winter is from 130,000,000 to 140,000,000 feet, principally spruce, which, with about 60,000,000 feet which remained over in the booms from last year, makes about 200,000,000 as our supply for this season. All the drives are now secure, excepting 2,000,000 to 3,000,000 feet, and all in the boom, excepting the East and West branch drives, the former of which will be in in about two weeks and the latter in about five weeks.

The Orono correspondent writes under the same date:—The drives have all arrived in the booms, except the drives from the West branch and Sebois, and those will be in by the last of July. The West branch drive contains about 35,000,000 feet, and the Sebois 5,000,000 feet. There are 40,000,000 feet of logs in the boom at this time, and 45,000,000 have been rafted out this season. Reckoning 20,000,000 feet as the amount of logs wintered in the boom, and 9,000,000 feet from the Passadumkeag, which do not go into the boom, gives us 160,000,000 feet of logs as the supply for this river, including those wintered at the mills.

Forest Fire.

The *Astorian*, (Astoria, Oregon Territory), describes a recent fire in the vicinity of its town as follows:—"During the last week a fire was out across Young's Bay, that, starting at first as a little smouldering mass, was fanned into a fierce flame by the dry winds from the east. Friday last, the scene, as described by an eye witness, was grand. Great trees were clouds of smoke by day and pillars of fire by night. Crimson sheets of flame streamed out from giant pines and great heaps of burning moss blown through the air lodged in the tops of adjacent trees, instantly converting them into a mass of flames that encircled the trunk and rose high in the air above. The roar of flames was distinctly heard in town. Fortunately no damage was done, though woodmen in the immediate neighborhood had great difficulty in saving that which was cut and piled."

SWEDEN.

A correspondent of the *Timber Trades Journal* writes as follows from Stockholm, on June 17th:—According to intelligence received from Norrland, the flood, caused by the melting of the snow on the mountains, has this year been more sudden and violent than usual. The floating has, therefore, had to be done with care, so as not to allow the logs to be taken by the torrent on to low-lying ground, with the risk of having the timber lying high and dry when the waters recede. This is one of the costliest accidents which can happen to the floating contractor, and he is therefore on his guard against it as much as possible. Everything, however, points to the conclusion that the "drives" from the small streams this year will be pretty clean, and consequently that a large number of the logs will reach the saw mills before autumn.

NORWAY.

A correspondent of the *Timber Trades Journal* writes as follows from Christiania, June 17th:—There is little or nothing of interest to the wood trade to report just now. This time of year is always pretty dull as regards shipments, for nearly all our vessels go into the Baltic or American trade after their spring voyage from home, so that tonnage remains scarce, and consequently rates of freight high during the summer months. Although this state of things is repeated every year quite regularly, importers on your side seldom seem to realize the fact that such regular increase of freight tends to enhance the c. i. f. prices, if the cost value remains stationary, and to check any actual decrease in the general market price for delivery.

Australian Trade.

Messrs. Gemmill, Tuckett & Co.'s timber report, dated Melbourne, April 8th, says:—We have to report a fair trade demand during the month for most descriptions of wood goods, and considerable sales have been carried through at auction, at prices nearly supporting last month's rates. American lumber—We report sales ex *Warwick Castle* and *Somersetshire*. 12 in. w. p. shelving brought £14 12s. 6d. to £14 10s.; 4 M. clear do., £16 10s.; 2 in. Canada clear, 7 to 11 in. wide (an English shipment), only realized £11 to £12 per M. super. Arrivals during the month—14,127 ft. w. p. ceiling, 193,633 ft. w. p. shelving, 192,397 ft. clear pine. These will fully supply the market until fresh arrivals, and prices are not likely to advance above present rates. The trade hold moderate stocks.

SQUARE timber to the value of \$14,500 has been shipped thus far this season from Elk Rapids, Mich.

F. E. DIXON & CO.

MANUFACTURERS OF PURE BARK TANNED

LEATHER BELTING



First Prize, Provincial Exhibition.....Ottawa, 1875
 First Prize, Provincial Exhibition..... Hamilton, 1878
 First Prize, Provincial Exhibition.....London, 1877
 First Prize, Industrial Exhibition.....Toronto, 1870
 First Prize, Industrial Exhibition.....Toronto, 1880
 International Medal, Centennial Ex.....Philadelphia, 1876



None genuine unless with a STAR on the head of rivets. Send for Price Lists and Discounts.

81 Colborne Street, Toronto

Can Trees Stop Tornadoes?

The time will come, because human necessity will compel it, when the unnaturally deforested plains of the West will be grand in their growth of noble trees. When they are, tornadoes will be broke in their force by some belt of timber, *chevaux de frise*, which meets and breaks the force of the storm. It is folly to say that the plains will not grow trees. In riding across them any common observer can see where magnificent oaks have survived as a testimonial to the worth of the soil. They stand stately in their silence on solitary knolls, above and beyond the prairie fire. Given the trees, the forest in fact, we have the essentials, the break against the winds, the timber for building, and the firewood, the three crops of which the plains are most in want, but all can be summed up in the words "timber shelter." Trees can stop tornadoes.

Peterborough.

THE DRIVES.—The saw log drives are coming along very slowly this season; none have passed through here since those of Messrs. Rathbun & Son, and Messrs. Ulyott & Sædler, consisting of 200,000 logs; all under the foremanship of Mr. James Lynch, one of the best foremen in the business that runs these waters. The logs were all to be assorted at Harwood on Rice Lake.

THE SHINGLE MILL.—The new raceway is now completed, and when the driving wheel is put into proper order, which will take a few more days, then Mr. Kearns will be making the shingles fly out of the slabs and logs in a hurry, and will keep the packers busy from now until winter.

Lindsay.

FINE TIMBER.—Messrs R. & G. Strickland of Lakofield, have just finished shipping from Lindsay, a large drive of square and board pine timber of 2,472 pieces or 140,000 cubic feet, which they have sold to a firm in Quebec at \$3.50, per foot delivered. This is undoubtedly the finest lot of timber that has been shipped over the Midland Railway this season.

BIG LOADING.—On Monday the 10th July, Mr. John Buller, of the Midland Railway, loaded at Lindsay, 21 cars with timber, 10,136 cubic feet, in four hours. Average number of feet per car 482½. Average time per car 11.3-7 minutes.

DURING the past three weeks there has been great activity along the river at Lindsay, owing to the fact that Mr. Irwin and Messrs. R. & G. Strickland were shipping large quantities of timber over the Midland Railway to Port Hope, where it is being rapidly rafted for Quebec. They have just completed shipping two large drives of square and board timber of 4,472 pieces, or 225,000 feet, and Mr. Irwin expects another large drive of 2,300 pieces shortly.

USELESS FRIGHT.—To worry about any Liver, or Kidney or Urinary Trouble, especially Bright's Disease or Diabetes, as Hop Bitters never fails of a cure when a cure is possible. We know this.

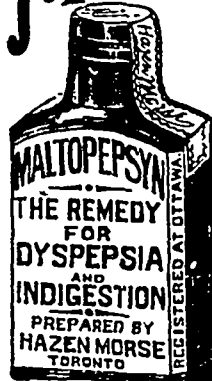
C. BRITTON, Lindsay, Ont., writes:—"I have much pleasure in recommending Baxter's Mandrake Bitters in all cases of Jaundice, Biliousness, Sick Headache and Liver Complaint, for they have given universal satisfaction, and I have sold more of them the past season than any other one patent medicine."

Frauds by a Lumber Firm.

DETROIT, July 7.—The well-known lumber firm of King, Quick & King, doing a heavy business at the village of Lowell, were arrested by the sheriff charged with the larceny of logs from Flat River. The complainants are the Michigan Barrel Company, of Grand Rapids, White & Froat, of Grand Haven, and others. It is alleged that during the past three years no less than \$20,000 worth of logs have been stolen from Flat river. Detectives have for some time past been engaged on the case.

AN Ottawa correspondent, dating July 7th, says:—Since the first of July there passed through the Madawaska slides 247 cribs, containing 5,769 pieces of timber. Since the 3rd instant, there has left Ottawa 765 cribs containing 14,620 pieces of white pine and 4,859 pieces of red pine. Since the 3rd instant, there has left Gatineau boom 17,892 saw logs, 1,537 pieces of cedar, and 6,632 railway ties.

MALTOPEPSYN



Artificial Gastric Juice.

A WONDERFUL FACT, proving the remarkable digestive power of Maltopepsyn.

Two doses (30 grains) of Maltopepsyn will digest the entire white of a hard boiled egg in a bottle of water, in from 3 to 4 hours. How much more will it digest in the stomach assisted by that organ? About twenty times the quantity.

Test this for yourselves,—it is an interesting and useful experiment.

Get from your druggist ten drops of Hydrochloric Acid in a four ounce bottle, fill bottle half full of tepid water (distilled water is best, though soft water will do), then add the finely cut white of a hard boiled egg, then add two doses (30 grains) of Maltopepsyn and shake bottle thoroughly every 15 or 20 minutes, keep the bottle warm, as near the temperature of the body (100° Fahrenheit) as possible, and in 3 to 4 hours the egg will be entirely dissolved or digested.

Maltopepsyn is endorsed by the leading Physicians and Chemists throughout the Dominion of Canada.

Send for Pamphlet, 24 pages, giving full treatment of Dyspepsia with the rules of Diet, etc., mailed free upon application by HAZEN MORSE, TORONTO. Price per bottle, with dose measure attached, 50 cents, contains 48 doses or about one cent per dose.

GRATEFUL—COMFORTING.

EPPS'S COCOA

BREAKFAST.

"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle miasmas are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—Civil Service Gazette.

Made simply with boiling water or milk. Sold in packets and tins only (½-lb. and 1-lb.) labelled JAMES EPPS & CO., Homoeopathic Chemists, London England.

THE MONTREAL SAW WORKS

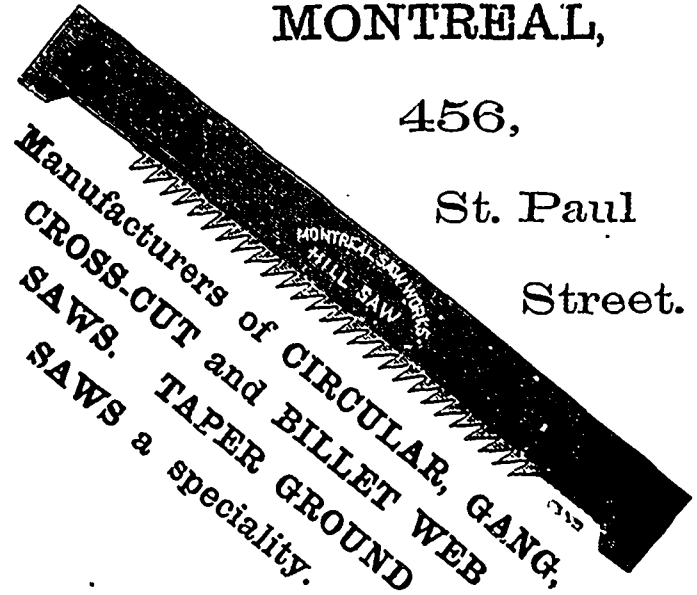
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General Mill Supplies always on hand.



Manufacturers of CIRCULAR, GANG, CROSS-CUT and BILLET WEB SAWS. TAPER GROUND SAWS a speciality.

General Mill Supplies always on hand.

Address all correspondence to Chas. M. WHITLAW, MANAGER.



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 Alexandria Saw Works
 SAINT JOHN, N.B.

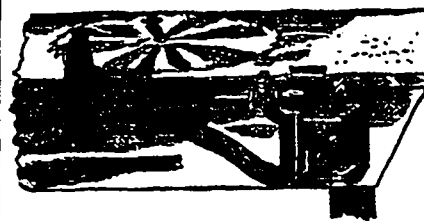
Saws of all kinds manufactured from the BEST CAST STEEL that can be procured in any Market.

EVERY SAW WARRANTED.

SAWS REPAIRED in the best manner and on Short Notice.

Send Address for Price List, Terms, &c.

J. F. LAWTON.



TO MILLMEN!

HODGSON'S Patent Saw Grinder

Is a new, efficient, and exceedingly cheap machine and is equally well adapted to grinding long and round saws of every description. Wheel is moved along the length, and in the depth of the tooth, and can be placed just where wanted as easily as a file. It is just THE THING for mills, cutting from one to five million feet of lumber, and costs no more than one-fourth to one-tenth the price of little better machines. It is patented in United States and Canada, and is made in Weymouth, Pennsylvania, and in Amherst, Nova Scotia.

Hodgson's Patent Monitor Shingle Machine

combines, at a moderate price, more points of excellence than any other. Jointer is built in machine, a few inches from the saw. The cast steel feed rolls are opened by a foot lever, and grip the block like a vice. Traverse of carriage to suit large or small stock, is under control of operator when running. Will run for days without cutting a shim. Warranted to cut, with one attendant, three thousand in an hour, under forfeiture of \$100. Send for circulars.

T. HODGSON, AMHERST, NOVA SCOTIA.

ESTABLISHED 1820.

EAGLE FOUNDRY!

GEORGE BRUSH

14 to 34 King and Queen Streets, MONTREAL,

MAKER OF

Steam Engines, Steam Boilers, Hoisting Engines, Steam Pumps,

CIRCULAR SAW MILLS, BARK MILLS, SHINGLE MILLS,

Ore Crushers, Mill Gearing, Shafting, Hangers and Pullies, Hand and Power Hoists for Warehouses, &c., &c.,

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"Water's" Perfect Steam Engine Governor, and "Herald & Sisco's" Centrifugal Pumps

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AMERICAN FORESTRY ASSOCIATION.

A meeting of prominent men from different parts of the country was held in the Common Council Chamber, Rochester, on June 20th, to reorganize the American Forestry Association. Dr. John A. Warder, of North Bond, Ohio, occupied the chair. The Association has for its object the planting and protection of forest trees. An interesting discussion of the subject was entered into by the members present. A committee consisting of C. A. Greene, E. Moody, William Little, A. W. Weber, and J. W. Manning, was appointed to prepare a form of constitution for the society.

The Association re-convened next morning in the Common Council Chamber. The committee appointed to draft a constitution reported the following, which was unanimously adopted:—

§ I. This body shall be called the American Forestry Association, and shall seek to promote the interests of forestry and to disseminate information connected therewith.

§ II. The officers shall be a President, First Vice-President, Secretary, Corresponding Secretary, and Treasurer—who shall constitute an executive committee with power to act on behalf of the association. There may also be one Vice-President for each state, territory and province in North America. The term of office shall be one year or until their successors are appointed.

§ III. Meetings shall be held annually, or at such times and places as the Executive Committee may direct, for presentation of papers, discussions, and practical matters relating to forestry.

§ IV. Any person recommended by a member of the Executive Committee, may be elected to membership on payment of \$2. The annual dues shall be \$1.

§ V. The Executive Committee shall have full authority to act for the Society in any emergency.

§ VI. This constitution may be altered or amended at any regular meeting by a majority vote of the members present.

The committee appointed to nominate officers reported the following named persons who were unanimously elected:—

President—George B. Loring, Washington, D. C.

Secretary—J. Jenkins, Winona, Ohio.
Corresponding Secretary—Prof. R. S. Warder, Cincinnati.

Treasurer—D. W. Beadle, St. Catharines, Ontario.

Vice-Presidents.—Maine, George Sawyer, Wiscasset; New Hampshire, Ex-Gov. Fred. Smith; Massachusetts, N. H. Egleston, Williamstown; Rhode Island, H. G. Russell, East Greenwich; New York, H. Seymour, Utica; New Jersey, George H. Cook, Rutgers College; Pennsylvania, Thomas Mehan, Germantown; Maryland, Gov. Hamilton; District of Columbia, John Saul; West Virginia, Hon. H. G. Davis, Piedmont; Ohio, Geo. Wertz, Wilmington; Indiana, J. Ingersoll, Lafayette; Michigan, W. J. Beal, Lansing, Kentucky, Cassius M. Clay; Tennessee, John W. Lee; North Carolina, S. D. Kelsey, Highlands; South Carolina, D. Wyatt, Aiken; Alabama, Charles Mohr, Mobile; Florida, J. G. Knapp, Lanona; Wisconsin, Hon. W. E. Smith, Madison; Minnesota, George L. Becker, St. Paul; Dakota, H. M. Thompson, Preston Lake; Wyoming, Hon. John W. Hoyt, Cheyenne; Illinois, Arthur Bryant, Jr., Princeton; Missouri, S. M. Gray, Columbia; Iowa, Chas. E. Whiting, Whiting; Nebraska, Hon. R. W. Furnas, Brownville; Kansas, George C. Brackett, Lawrence; Louisiana, —; Arkansas, F. L. Harvey, Fayetteville; Texas, G. C. Georgeon, College Station; Colorado, D. S. Grimes, Denver; Utah, J. E. Johnston, St. George; California, Robert E. C. Stearns, Berkeley; Nevada, —; Oregon, J. B. Dufur, Idaho, —; Quebec, Jas. Little, Montreal; Ontario, Wm. Brown, Guelph, Ont.

The following preamble and resolution was adopted:—

Whereas, The American Forestry Congress has recently been organized with the same objects and field as the American Forestry Association.

Resolved, That a committee of three be authorized to negotiate a union of these two bodies.

Resolved, That if this union be effected at

once, the first meeting of the united association be held at Montreal, August 21 and 22, 1882.

A motion was then passed to the effect that when the Association adjourned it should adjourn to meet again in Montreal on August 21. The Chair was instructed to appoint three gentlemen as a committee to make the desired negotiations with the American Forestry Congress.

Norman J. Coleman, editor of the *Coleman Rural World*, of St. Louis, Mo., made some remarks in regard to the efforts of Dr. John A. Warder, the retiring President of the Association, for the good of the cause, and, on motion of the speaker, a vote of thanks was tendered to Dr. Warder.

Remarks were then made by Dr. Warder, Wm. Little and N. J. Coleman upon the question of preserving forests, and the best means of preventing the wholesale destruction of trees. E. C. Selover, of Geneva, followed with brief remarks. He advocated running the state experimental station in the interests of forestry. The convention then adjourned.

THE USES OF HARD WOODS.

The amount of hard woods, or "white woods" as they are called in the trade, in contradistinction to the resinous and gums, which are used in one form or another in the mechanical arts, in agriculture and domestic life, is simply astounding to one who has never considered the matter. You have only to think how many handles of one sort and another—axe, pick, spade, plow, hatchet, hammer, etc.—are used on every farm, and apply that scale to the agricultural proprietors of the world, to see the amount of these woods that are in constant demand. Consider the vast number of mechanical pursuits in which these are indispensable. Think of the number of sledge and hammer handles that must be worn out in making cars, boilers and engines, of the pick handles that must be had to build railroads, grade and pave streets, dig tunnels, sink shafts, mine iron and coal, gold and silver, and some idea of the vastness of the demand for even handles alone may be had. But this is only one of the various forms in which this product of nature is daily consumed by the insatiable demands of civilization. Cogs, pulleys and mallets, spokes and hubs, shuttles and bobbins, and a thousand specific devices for saving time and labor, must be made out of these woods.

Think now of the innumerable vehicles, all of which are to be supplied with spokes and hubs, rims and felloes, shafts, axles, spring bars, coupling poles and other essential parts. There is no present likelihood of there being any substitute found for such woods in these uses. There will never be a metallic handle for the axe or pick of practical utility. The elasticity and lightness of wood are essential in all these uses. In other still other qualities, as lack of friction or imperfect conduction, are necessary. Shuttles must be made of a closely knit wood which may be worked very thin, yet remain firm and light, and take a very high polish. Mallets, as for the use of stone-cutters, must be made of a heavy, close-grained, elastic wood, which will not splinter nor become indented from a long succession of hard blows upon the chisel head. There are but few kinds of wood which are adapted to any of these uses. Foremost among them all, as the great mechanical wood, is the hickory. Its whiteness, hardness, toughness, elasticity and durability, together with its capacity to assume a reasonable finish, and almost absolute freedom from splinters and checks, gave it easily the supremacy over all other hardwoods. It is true that in some of the uses to which these woods are devoted, the hickory is not as good as some others. It would not make as good a shuttle as the persimmon, as good a plane stock as the apple, as good a stamp or roller as the maple, as good an engraving material or as fine rings or croquet balls as the box or dogwood; but while those woods excel it in these peculiar uses, they are useless in a thousand others where hickory is unapproachable. As a material for all classes of handles, light spokes, rims and shafts—in short whenever both stiffness and lateral elasticity are required together, it is without a rival. It is among woods what steel is among metals. Two kinds of oak, the white and post, are sometimes used for the grosser purposes in which the

qualities of hickory are required, as large spokes, felloes, etc., as well as many other purposes to which it is peculiarly adapted. The ash is the only other elastic handle wood, and its tendency to split between the grains, as well as its unreliability and its variability in quality, make it undesirable except for a few purposes—as the spade, pitchfork, and the like—where lightness is requisite. Where solidity only is required, the beech, maple, holly, apple, and a few other woods may be used. Among the best of these inelastic woods, however, are the persimmon and dogwood.—*Wood Worker.*

AN ACROBATIC LOGGER.

There is an acrobatic and gymnastic talent outside the circus ring, and when some important emergency calls it into play, it will develop in the most unlooked-for places some times. The logging business is fraught with dangers and hardships, and many of the adventures of the sturdy logger might creditably grace the pages of romance, and would put to shame the extravagancies of Munchausen. One of the most thrilling feats was that of an acrobatic logger who had been peeling bark for some days in the Moosic mountains near Carbondale, Pa. He was likewise engaged in removing the logs to a mountain skidway near Herrick Centro, 250 feet below. While harkness was at the skidway handling a log his catchhook lost its grip and he his balance, so that he was thrown down the embankment in advance of the rolling logs. The logger was between two fires—behind rushed the freed timber, in front was the river covered with a tangle of logs. It was a terrific race between man and log. But the endangered logger thought and acted quickly. He shot down the mountain side to a certain point, where he gathered himself and made a tremendous leap out into the water. He struck a narrow space between the logs, coming under the pole in good order, and the plunge carried him beneath the surface just as the pursuing log dashed to the water's edge, and broke badly, coming in decidedly blown. The man kept his wind well and was rescued by his companions only a few feet from where the losing log struck the water. It was little short of a neck and neck contest. The logger kept his grip on the cant hook, and had it when pulled out of the water.—*Northwestern Lumberman.*

ENCOURAGING TREE PLANTING.

A few years ago Congress passed a law to encourage the growth of timber. Under its provisions and with a view of availing themselves of its advantages, the farmers in the far west are planting thousands of acres with young shoots and saplings, which in a few years will undoubtedly make climatic changes fraught with untold beneficial results. The wisdom of the law, says the *Boston Advertiser*, becomes more and more apparent as time goes on. They promise to counterbalance the wholesale destruction of forests in the older section of the country by creating new tracts of woodland upon the vast bare plains of the trans-Mississippi region. They appeal directly to the individual self-interest of settlers and to the desire for landownership which appears to be a stronger passion in new communities, where the soil is almost the only visible property, than in places where an old society has created many other forms of wealth. The western farmer who has homesteaded a quarter section of 190 acres can secure an additional quarter section by planting and caring for the growth of ten acres of trees. If he selects his homestead tract upon an unoccupied section he can get 320 acres in a body, and if this is not feasible he can usually find a chance for a "timber entry" within a short distance of his home and thus obtain a second farm to give to his sons or to sell when the denser settlement of the region has made it worth a good price. Nor are the benefits of the tree culture laws limited to actual settlers. Many claims are taken up purely for speculative purposes by non-residents. Considerable areas of land are thus kept out of the hands of men who would homestead and cultivate them, but the object of securing the rearing of numerous patches of forest in regions naturally bare of trees is greatly advanced.

It is still to soon to tell whether or not any

noticeable climatic changes will result from the creation of timber tracts now going on in south western Minnesota, Dakota, Nebraska and Kansas, but is not probable that great benefits may accrue to those regions. When the trees attain a fair size the new forests may prevent excessive droughts and destructive freshets, and break the force of high winds and tornadoes, as well as promote a supply of fuel and lumber for future generations. The timber-culture laws afford a striking example of how much can be done to improve natural conditions by wise legislation, and are a lesson to the advocates of the let-alone theory of government. Their successful working suggests the inquiry, if the United States can, by two simple statutes, cause forests to spring up upon hundreds of thousands of bare acres in the now west, cannot the states do something by legislation to regulate and limit the destruction of timber in the older sections of the country?—*Lumberman's Gazette.*

THE WHITE SEA TRADE.

The wood trade of the northern regions of Russia, and particularly the basin of the White Sea and its affluents, is pronounced excessively slight in comparison with that of the native countries of Norway and Sweden. The radius of the forests of Vologda and Archangel has a superficial area of 197,100,000 acres, it is estimated. The wooded regions of Sweden cover an area of some 40,500,000 acres, and those of Norway 16,200,000 acres. Notwithstanding the fact that the figures show Russia to have considerably over twice the estimated radius of area, the wood exports of these countries differ to the extent that the two Russian Governments export 124,000,000 cubic feet, and Sweden and Norway export 1,200,000,000 cubic feet. Only a minor portion of this wood is exported abroad, the amount being:—From White Sea ports, 10,775,000 cubic feet; Swedish ports, 200,000,000 cubic feet; Norwegian, 82,891,000 cubic feet. The most striking fact in the Russian wood export trade is that the largest export comes from the less-wooded districts. The Governments of Vologda and Archangel possess but eleven saw-mills, whereas in Sweden there are 1,350. The great mass of the Imperial forests of Russia are concentrated in the north and northeast, at the north of the Volga and Kama, and on the right bank of the Volga, in the Government of Ljubirsk.—*Glasgow Herald.*

WOODEN PIPING 250 YEARS OLD.

Some recent excavations in Berkeley square, London, England, brought to light one of those curious relics of old London, which are every now and then being exposed in its streets. In the sixteenth century London was supplied with water from the Thames by means of wood pipes invented by one Peter Morris, or Maurice, a Dutchman, who, in 1580, obtained a right from the corporation to erect machinery to supply what many householders had been compelled to purchase, a tankard at a time, from water-bearers. Maurice's works were erected at Old London bridge, and his water pipes were hollowed out of the stems of trees, tightly fitted into each other, much after the manner of the common sewer pipe of to-day. Some wooden piping of the kind devised by this ingenious Dutchman has recently been dug up in Berkeley square, but it was probably part of the works of the New River Company, which so far adopted Maurice's plan that it originally supplied water through pipes formed of the stems of small elm trees, denuded of bark, drilled through the center, and cut to lengths of about 6 feet. Some 10 years ago a considerable length of this wooden piping was exhumed in Pall Mall.

WALLING (formerly known as Teetors), in White county, Tennessee, near the line of the extension of the Manchester and McMinnville railroad, is doing a lively lumber business. The lumber business commenced in White county about three years ago, and in that time about twelve million feet of walnut and three million feet of poplar have been sawed and shipped from the county. About one hundred wagons are now engaged in hauling lumber from the mills in the county to the railroad depot at Rock Island.

OIL FROM PINE.

Within the last few years an important industry has sprung up in the French department of Landes. It consists in the extraction and application of oils from pine. These oils are of two sorts, the heavy (pinoleum) obtained by distilling the resinous wood at a low temperature, and used for painting and wood-preserving; and the light oil for illumination, got by distilling in special apparatus, and purified with chemical agents. This light oil has the same chemical composition as oil of turpentine and distils at the same temperature (150 to 160 degrees), but has the advantage of not turning into resin. It contains neither pinic nor sylvic acid. As it does not emit vapour except at a high temperature, its use for lighting purposes is quite safe. Its luminous intensity is said to be greater than that of petroleum; it contains 88 per cent. of carbon, while petroleum has 82 per cent. Two similar burners showed the pine oil to have an advantage of 33 per cent. in luminous intensity; the consumption is also less. In the department of Landes, roots and old stumps of pine, formerly unutilized, are now made to yield considerable quantities of oil.

CHARCOAL.

We have before spoken of the process that has now passed beyond the stage of experiment, for making charcoal from wood and saving during the operation more in value of various chemical constituents than it costs to make the charcoal. The Chicago Tribune in speaking of it says that the Milwaukee, Lake Shore & Western Railway Company has sold about 5,000 acres of land near Birnamwood, Shawano county, Wisconsin, to a number of New York capitalists. The hardwood therein will be utilized in the manufacture of charcoal, acetic acid and alcohol, and a plant costing \$25,000 is to be established at once for this purpose. The capitalists have secured the right of a French patent, which, by the use of retorts, is made to condense smoke from burning wood. By a peculiar process six gallons of 85 per cent. alcohol and 50 lbs. of acetate of lime, the base of acetic acid, are extracted from one cord of wood, leaving sixty bushels of charcoal. It is the intention to invest a large amount of money in addition to the first cost of the plant.

DRIVING DIFFICULTIES.

The Northwestern Lumberman says the owner of logs above the Gerrish dam, in the Tittabawassee and its branches, not at Saginaw, Mich., the other day, to settle upon some means of controlling the driving of the stock of logs now in the stream, which, for want of harmony among owners, was in a fair way to be left till late in the season. The meeting represented about 73,000,000 feet of logs, and about all the action taken was to draw up an agreement fixing the prices to be paid for driving from different points to the boom limits, which ranged from 12½ to 20 cents per thousand feet. This compact was signed by the representatives of 63,000,000 feet of logs, though it could not have any binding effect till 73,000,000 feet was represented, so the interested parties began scratching around to secure enough signatures to close the matter up, a skirmishing committee being appointed for that purpose.

Suddenly Seized.

Mr. Arthur Fisher, of the Toronto Globe observes: "On my last trip to the States, I caught a very bad cold from a severe wetting. I received one night in the city of Philadelphia, which settled into a very bad case of rheumatism, and made me most miserable. I did not know what to do for it, and could not think for a long time, until I bethought me, that on previous visits to that side, I had always bought for Mr. Gay, of our paper, a couple of bottles of St. Jacobs Oil. I remembered also, fortunately, that the last two bottles had cured that gentleman of the rheumatism, and so I resolved to purchase St. Jacobs Oil for my own use. I went at once to a drug store and made the purchase; and that very night I began applying the Oil, and in two weeks time I was as well as ever."

"AND FOOLS who came to scoff remained to pray."—We receive many letters from those having tried while doubting, yet were entirely cured of dyspepsia and liver troubles with Zepes, Clergymen write us earnestly as to its wonderful effects.

HOW TO PRESERVE A SUGAR BUSH.

The Cultivator and Country Gentleman says: "An old farmer who is the owner of a fine 'sugar bush' that has been tapped many years, in succession, but is yet in a good state of preservation, says that trees will be little injured by tapping if the holes are tightly plugged when the spiles are removed; that instead of finding a large decayed spot the next year surrounding the hole made by the bit, the wood will be sound and green clear up to the hole, and that the tree can be tapped within one-fourth of an inch of the old hole and a good flow of sap obtained. He uses pine for plugs, and to have them fit nicely he makes them from long sticks which have been driven through the right sized hole made in a piece of iron."

THERE is an elm in the south of England, sixty-one feet in circumference, whose trunk is hollow, having a door fastened by a lock and key. Festal parties have sometimes gathered in this tree, and it is said that a child was once born there. Another great elm has a winding staircase cut within it and a turret at the top which will accommodate twenty persons at once.

THE Ottawa Citizen says that a house on the new patent which Mr. Logan has taken out for the construction of portable houses for the North-West has been ordered for one of the road companies in Ottawa to be used as a toll-house. These houses are composed entirely of wood, and one of the peculiarities of their construction is that they are all pegged together, no bolts or nails being required for their erection.

A NOVEL method of taking lumber from the river has been put into practical operation by the Hannibal (Mo.) Transfer Company. The scheme is to run flat cars down to the river bank and out on the bed of the river for a distance of 200 feet, and cribs of lumber are then floated on top of the flat cars and drawn out by two engines upon the bank. The cribs are 32 feet long and 16 feet wide, and contain 10,000 feet of lumber. They are then removed to the yards of the company and taken apart, the boards being washed by hydrant water clear of the sediment dirt which attaches as they come down the river. The method will have the effect of making it possible to handle several times the amount of lumber shipped in former years.

BUT few people comparatively have any idea of the amount of timber used in the construction of a single railroad. It yearly takes 200,000 acres of forest to supply cross-ties for the railroads of the United States. It takes 15,000,000 ties to supply the demand on their railroads, for which on an average the contractors get 35 cents a piece, making in the aggregate \$5,250,000. In building a new road the contractors figure on 2,700 ties to the mile, while it takes 300 ties to the mile to keep a constructed road in repair. Contractors, of course, buy pieces of timberland as near to the proposed line of road as possible, paying for the timber an average of about \$20 per acre, or giving the proprietor 10 cents for every tie got out. The average of a good piece of timber land is 200 ties to the acre and twelve ties to the tree.

BRIGHT'S DISEASE of the Kidneys, Diabetes and other diseases of the Kidneys and Liver, which you are being frightened about, Hop Bitters is the only thing that will surely and permanently prevent and cure. All other pretended cures only relieve for a time and then make many times worse.

TEABERRY whitens the teeth like chastened pearls. A five cent sample settles it.

FAMILIAR as household words—the names of Esterbrook's celebrated steel pens—Falcon, Bank and Easy Writer. To be had from all the Booksellers, Stationers and Newdealers.

THE WORST CASES of weakness, exhaustion, impotency, and all diseases and weaknesses of the generative organs can be cured by Mack's Magnetic Medicine. See advertisement in another column.

THE Rev. Charles E. Fifer, formerly of Pittsfield, N. H., but now of Wakefield, R. I., writes: "I have used Baxter's Mandrake Bitters in my family for over two years, and as a result have not called a physician in the whole time. My wife had been an invalid for two years, but these bitters have cured her."

Simcoe House,
CORNER FRONT and SIMCOE STS.
TORONTO, ONT.
Best accommodation in the City. TERMS \$1.50 and \$1.00 per day, according to Location of Rooms
The Most Convenient House to all Trains
GREEN & SON, Proprietor.

The American Hotel,
BARRIE, ONT.
Collier Street, Adjoining the Market.
RATES REASONABLE, CENTRAL LOCATION.
FREE BUS TO AND FROM ALL TRAINS.
Every accommodation for Commercial and LUMBERMEN.
W. D. McDONALD, Proprietor.

J. K. POST & CO.
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y.

ROBERT SMALLWOOD
MANUFACTURER OF
The Patent Lever Feed Shingle,
Box Board & Heading Machine
(Always takes First Prize.)
Rotary Saw Mills
IN FOUR SIZES, and other
MACHINERY for SAW and
GRIST MILLS.
SEND FOR CIRCULAR.
CHARLOTTETOWN,
PRINCE EDWARD ISLAND

UNION FOUNDRY
Union Street, --- Carleton,
Warerooms, Water Street.
ST. JOHN, N. B.
Allan Brothers
(Late of Harris & Allen)
MANUFACTURERS OF ALL KINDS OF
Steam Engines
AND
MILL MACHINERY.

Ships Windlasses, Iron Capstans
and Ships CASTINGS of all kinds.
Ships Cambooses & Cabin Stoves
COOKING AND HEATING
STOVES,
Shop, Office and Parlor Stoves, and Franklins
Agricultural Implements.
BRASS CASTINGS.
Tin, Sheet Iron and Copper Ware for SHIP and HOUSE USE.

E. S. VINDIN,
Commission, Shipping, Forwarding and
General Agent.
LUMBER MERCHANT
Office, Tempest's Block, Port Hope.

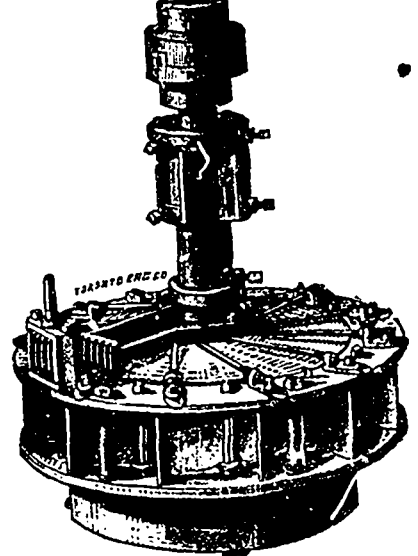
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Dealers in all kinds of
Lumber, Lath & Shingles,
Office, Union Loan Building,
Toronto Street, Toronto.

17 YEARS' EXPERIENCE.
HOWIE'S DETECTIVE AGENCY
OFFICES, 32 KING STREET EAST,
TORONTO, ONT.
All legitimate Detective business attended to for Banks, Fire and Life Insurance Co's, also for private parties. This agency does not operate for reward.

CHOPPING AXES
(Made to Order and on hand)
MILL PICKS DRESSED in a first-class style. Those shipped by rail will be returned promptly.
Lance Tooth Saws Gummed. AXES WARRANTED.
W. HERLIHEY, Lindsay.

J. L. Goodhue & Son
MANUFACTURERS OF
Leather Belting!
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THE CANADA LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY
TOKER & Co. PETERBOROUGH.

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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

PETERBOROUGH, Ont. JULY 15, 1882.

HILLIARD & DICKSON'S raft, one of those recently wrecked in St. Croix Bay, has been all saved, and the last piece of timber has arrived.

FRESNO County, Cal., has an apricot tree measuring 60 inches around the trunk three feet from the ground, which has about a ton of fruit.

THE new mill of the Ontonagon, Mich., Lumber Company is making a good early record. During a recent week it turned out 519,949 feet of lumber.

MR. WILSON, recently from St. Thomas, is erecting a large saw mill on lot 30, 8th con., of the township of Dawn, about three miles from Oil Springs. Mr. Wilson will go into business pretty extensively, and will find a market for the major portion of his production in Germany.

A LOGGING railroad has been opened on Hood's canal, at Or near Olympia, W. T., by McLeary Bros., which has cost \$10,000, and the locomotives \$5,000 additional. The road taps a 4,000-acre tract of fine timber, from which 30,000 to 50,000 feet can be cut daily for 10 years, according to the estimates.

A RAFT ran aground on Hog Island, near the foot of the Cedar Rapids on Saturday, July 8th, and a portion of it broke to pieces, some of the raftsmen being precipitated into the river, and with difficulty rescued from drowning by their comrades. Mr. Jackson, the well known pilot, left Montreal on the train with a party of twenty Caughnawaga Indians to assist in getting it off.

THE Montreal Gazette says an unusually large amount of timber has arrived at Lachine this season, so much so that the booms were completely filled; and what timber remained outside of them was in great danger of being wrecked. This fact being represented to Mr. Conway, the efficient canal superintendent, he immediately provided the extra room required at a small cost to the Government, who will get large returns from the boom dues on the extra room. The thanks of the trade are due to Mr. Conway for his action in the matter.

THE Buffalo Lumber World says:—While the white pine districts of Michigan and the North-west are being rapidly stripped of their timber, and many are confident that the chid is already born who shall see those regions denuded of the last stick of pine, there are in the South millions of acres of yellow pine, which is esteemed by many quite as good as the white for most purposes, on which the woodman's axe has never yet been heard.

A QUEBEC correspondent says on July 7th:—The timber market has been dull up to the present time. The half of Mr. Peter McLaron's last year's lot of lumber, about 165,000 feet of white pine of about 57½ feet average, has been sold at 34c. per foot; also a dram containing about 35,000 feet of white pine, of 50 feet average, at 26c. per foot. A lot of red pine of about 38 feet average has been sold at 14 and 16c. per foot according to age.

THE Lumberman's Gazette says the season has now come when our people should beware of forest fires. Let those clearing land see to it that their fires cover no ground other than that intended. By these forest fires an incalculable injury may be done. First, the country will be lost in smoke and ashes; second, a great loss of valuable timber will be sustained; third, fences, farms, and maybe towns will be destroyed; fourth, the country through which the fires rage is temporarily blockaded, and fifth, its beauty is permanently lessened by the burning.

THE Hamilton correspondent of the Globe says:—Mr. F. W. Fearman, of this city, a short time ago sent a bag of soft maple seed to a friend in Manitoba, which has been received and planted. From this seed in a short time it is expected a small grove will spring up, which will not only be useful for wood in the Prairie Province, but will be ornamental and a protection against the wind. Mr. Fearman advised the planting of the seed in rows one inch deep in the soil. The tree from which the seed was taken is about twenty years old, and if cut down would make over a cord of good fire-wood.

THE township health officers in Edwards township, Ogemaw county, Mich., propose to hoist two dams in that township, and have given notice to that effect. As about 100,000,000 feet of logs depend upon these dams for water to carry them into boom limits, the owners of the same are naturally considerably exercised regarding the matter. The action of the township officers is said to be on the ground of health, but it is asserted that no one resides within a mile and a half of the dams. The log owners interested have taken legal advice to get an injunction to restrain the hoisting of the flood-gates.

THE Timber Trades Journal, of London, England, says:—The improving value of timber lands in Canada appears to be attracting the attention of capitalists in this country, and especially in Scotland. Two of the Scotch Canadian companies, viz., "The Quebec Timber Company," and the "British Canadian Lumber and Timber Company," are at present requiring increased capital, the former company for the purpose of purchasing about 315 square miles of valuable pine limits in the Ottawa district; and the latter are offering 5 percent. debentures, secured on their valuable timber limits, stated to be worth £300,000.

THE Ottawa Herald, of July 8th, says:—By actual measurement this morning the Ottawa River is 5 feet 4 inches higher than ever before at this date, within the memory of the oldest raftsmen on these waters. Other years at this season the numerous sand bars between this and Greenville were impassable for boats, but up to the present pilots have experienced no trouble from these obstructions. The same unusual height of water is experienced on the Upper Ottawa, and its principal tributaries, so that in view of the large quantities of timber that have already been floated down, it is confidently expected that the drive this year will be complete. The only drawback may be the possible overstocking of the market at Quebec, which will have the effect of reducing prices.

THE Timber Trades Journal says it has frequently been discussed whether Quebec pine or best redwood boards are the more suitable for mould-making. The matter is not one which is capable of being decided "off-hand." On the score of quality alone, we are of opinion that pine must rank first. Pine mouldings are capable of receiving a higher finish, and take coatings of paint better than do redwood mouldings. Redwood mouldings must, on the other hand, be awarded the preference on the score of economy. The wood costs less than does pine, and the redwood being longer in its lengths, the waste necessitated by the use of the short lengths of pine is avoided.

FOREST FIRES.

OWING to the frequent showers and the cool weather with which we have been favoured thus far this season, our forests have suffered little or no damage by fire as yet, although we fear that unless more than the usual precautions are observed during the next two or three months, we shall yet have to record a considerable depletion of our timber reserves, by the fire fiend. With a little extra care, and at a moderate expense, however, we cannot help thinking that if "trees had votes" much might, and would be done to render the year 1882 a red letter one in this respect. The expense of putting forth some extra exertion to protect our forests during the few weeks of the dangerous season which now remain, certainly could not be great, and ought to be easily undertaken by those already in the employ of the Woodland Forest Departments of our Local Governments. That the people of Canada are destined to pay, at no distant day, for their carelessness in this respect, cannot be disputed by any one who has their eyes open to what is transpiring around them. The rapidity with which our home demand is developing, and the constantly increasing difficulty with which it can be supplied at what one is inclined to look upon as a reasonable figure, should make everyone realize that it is of importance to them that our timber resources should be husbanded with the greatest care, and that a judicious expenditure of the public funds for such a purpose would be money well spent in more ways than one. Were it not that we are aware that the continual dropping of water will wear a hole in the hardest stone, we should feel disposed, in sheer despair of anything to this end being done, to remain silent on the subject, but hoping that our little droppings, combined with that which falls from other sources, may yet have some effect and lead to some practical action on the part of those to whom these important interests are entrusted, we once more utter a word in behalf of the protection of our forest wealth, and of the important interests dependent thereon, from the annual deprivations which it suffers by fire.

QUEBEC CULLERS' OFFICE.

The following is a comparative statement of Timber, Masts, Bowspits, Spars, Staves, &c., measured and culled to date:—

	1880.	1881.	1882.
Waney White Pine.....	720,528	469,252	484,464
White Pine.....	916,547.	1,317,080	1,137,028
Red Pine.....	245,764	230,343	176,391
Oak.....	616,504	674,404	642,929
elm.....	445,430	587,009	260,769
Ash.....	102,605	209,882	103,467
Basswood.....	.....	3,099	129
Butternut.....	285	297	1,442
Tamarac.....	9,316	4,331	727
Birch and Maple.....	571,837	117,331	188,754
Masts.....	.....	.....	32 pcs
Spars.....	.....	.....	.....
Std. Staves.....	0.6.0.2.6	69.6.25	126.8.0.20
W. I. Staves.....	123.9.1.16	116.2.2.20	225.4.0.19
Irl. Staves.....	.....	.....	1.7.3.29

ALEXANDER FRASER,
Deputy Supervisor.

Quebec, 7th July, 1882.

Sawdust Utilized.

The Chicago Northwestern Lumberman says: "Sawdust from Leathom & Smith's mill Sturgeon bay, Wis., supplies fuel to the steam barge Smith for her trips between that port and Chicago. The dust is taken from the circular to the bin, which is located at the edge of the wharf, and run into the hold of the craft by means of a spout, thus saving handling, etc. If this new venture proves successful, as there is no doubt, a great saving in time and expense is expected."

THE FRENCH TRADE.

BORDEAUX, June 12th.—The weather continues unsettled, to the great detriment of the wine harvest, but in some parts of the interior, and also in Spain, complaints are heard of the drought. Cargoes continue to come in gradually. Some arrivals of Dram flooring, and the Norwegian goods generally, have not met with satisfaction, the wood being considered to have too many knots, spoiling its appearance. It remains to be ascertained whether the brack for the French is the same as for the English market, which I have no doubt it is. There is another steamer chartered for wood to the Mediterranean, from St. John to Barcelona. The French steamer Panama, with wood goods from that place, has now arrived at St. Nazaire.

The Gironde of June 10th says:—We are expecting the arrivals of spruce shortly in the market. Several vessels are already en route, and a lot loading at St. John and Miramichi. These arrivals are indeed welcome, as there are scarcely any attacks of whitewood at our place. The news received from various Swedish and Finnish ports announces that several steamers and sailing vessels are on the way to our port, and others loading.

BUNDLING LATHS.

The Timber Trades Journal says:—Objections have been raised to the practice of binding bundles of foreign-made plasterer's laths by means of wire; string, or better still, unwoven rope, is considered to be far preferable by those who have experience of the trade. The wire is admitted to be temporarily stronger than either string or the unwoven rope, but the action of the weather, it is said, quickly corrodes the metal wire, and when this has once occurred the bundles nearly always burst. It will be readily enough understood that laths, immediately on their arrival on this side, are required to endure some rough handling, and without question it is most necessary that the bundles in nine cases out of ten become valueless. The laths get stowed about, broken, uncared for, and lost, for the importer is rarely able, unless he be actually present, to prevail upon his men to break off at their work for the purpose of rebinding them. Most importers of laths will doubtless give evidence of this being the case.

CANADIAN FORESTRY.

Considering the immense importance of her timber resources to Canada, it is a matter of surprise that our forest literature is extremely meagre. We are glad to see in a pamphlet on our table, entitled "The Geographical Distribution of the Forest Trees of Canada," by Dr. Robert Bell, of the Dominion Geographical Survey, the first attempt to give a comprehensive and systematic account of the occurrence of the different species of trees in Canada. This work is extracted from Dr. Bell's report of the survey for 1880, and its publication in pamphlet form at a cheap figure will doubtless have the desired effect of creating a greater interest in Canadian forestry than has hitherto existed. The pamphlet is accompanied with a large and accurate map, on which are represented by different lines the northern limits of thirty of the most valuable species of trees which occur in this country. The pamphlet will be welcomed by all interested in the timber resources of Canada.—Toronto World.

BLACK WALNUT.

The following letter appears in the Timber Trades Journal, of London, England:—

SIR,—Some few weeks since there was an article on the American black walnut, stating that it could only be propagated by seed; could any correspondent mention where seeds can be purchased in this country (the local nurserymen know nothing of them), as the writer is desirous of planting a few as an experiment?

W. D.

It is almost impossible for vessels entering Port Hope harbor to discharge a cargo, owing to the large quantity of timber that is daily arriving by the Midland Railway from Lindsay, there being an average of about 16,000 feet per day.



TRENT NAVIGATION.

NOTICE TO CONTRACTORS

THE LETTING of the works for the FENELON FALLS, BUCHHORN and BURLEIGH CANALS advertised to take place on the fifth of July next, is unavoidably postponed to the following dates:—
Tenders will be received until WEDNESDAY, THE SECOND DAY OF AUGUST NEXT.
Plans, specifications, &c. will be ready for examination (at the places previously mentioned) on SATURDAY, THE FIFTEENTH DAY OF JULY NEXT.

By order,
A. P. BRADLEY,
Secretary.
Dept. of Railways and Canals,
Ottawa, 20th June, 1882. 1150-law-2113

NOTICE.

TO WHOM IT MAY CONCERN:

Notice is hereby given that the authority of M. W. FORWARD as agent at Oswego for ROSS & CO., of Quebec, is revoked, and his authority as such has ceased. By their Attorney,

SAMUEL P. WIGG.

Dated June 27, 1882. 1w27-1114

D. S. BRIGGS,

9 TORONTO STREET, TORONTO.

WHOLESALE DEALER IN

Clear, Pickings, Common and Hardwood Lumber, Lath, Shingles, &c.

BILL STUFF CUT TO ORDER. 1111

A. L. UNDERWOOD

WHOLESALE DEALER IN

White Pine, Basswood & Hardwood,

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Wholesale Lumber Dealers

TORONTO.

We have for Sale a large quantity of PINE, OAK, WHITEWOOD, ASH, CHESTNUT, CHERRY, BUTTERNUT, BASSWOOD, &c.
S.P.S.—A SET OF TUB MACHINERY FOR SALE, CHEAP—OR EXCHANGE FOR LUMBER. 1111

LUMBER

Shingles, Doors, Sash, Flooring, &c.,

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STATE QUANTITIES AND PRICE TO

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Head Office, 514 Maine Street, Winnipeg, Man. 1111

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PETERBOROUGH.

CASTINGS of every description in Brass and Iron.
All sorts of MACHINERY for Saw and Grist Mills.

STEAM FEED for Circular Saws.
Also Saw Gannets, Cutters, Double Upset Swages, and all Saw Tools.
Send for Price List. 14

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Manufacturer of SURGICAL and ORTHOPEDICAL INSTRUMENTS. ARTIFICIAL LIMBS made to order. INDIA RUBBER GOODS of every description. 1114
688 and 690, Craig Street, Montreal.

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Manufacturer of Every Description of

FILES and RASPS

HAND CUT FILES made from the best Refined English Cast Steel and Warranted Equal in every respect to the best English brands.

NEW FILES neatly put up in labelled boxes for the trade; to whom bottom figures will be quoted. Old and Worn-out Files re-ground and re-cut by hand, and made equal to the New File for use, at prices that will effect a great saving to all consumers of Files. N.B.—Every File Guaranteed. Price List on application, and a Sample Order Solicited.

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Lumber and Commission Agent.

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Lumber Dealers,

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Shipping & General Agents

PORT HOPE. 1111

PORTLAND FOUNDRY.

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MILL CASTINGS

Ship Windlasses, Capstans, and

Ship Castings of all kinds,

(MADE TO ORDER.)

Power Capstans, Patent Ship Pumps

With Copper Chambers. 1115

Lead Scuppers & Water Closets & all

goods in my line for Ships' use.

Work done to Order with Quick Despatch.

Drake Brothers' Box Mill,

Provost Street Extension, New Glasgow, Pictou County, N. S.

SPRUCE, PINE and HEMLOCK SHINGLES

F. H. DRAKE.

1117

N. H. DRAKE.

WILLIAM CAMPBELL

(Late CAMPBELL & FOWLER.)

MANUFACTURER OF

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ESTABLISHED 1862

MANUFACTURERS OF

STEAM BOILERS.

NEW and SECOND HAND ENGINES and other Machinery on Hand and for Sale.

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FOR THE BEST

TURBINE WATER WHEELS

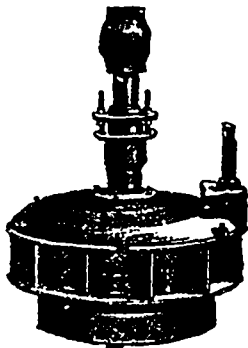
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Mill Machinery,

ADDRESS:

PAXTON, TATE & Co.

Fort Perry, Ont.



Send for Illustrated Catalogue. 1112

SAW MILLS!

Having POLE ROADS to their Timber keep up the Mill Stock and run the year round.

Pole Roads are Cheap, Durable and Speedily built. The Cars can be built by any handy man in a couple of days, and will carry 2,000 feet of Hardwood Logs at a Load, drawn by one Span of Horses.

The Wheels are adjustable on the Axles to accommodate themselves to any bend in the poles.

The Iron Work complete, including Bolts and Washes, with a diagram of Car, are supplied by the undersigned. Prices on Application.

As to cost and utility of Pole Roads we will refer without permission to E. WATT, Gesto, P.O.; W. EDGAR, Kilroy, P.O.; DUNSTAN & IRWIN, Essex Centre, and JAMES NAILOR, Oil City, who are now running respectively 10, 8, 5 and 3 miles, and are stocked with our Cars.

C. NORSWORTHY & CO.,

ST. THOMAS, ONTARIO.

Patentees and Manufacturers of Moore's Improved Taper Cone Feed Saw Mills. 1111

PROPER TIME TO CUT TIMBER.

A correspondent of the *Country Gentleman*, writing to that paper, says:—When to cut timber, especially hickory, is a question that has frequently been asked, and will continue to be as long as there is timber to cut. That there are seasons of the year when timber intended for use ought not to be cut, is very manifest to my mind from personal observation and experience of others. A few years ago I cut a number of white oak trees, and made them into rails in December. They were put into a fence on high, open ground, where they had the full benefit of air and sunshine. At this time there is not a single sound rail in the lot, and a great majority of them are entirely rotted, and others put in their place. I have had rails made at nearly all other seasons of the year, and have never had them rot as these did. I have peeled a great deal of chestnut and oak timber for tannery, and made most of the trunks into rails. I have noticed that some of these rails have lasted better than others, which causes some to think that there is something as to the time they are cut, and I am led to believe that timber cut in the light of the moon will last better when exposed to the weather than that cut when the moon is on the decline.

I have also noticed that from some oak rails made during the latter part of the winter from green timber and put into the fence, the bark will drop off in a year or two, while on others it will remain tight for years. I have moved fences that were built for 30 years, the bark on many of the rails was sticking fast. Hickory timber cut in the light of the moon in February will never become powder posted or worm eaten, no matter whether the bark is taken off or not, while that cut in the dark of the moon will be worm eaten and posted; of this I am satisfied beyond a reasonable doubt. I had an uncle who engaged to make a lot of ramrods for a gunsmith. Without taking thought he cut the timber during the dark of the moon in February, shaved the rods out and put them up in the garret to dry. For some cause or other he left them there over the summer. The next winter, when he went to examine them, they were literally eaten up. To look at them a person would suppose they were sound, but take them in hand and break them, they were nothing but a shell. I examined them myself, and know whereof I affirm.

A few years ago I engaged to furnish a wagon-maker a lot of hickory for wagon-axes, and cut all of the trees in the light of the moon except one. I hauled the tops and limbs of the trees off the ground for wood. That which belonged to the single tree I piled by itself, and I never moved it. During the following summer it was completely honey-combed, and in a very few years had rotted entirely away. I have also cut hickory in June and peeled it, which was never touched by worms. I can find some hickory rails on an adjoining farm that were made over 60 years ago, but know nothing about what time of the year they were made. Timber girdled in the light of the moon in June will stand for years and season and dry out, while at other times they rot and tumble down in a very few years.

Commenting on the above, the *Blacksmith and Wheelwright* says:—We agree with this writer that there is a proper as well as an improper season for cutting timber. We know from experience that two pieces of timber of the same kind, growing with the same exposure, and as nearly alike, in all particulars, as it is possible for two things to be alike, but cut at different times, will behave very unlike. One will remain sound for a long time, while the other will manifest some of the symptoms described by the writer of the above. We have never thought of going to the moon, however, for an explanation of the difficulty. We know the moon is accused of a great many offences, that it has in special charge the tides and other terrestrial phenomena, but we are disposed to defend it in this matter of the durability of timber. We believe the reason is to be found nearer at home, and that if investigators will study the habits of certain insects which prey upon timber, the condition of the timber itself with respect to its sap at the time it was cut, and the character of the soil upon which it grows, they will be much more likely to solve the ques-

tion than by turning to the moon. This problem is one which has not been sufficiently studied. There is not enough information on the subject. The prevailing ignorance makes it possible for a writer to attribute all the phenomena observed to the occult influence of the moon, and in so doing to appear plausible. This question of the proper season for felling timber is one to which experienced, practical men can well devote attention.

SAGINAW SAW MILL IN AUSTRIA.

Wickes Brothers, of Saginaw, Mich., manufacturers of saw mill machinery, are about shipping a complete mill outfit to Stettin, Germany, from whence it is to be conveyed into the heart of an immense pine forest in northern Austria. This is the first complete American saw mill ever sent to that section of Europe. It was purchased by Count Chambour, a French nobleman, who is largely engaged in lumber manufacture, owning several mills and large tracts of valuable pine in northern Austria. Mr. H. D. Wickes effected the sale while travelling in Europe last March. The machinery to be shipped, including an engine, will weigh about 40 tons, and will make an entire train load for the small cars that are employed in Germany. The mill outfit will include a 38-inch patent gang, a full complement of all auxiliary saws, all the shaftings, bolting, pulleys, saw-gummers, files, and everything down to files. Everything will be American, except the boilers for the engine. It is thought that the transportation expenses will add 50 per cent. to the cost of the outfit laid down in the pine woods of Austria. But it will pay where it is to be put up, inasmuch as the mills now in use are of the kind that have saws that go up one day and come down the next, or words to that effect.—*Northwestern Lumberman*.

DUTY ON A HARBOR CRIB.

Our readers will remember that Messrs. Rathbun & Co., recently had a monster harbor crib built in Deseronto and towed across the lake and put into position at Oswego, where their extensive docks are. They are horrified now by a heavy duty being put upon their importation. The Hamilton Spectator says that the Treasury decision is as follows, sent to the Collector of Customs at Oswego: "Sir,—The department is in receipt of your letter of the 19th inst. reporting upon the appeal of E. W. Rathbun & Co. from your decision assessing duty at the rate of thirty-five per cent. ad valorem on a certain wooden crib imported into your port from Canada, which they claim to be dutiable at the rate of 20 per cent. ad valorem. It appears that the crib in question is a large wooden receptacle for stone, which is intended to be sunk and used in building a pier in the harbor at your port. It is made of 'flatted' logs, timber, and planking fastened together with iron bolts and wooden pins, and in this condition was towed into your harbor. Such being the case, the article is clearly a manufacture of wood, which is dutiable at the rate of thirty-five per cent. ad valorem.—*Kingston News*."

TRANSPORTING LOGS.

The *Lumberman's Gazette* says:—"We have before alluded to the possibility of transporting logs from the Georgian Bay and other points to supply the mills on the Saginaw river with stock, after the same shall have been exhausted hereabouts. We have always had faith in the feasibility of the proposition, and expressed our belief that the ingenuity of man would overcome the difficulties presented, when the necessity should arise. The possibility of towing long rafts of logs any considerable distance has been found hazardous business as at present conducted, although practical lumbermen have expressed implicit faith in the possibility of constructing cribs so as to insure practical safety in transporting logs by this method. A new plan, however, has lately sprung into prominence, which may possibly be extended and improved upon, and thereby overcome the obstacles which have hitherto seemed so insurmountable. The new plan is nothing more or less than the transportation of logs in peculiarly constructed scows. The great objection to this plan has hitherto been embraced in the difficulty and ex-

pense of loading and unloading the logs. This has been partially if not wholly overcome by a device now being utilized in some of the Wisconsin districts. The *Green Bay Advocate* in a late issue says:—"The new log lifting and carrying device of Wm. Baptist & Sons proves a success and is now in practical use. It consists of engine, boiler and hoisting apparatus on a scow. The hoisting concern picks up a log from the water or shore and deposits it in the scow in one minute. The trouble experienced thus far is in letting go of the log after it is on the scow. The clamp is similar to ice tongs, and when a log is lying with others it is hard to unclamp it. This, however, is a trifling defect, which will be easily overcome. It proves much safer and more expeditious to bring logs in a scow than to tow them in a raft. The difficulty alluded to is of such trifling magnitude that it is unworthy of consideration in this connection. If the mode of log transportation, as above, proves practicable on a small scale, it will undoubtedly be enlarged and improved upon, and thereby settle the long discussed problem of the future log supply for the mills on the Saginaw river in which so many millions of dollars are invested, and thus obviate removal or demolition."

KENTUCKY TIMBER.

A correspondent of the *Northwestern Lumberman* from Southern Kentucky complains because so much of the timber is shipped away to be consumed in manufacture, whereas the woods might as well be made up into commodities at home. At many of the railroad points some of the most magnificent walnut is seen, some of the logs measuring over four feet at the butt. It is shipped to Cincinnati, Ohio, and other northern furniture-making markets. The correspondent says:—"It seems a little strange that outside cities clamp down upon and utilize our state products, convert them into furniture, and realize vast profits, while our citizens stand idly by, dreaming, with listless gaze, at the absorption of our wealth. Walnut trees are bought standing in the forest, and the title conveyed away as real estate, to be gathered in as they are wanted. Almost every respectable tree in these rich valleys has been sold, leaving but a small balance for future dealers. Even the stump and roots are sold and used for veneering purposes, affording the most beautiful specimens of ornamental and decorative lumber. Not only does this section abound in valuable walnut, but in oak, ash, hickory and other fine timber."

An Iron Tree.

The iron palmetto at Columbia, S. C., is the greatest work of art in the State House yard. This is a casting wholly of iron, commemorating the death of many of Carolina's slain, whose names are found in raised letters on brass tablets at the base. The success of this casting consists in its perfect imitation of living palmetto—the favorite tree of South Carolina. We had heard of this statue in other places, but had never been able to believe the stories of the flexible leaves bending in the breeze, supposing this phenomenon an optical illusion, but such is really the case. The long thin leaves of iron, life-like even to the hair like fibres of the twigs and branches, wave tremulously in every zephyr, and the whole tree, painted artistically, has so close a resemblance to the real tree as to deceive the acutest observer at the distance of five rods.

Scorched Pine.

The losers of timber by the late fire in the Menominee, Mich., region were as follows:—The Ludington, Wells & Van Schaick Company, 7,000,000; the H. Whitbeck Company, 15,000,000, and the N. Ludington Company, 8,000,000 feet. The fire was in a heavily timbered district near the Brule, and as much as possible will have to be logged during the coming winter in order to save the burned trees. Fires have also run through the great wind-fall that resulted from the tornado last year, and logging on this tract will go forward all summer. The Kirby-Carpenter Company is putting in several millions of feet, while the Ludington, Wells & Van Schaick Company will cut and skid 10,000,000. It is thought that if early driving is begun on the upper Pike there will be little difficulty in running the logs down to the mills.—*Northwestern Lumberman*.

TREE PLANTATIONS.

Mr. B. F. Peck, of Bethany, N. Y., affords an example of what can be done in forest culture. He began a plantation of trees on two fields six and eight years ago. He now has ten acres of trees on rather poor soil, which consists of a clay loam resting on shell-rock near the surface. He grew European larches and Scotch pines. At two years from the seed these young larch and pine trees were transplanted to places where they are to remain, four feet apart each way, an acre thus containing 2,640. Those that have been set six years are now 10 or 12 feet high, vigorous in growth and branching so extensively as to make it difficult for one to pass through the woods. Those are from two to three inches in diameter at the ground. Those set eight years ago are from 18 to 24 feet high, and from four to six inches through. The pines are planted out 16 feet each way. In a year or two Mr. Peck will begin to thin out the larches, using them for poles and small fence posts. The land is thought to pay as well in these trees as if planted to ordinary farm crops, while the advantages they afford in protection to other crops and to the farm buildings is incalculable. Mr. Peck believes if 20 per cent. of our older and rough cleared land was planted to forest trees, it would render the remaining 80 per cent. more productive and valuable than the whole now is.

FORESTS RUINED BY WATER.

The Chicago *Northwestern Lumberman* says the proposition is advanced that water rather than fire is the most destructive element in obliterating our forests. As an instance it is stated that in a new valley among the mountains a beaver dam obstructed the flow of a stream and made a large swamp of a meadow, which was surrounded by a dense growth of pine and hemlock. When the same creek was again dammed back by coal dirt it ruined quite a large area heavily timbered, and the same thing has occurred on a large number of streams. It has been found that where the fires destroy our forests we soon have a new growth of a different species of trees, but none where water destroys them. An investigator following this theory inquires if the treeless plains may not be accounted for upon this basis, which opens a question of cosmography which would require the deepest consideration and the most careful research to determine, if, indeed, it could be satisfactorily settled.

Pine Pipe.

At Lycoming, Pa., a factory has been established by Bower & Wyckoff for the manufacture of wooden pipe, to be used in tanneries, in mines and by farmers. Two buildings are occupied, one as a factory and another for the storage of manufactured stock. The pipe is made of white pine, and is of four inch bore. The sections are eight feet in length, and of all thicknesses, as may be required. The small pipe used by the farmers is rendered durable and preserved from decay through being coated with asphaltum and rolled in sawdust. The factory averages from 1,200 to 1,800 feet of piping per day.

\$200.00 Reward!

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Chips.

DRIVES to the extent of 100,000,000 feet have been safely floated in Aroostook county, Me.

SOME malicious person cut the boom at Chas. Mears' sorting ground, Lincoln lake, Mich., and let 3,000,000 feet of logs go their wayward way.

THE Lindsay Post says a large quantity of the finest hardwood ever shipped from Lindsay is being delivered at the Midland yard near the river.

LUMBERMEN are becoming afraid that the water in the Ottawa will fall and that they will be unable to bring their timber to market this season.

THE Lake Superior News, of Duluth, says—Quite a number of Michigan lumbermen are in the city looking around with the intention of locating if they see a good opening.

THE Cheboygan Lumber Company, of Cheboygan, Mich., recently received a raft of 1,000,000 feet of logs from Waikani bay, Lake Superior, the first raft to pass through St. Mary's river.

THE Montreal correspondent of the Canadian Manufacturer, writing on June 28th, says:—Several car loads of white pine have been shipped to Manitoba during the week, costing \$20 to \$25 per M. feet.

AN adobe building at San Antonio, Texas, 150 years old, has been torn down. It is an old relic, and built in 1730 by settlers from the Canary Islands. Some of the cedar timbers were still good and sound.

IT is thought that over 50,000,000 feet of logs will be sawed in Minneapolis during the month of June, which will make it the banner month in the history of milling in that city. Very few of the mills are running at night.

A GREAT linden tree in Wurtemberg covered four hundred feet with its branches, which were supported by numerous columns, set by kings and others of high degree. A linden at Zurich forms a tower capable of holding five hundred persons.

WALNUT has become scarce enough and dear enough in Canada to suit almost anybody's ideas; but England can beat us a trifle in walnut expensiveness. Two walnut trees blew down in England recently, and the timber was sold for over \$500.

ENGLAND imports some 10,000 tons of cork per annum, and the quantity is yearly increasing, notwithstanding the introduction of many stoppers and substitutes for corks, such as plugs of wood, whose fibres have been specially softened for the purpose, india-rubber, and other materials.

THE Milwaukee Exchange says:—There appears no longer to be any use in publishing rates of freight on lumber and coarse stuffs, such as wood, ties, &c. Vesselmen take anything they can get, and express themselves satisfied whenever they succeed in making a trip that pays expenses.

THE people of Kansas, under the forestry laws of the state, have planted 93,000 acres in trees, the cottonwood being most abundant, and growing most rapidly. Some 6,000 acres have been planted in black walnut, which it is expected will give handsome returns in eight or nine years.

PROBABLY the longest pole road for logging in the state has been built in Midland county, Mich. It is eight and one-half miles long. Rockwell, Stokes & Co. are building a saw and shingle mill on this road and will haul all their product over it, four miles, to the Flint & Pere Marquette road. It will be a circular mill with two Hall machines for cutting shingles.

THE Linden, or Lime-tree, is a rapid growing tree, and often attains a great size. One in Norfolk is 90 feet high and 48 feet in circumference. Another at Moor Park, England, is 120 feet high, 23 feet in circumference at the ground, while its crown is 122 feet in diameter. Another in Kent covers a quarter of an acre of ground. The lower branches of the last named tree have grown out to a great length until they drooped to the ground by their own weight, when they took root, sending out young trees. These in turn put forth branches which again took root, thus forming a second circle of trees.

THE Detroit Marine News says a steamer last week carried out 15 car loads of Michigan oak lumber, sawed to dimensions and billed through to Glasgow, to be used in constructing railway cars. It is believed that this order will be followed by others, because our northern oak possesses qualities much sought after by builders, but not found in British lumber, save that which commands a very high price.

AN Ottawa correspondent says that during the week ending July 1st, 551 cribs containing 15,700 pieces of timber passed through the Calumet slide, through Chats slide 552 cribs, through the Chaudiero slide 290 cribs, representing 6,764 pieces of white pine and 1,102 of red pine; through the Carillon slide, 112 cribs of square timber and 25 cribs of deals. Through the Gatineau boom slide there passed since the 26th of June 30,807 saw logs and 7,500 railway ties.

THE Northwestern Lumberman says the ever increasing demand for shingles has been enhanced to a very important degree by the recent destruction of several large mills, which has cut off the supply to a serious extent. As a result most of the mills now running have no trouble to dispose of their product, and in many cases have large contracts ahead. Norreter & Melcher, of Saginaw, Mich., have contracts ahead for cutting 3,000,000 shingles at the Crow Island mill.

THE ash frequently attains a considerable size. During the last century there was a hollow trunk of an ash tree, forty-two feet in circumference, at Doniroy, Ireland. The village school was kept in this tree for a time. An ash in Lochaber churchyard, Scotland, is said to have been fifty-eight feet in circumference, measured five feet from the ground. At Carnock, Scotland, is one planted in 1593, which is 90 feet high and 19 feet in circumference, five feet from the ground.

THE Dexterville, Wis., woodenware factory is owned and operated by Geo. Hiles & Son. The stove department occupies a building 50 x 100 feet, and over 6,000 staves are manufactured daily. Fifteen acres are occupied as stave piling ground, and 4,000,000 are now on hand. The syrup keg department is 40 x 70 feet, and there are six double dry houses. There is a pail and tub factory being erected, 65 x 100 feet, and two stories high. The total cost of the establishment was \$70,000. The company has 40,000,000 feet of timber.

A FARMER in the township of Brantford, Ont., writes to the Mail as follows:—"I have maple trees I set out in 1842, one of which measures 57 inches in circumference three feet above the ground, and I have white oaks that are now between 60 and 70 years old, which measure over 9 feet in circumference. This being the case, we and the generations to follow need not dread a want of timber and wood for fuel if we only begin to plant trees about our farms, and if those of us who have bush lands, when taking out the large trees, will only be sure and leave the saplings."

A BOAT to be used for the purpose of a floating saw mill has been built on the river at Nashville, Tenn., by Messrs. Green & Wallace, for operation on the Upper Cumberland. The design of its projectors is to buy pine, cedar and walnut timber on the banks of the river, and to convert it into lumber for market on the vessel, at the rate of several thousand feet per day. Captain Green has announced it as his intention to buy all the logs from Walnut Bend down to the city. The vessel is a novel structure, 100 feet in length and 22 feet wide, and has a full saw mill equipment.

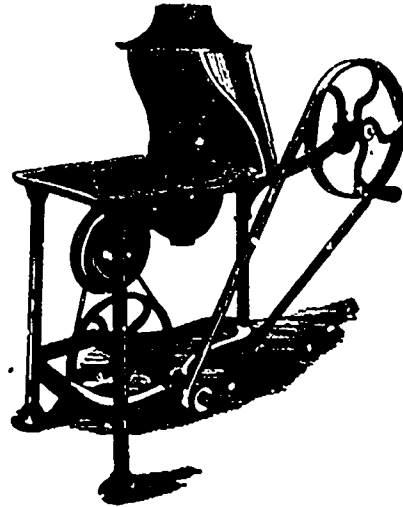
THE Northwestern Lumberman says the lumber manufacturing points are now exhibiting great activity, Muskegon, Saginaw and Minneapolis being particularly on the boom. At the latter point, taking the estimate of 392,000,000 feet of logs as the sawing supply for the mills for the season, they have more logs than they can cut, notwithstanding the briskness which characterizes operations. The amount of logs cut shows a large increase over those cut last year. The surveyor general has recently given some encouraging figures showing the increased operations, which are about double. Since every mill owner has prepared for an exceptional season, it is regarded that Minneapolis will see the biggest boom this season it has ever had.

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Market Reports.

MONTREAL.

From our own Correspondent.

JULY 10th.—Since the date of our last report there has been quite a number of holidays and church festivals, which always interfere more or less with business. Lumber dealers here state that the amount of business done so far this year is quite equal to the same period last year, and a brisk and healthy demand is expected for some time to come. Stocks are full and a good deal constantly arriving. A large number of rafts have been passing here for Quebec with deals for the English market. Prices are well maintained and firm. We quote as yard as follows:—

Table listing lumber prices for Montreal, including Pine, Spruce, Hemlock, and various grades of deals and shingles.

FREIGHTS.

A number of vessels are in port, chartered some time ago for lumber to the river Platte. The rates to-day for large vessels is \$13@14, and for small vessels \$15. Freight market easier.

SHIPMENTS.

The shipments from this port from the 23rd of June to date were as follows:—To Hartlepool, 874,426 feet of lumber and 25,545 deal ends; to London, 277,200 feet of lumber and 51,003 pcs deal ends; to St. John, Nfld., 3 million W. I. staves and 273 pipe staves. The shipments to the River Plate since the opening of navigation to date are 4 vessels, carrying 1,696,347 feet, against 5 vessels, carrying 2,454,888 feet, for the same period of 1881, showing a decrease of 758,541 feet.

CORNWOOD.

The corporation contract for maple was given out some days ago at \$7.40 delivered, the corporation to pay the expense of loading. The Court House contract has not been given out yet. The general demand has been dull and not likely to be much better till September. Prices are firm as quoted on the wharf and railway station, but not much coming in. We quote:—

Table listing prices for various types of maple lumber, including Long Maple, Short, Long Birch, Short, Long Beech, Short, and Tamarack.

TORONTO.

From our own Correspondent.

JULY 10th.—Since last writing you the local trade has assumed a somewhat healthier tone; still there is not nearly the same amount of trade being done as at the same period last year, but I have no doubt it is now being carried on more carefully and with a determination on the part of dealers to make as few bad debts as possible, and it is better for all interested that such should be the case, and will prevent a certain class of men who have hitherto lived and traded on the credulity of the lumberman and hardware dealer, from pursuing their dishonest practices any longer. There has been far more of this kind of trade done than has been agreeable to the retailer, and a comfortable living has been made by such men, at their expense, and the present unhealthy state of the building trade is due solely to this cause, in this city at least, and any man, or number of men, who take such steps as may effectually check such dishonest practices confers a benefit on the community at large, and hereafter we may expect to see a more reputable class of buildings erected, and the competent and honest builder receive a fair remuneration for his work, and the writer, for one, earnestly exclaims, so may it be.

Shipping over the docks is nearly at a standstill, very little lumber of the present season's cut being as yet fit to ship, and as a result of this state of affairs, freights have had a tumble. Plenty of vessels can now be had at \$1 per M to Oswego, but even at that figure vessel owners

cannot find freights for their crafts, so they have to wait and hope for better times, indications of which are not far off, and I have no hesitation in predicting a busy fall trade. A bountiful harvest over the borders, and fair prospects for the same here, will all tend to stimulate the lumber trade, and all that will be required to ensure prosperity to this fair Dominion of our will be a careful administration of its affairs, combined with prudence and economy on the part of its people.

Prices at the yards remain the same, with no surplus of stock on hand.

QUOTATIONS, FROM YARDS.

Table listing quotations for various lumber products from yards, including Mill cull boards, Shipping cull boards, Scantling and joist, and Cutting up planks to dry.

B. M.

Table listing prices for various types of flooring, including 1 1/2-inch, 1 1/4-inch, and 1 1/2-inch dressed and undressed.

LONDON, ONT.

From our own Correspondent.

JULY 10th.—Since writing my last letter no new feature can be reported of this market of a favorable character. The demand for lumber of all or any grade is almost nil, and there is no accounting for the lull, for it is quite unusual at this season of the year, when building operations should be active.

There is not much building going forward in the city or suburbs, and house property does not seem to be a favorite investment in London just now. It is, however, just to the merchants to say that they retain their prices firmly, and they say that if any change takes place it must be upwards.

The quotations here for common stock is \$16, and at the mills they are asking and firmly holding at \$14. This, with freight and other incidentals, does not leave sufficient margin.

The universal impression among the lumber merchants here is that lumber will "jump up" to much higher prices than at present, and that, too, before long.

The block pavement contracts have been let to Mr. Cathro and his partners, these are from Richmond along Dundas street to Wellington, and from Dundas along Richmond to Fullerton street.

QUOTATIONS.

Table listing quotations for various lumber products in London, Ontario, including Mill cull boards, Shipping cull boards, Common boards, Scantling and joist, and Common stocks.

OTTAWA.

From our own Correspondent.

JULY 10th.—No sales of the "season's cut" have been made, or large orders received by millowners hereabouts this year as yet. At this period last season almost every one of the lumbermen had their cut sold, and were extremely busy filling their orders, having very little stock for the general demand. This fact is considered somewhat remarkable. A number of American buyers are at present at the Russell House. It is probable that some large orders will be made known within a few days.

Quotations remain unchanged. Shipping by

boat is unusually dull just now, the docks at the Chaudiere being lined with American boats awaiting loads. Several firms, among them J. R. Booth, are shipping by rail to Quebec large quantities of deals. In previous years these deals were altogether shipped by boat. Mr. Booth, although shipping by rail, is the owner of the largest fleet of boats among the Chaudiere lumber kings.

No change on the Quebec square timber market is reported. No sales have taken place as yet. Nearly all the rafts destined for the ancient capital have passed the slides at this place.

There is a diversity of opinion among limit owners on the Upper Ottawa as to the propriety or wisdom of rebuilding the Gordon Creek improvements which were destroyed by the high water a few weeks ago. The cost of these improvements was in the neighborhood of \$1,000,000, and this sum is almost a total loss. By the Gordon Creek route a considerable saving of distance is effected in the bringing down of logs and square timber from the Kippewa. The old route known as the Smith will now have to be resorted to, and will, it is thought, be generally used in future, as it is hardly probable that the Gordon Creek dams will be reconstructed.

A new steamer, called the Argo, has been placed on Lake Temiscamingue for towing purposes. She cost \$20,000 and is owned by the Lake Temiscamingue Steamboat Co.

A petition has been in circulation and freely signed by the lumbermen to the Government praying the latter to do away with the charges on the Carillon slide. Their request will likely be granted, as the revenue derived does not amount to a great deal.

ST. JOHN, N. B.

From our own Correspondent.

JULY 7.—Since my last report the lumber market here has been considerably depressed, owing no doubt to the low prices ruling in Great Britain, the last sales of spruce deals in Liverpool by auction having averaged only about £7 5s. per standard, which would be sure to leave a loss at the late high prices. Freights are also a great deal firmer, on account of the slight advance in the United States, and steamers are accepting the current rates there sooner than come here for deals. I quote freights as follows:—

Table listing shipping rates for Liverpool, Bristol Channel, and Ireland.

SHIPPING.

The following is a list of the vessels in port, with their tonnage, destinations and rates of freight:—

Table listing shipping information including vessel names, destinations, and dates.

COMPARATIVE SHIPMENTS 1ST. JANUARY TO DATE.

Table comparing shipments for 1881 and 1882, listing deals, pine, and birch.

OSWEGO, N. Y.

JULY 10th.—There is no change in quotations. The demand is very light.

Table listing prices for various lumber products in Oswego, N.Y., including Three uppers, Pickings, Fine, common, and Common.

ALBANY.

Quotations at the yards are as follows:—

Table listing prices for various lumber products in Albany, including Pine, Spruce, Hemlock, and various grades of deals and shingles.

BOSTON.

JULY 8th.—The Journal of Commerce says trade is not active, but there is a fair, steady demand, and values keep along on a pretty steady basis. The outlook is uncertain, and there is little disposition to order very far ahead. Dry and select grades of almost all kinds of soft and hard woods are comparatively firm.

CANADA PINE.

Table listing prices for various types of Canada pine, including Selects, Dressed, and Shavings.

CHICAGO.

JULY 8th.—The Northwestern Lumberman says:—The holiday fleet on the cargo market was much smaller than had been anticipated, the morning of July 4 bringing a fleet of but 17 vessels, while that of the following day was but 23, the heaviest of the week. Of the dozen vessels on the market July 6, all but one cargo of shingles had disappeared by noon. Asking any of the habitués of the cargo market the conditions as regards prices, one will almost invariably receive such responses as "good," "firm," "remarkably steady," etc., while the same query addressed to buyers will, according to the hopefulness of the one questioned, receive such answers as "remarkably firm," "going all to smash," and the like. The facts are that while taking all things into consideration, prices have been sustained in a remarkable manner, there has been a little letting down upon all grades of stock offered. Piece stuff, as the standard of the market, may still be quoted at \$11, while sales have been made of Muskegon and White Lake stock at \$10.50 and \$10.75, and a fair quotation would be at those prices for lumber from those points, and \$11 to \$12.25 for Manistee and Ludington ordinary stock. A good proportion of long lengths would modify the figures by 25 to 50 cents in each case. No. 1 log run, selected, would bring as much as at any previous time, while log run not closely selected for culls should be quoted from 50 cents to \$1 weaker. No. 2 short has sold from \$11 to \$13.50 for boards and strips, as to quality, coarse stock being dull and neglected. Shingles are decidedly weak and lower. Standards are selling all the way from \$2.37 1/2 to \$2.50, according to the popularity of the brand, while "A" have sold for \$2.50, and the most favorite brands at \$2.75. Clears are held at \$3.15, at which the make of one leading manufacturer has been contracted to August 20.

The falling off in volume of receipt for a couple of weeks past would indicate that manufacturers on the Michigan shore have adopted the policy of withholding shipments, and we learn that more piling at the mills than is customary has been undertaken. The absence of

large offerings during the holiday period was considered by the conservative element of the trade a mark of a wise policy, and while the influence of members of the bear element, in inaugurating a lower price list has so far failed of the expected results at the cargo market, the latest move may be more potent should large offerings continue.

CARGO QUOTATIONS

Table with 2 columns: Item description and Price. Items include short dimension green, dry, long dimension, boards and strips, No. 2 stock, No. 1 stock, No. 1 log run, culls out, Standard shingles, A, Clear, Lath.

Receipts and shipments of lumber and shingles for the week ending July 6, as reported by the Lumberman's Exchange.

RECEIPTS

Table with 2 columns: Year and Receipts (Lumber, Shingles). Rows for 1882 and 1881.

FROM JANUARY 1 TO JULY 6 INCLUSIVE

RECEIPTS

Table with 2 columns: Year and Receipts (Lumber, Shingles). Rows for 1882 and 1881.

LANK RECEIPTS TO JULY 5

Table with 2 columns: Year and Receipts (Lumber, Shingles). Rows for 1882 and 1881.

Increase. 124,150,000 115,470,000

STOCK ON HAND JULY 1.

Table with 3 columns: Item, 1882, 1881, 1880. Rows for Lumber, Shingles, Lath, Pickets, Cedar posts.

TONAWANDA.

CARGO LOTS—SAGINAW INSPECTION.

Table with 2 columns: Item and Price. Rows for Three uppers, Common, Culls.

BUFFALO.

We quote cargo lots:—

Table with 2 columns: Item and Price. Rows for Uppers, Common, Culls.

LONDON.

The Timber Trades Journal, of June 24th, says:—There was one transaction we ought to notice at the sale of Wednesday, at the Baltic, by Messrs. Simpson & Mason, because it determines the value in this market of Montreal best pine.

The arrival of forty wood-laden vessels, of which twenty-four were steamers, in the week ending the 21st, may be considered to have brought a very fair supply, as times go, to this market.

The general dulness now noticeable at the docks is becoming almost a normal condition of affairs there. One day last week we believe there was actually not a single vessel discharging, meantime a lot of stuff is still being delivered, a state of things not so agreeable to the company, who like to see the piles well kept up.

than to London, and steamers necessarily bring such a dose at a time that to charter one of these monsters is not such an offhand affair as might be supposed, though when trade is brisk 500 or 700 standards for that matter are a bagatelle to a London house.

LIVERPOOL.

The Timber Trades Journal, of June 24th, says:—We have again had a slow and dragging week of business, and with a languid market and continued pressure to sell, especially by shippers of pitch pine. Prices have been a shade weaker; the reduced rates, however, seem to stimulate the consumption, and there has consequently been a fair quantity of orders in the market, and the deliveries have been more prominent in quantity than has been the case recently.

On Friday, the 16th of June, Messrs. A. F. & D. Mackay offered one cargo of St. John, N.B., deals and birch timber, one cargo of Bridgewater, N.S., spruce deals, and one cargo of Margaret's Bay, N.S., together with sundry other parcels of goods in store.

A good company of buyers, composed of consumers and dealers from the country as well as the local trade, was in attendance, but in order to get through the various consignments reduced prices had to be accepted, as there was an evident disposition to meet the market.

Spruce deals, St. John, N.B.—

Table with 4 columns: Size, Quantity, Price, etc. Rows for various sizes of spruce deals.

Do. Bridgewater, N.B.—

Table with 4 columns: Size, Quantity, Price, etc. Rows for various sizes of Bridgewater deals.

Do. Margaret's Bay—

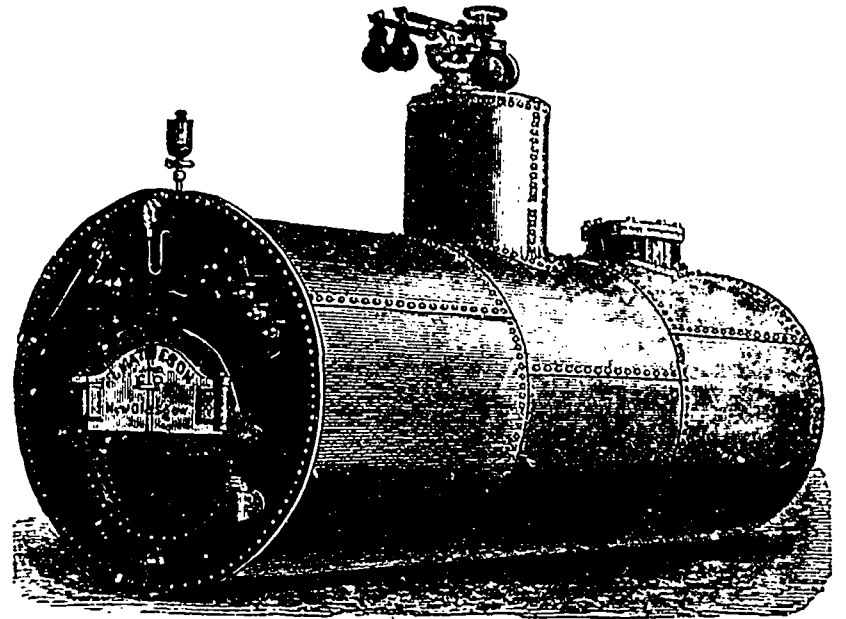
Table with 4 columns: Size, Quantity, Price, etc. Rows for various sizes of Margaret's Bay deals.

Birch timber, St. John, N.B.—

Table with 4 columns: Size, Quantity, Price, etc. Rows for various sizes of birch timber.

Under Maple Ash

Messrs. King Bros. hold their monthly timber sale on Wednesday, 21st June, at their yard,



Advertisement for Acadia Foundry, featuring the text 'ACADIA FOUNDRY' and 'J. MATHESON & Co. ENGINEERS & BOILER MAKERS, NEW GLASGOW, N.S.'

JONES & SON, Wholesale Lumber & Timber Dealers 39 Broadway, NEW YORK.

Oak, Ash, Cherry, Black Walnut, Poplar, Butternut

And all other Kinds of HARDWOOD LUMBER.

White and Yellow Pine Lumber and Timber.

Oak Ship Plank and Timber. Pine Deck Plank and Ship Stock Generally.

Canon's Marsh, Bristol. There was a fair attendance. Annexed are the prices realized:—

Table with 3 columns: Item, Quantity, Price. Rows for various types of lumber and wood.

much the same level as last year so far, and the stock at present in first hands is small. The contrasted imports are as follows:—1882—196,821 pieces; tonnage employed in conveyance, 6,478; 1881—172,551 pieces; tonnage employed, 5,933.

LEATHER BELTING.

Chipman, Renaud & Co.

MANUFACTURERS OF LEATHER BELTING, FIRE ENGINE HOSE, LACE LEATHER, &c.

124 & 126 Queen St. MONTREAL

The Timber Trades Journal, of June 24th, says:—No auction sales to report have taken place here or at Greenock within the past week. Imports have been on a moderate scale, amounting in all to about 2,300 loads. The regular traders from Quebec had not, according to latest advices, cleared for Greenock with the usual supplies of log timber, and it is evident they are going to be several weeks later than last year, arrivals having begun before the end of June in 1881.

ADAM MCKAY,

MANUFACTURER OF

Steam Engines and Boilers,

AND ALL KINDS OF MACHINERY.

Locomotives, Stationary and Marine Engines and Boilers, Girders, Heaters, Radiators, and all kinds of Steam and Brass Fittings and Sheet Iron Work; and dealer in all classes of Railway, Steamboat and MILL SUPPLIES. 1119
144 Upper Water Street, HALIFAX, N.S.



Has Facilities
—FOR—
DOING as GOOD WORK
—AND AS—
PROMPTLY
As any Engraver in Canada
—
ESTIMATES FURNISHED.

ROBERTSON'S

LIGHTNING CANT-DOG

STEEL RING,

The Lightest, Cheapest and Most Durable Cant-Dog in the World.

PETER ROBERTSON,

Chaudiere - - - Ottawa.

6124

Represents
No. 5 20-Horse Power
FIRE-PROOF
CHAMPION
SAWMILL
ENGINE
WITH
SECTIONAL
SAFETY
BOILER.

Build 4 Sizes Fire-Proof Champion Engines

6 H. P.	} WITH PLAIN OR SECTIONAL BOILER If so ordered. We are testing an Engine every day. Intending purchasers are invited to call at our Works and thoroughly examine the Champion. We use KRUPP'S CELEBRATED BOILER PLATE, Every plate tested. Every boiler tested to 100 pounds, cold water pressure.
22 H. P.	
16 H. P.	
20 H. P.	

OVER 600 SOLD
in 5 seasons. The favorite everywhere. It has no equal.

The sectional safety boiler is manufactured expressly for the "North West" trade. This boiler is so arranged that it is readily taken apart in sections enabling purchasers to clean thoroughly every part of it and prevent burning out. We know from experience this is absolutely necessary with the alkaline waters of the great

Western prairies. Largely used by the Pacific Railway Company and all the large Colonization and Rancho Companies.

ADDRESS WATEROUS ENGINE WORKS CO., BRANTFORD, CANADA.
Send for New Circular.

WOOD TO WEAR.

One of the peculiar industries is that of manufacturing clog soles and wooden shoes. The timber is first cut into planks, and on the side of each plank a metal guage is laid, an operative then roughly outlining the size and number of soles which can be cut from it, the planks pass on to a band saw, where they are cut up into blocks with the required curvature for a sole, thence passing to the roughing machine which crudely shapes them. Another machine cuts the sides, another shapes the shanks, and a third round the heels, and the toes are shaped by a fourth. From these they go to a revolving cutter, which roughly hollows the upper side of the sole, and subsequently this hollowed surface is smoothed in another machine. The soles pass next through various finishing machines, the bottoms, sides, shanks, heels and toes being thus successfully rendered perfectly smooth by friction with swiftly revolving bands—the latter covered with a mixture containing ground glass and some other attritive materials—which scour them in the same way as if with sand or emery paper. Finally, a gripping machine levels the edges, leaving a "grip" to which the leather uppers can be fastened. The sole of each wooden shoe, from the time that the log of wood is first cut into segments to the time when the edges are beveled by the gripping machine, passes through 15 distinct machines.—*Northwestern Lumberman.*

THE SAW MILLS.—The British Canadian Company's new mill at Hugel Point is now running. The lumber mills here are all hard at work. Cameron & McLeod's mill is engaged in cutting cedar. The British Canadian new mill and the large mill, formerly H. H. Cook's mill, Chew Bros., and Dollar's Wye mills, are all cutting pine lumber. The lumbermen report the logs all down and in safe water and a full supply for all the mills. This season's cut will far exceed any heretofore in Midland.

The first saw-mill was erected in the island of Madeira in 1420; and the next at Breslau, in Austria, in 1432.

WAR AMONG SQUATTERS.

The Fort Totten special report to the Grand Forks, Dakota, *Herald*: Considerable trouble and some fighting is going on over on the north side of the lake. There are several hundred squatters over there, and some it is claimed are holding more land than the law allows. The new settlers coming into the country try to squat in the land which the other parties claim and a fight ensues in which knives and revolvers are freely used. As yet no one has been killed, though one named Hance was struck with a club and badly hurt. A party of 20 is trying to hold a tract of fine timber of over 3,600 acres. Whenever any one attempts to squat on it they are driven off at the point of revolvers. They will not state where their stakes are, or where or how much they claim. They are thus able to cover a great deal more territory than the law allows. Trouble is anticipated, and the fort commandant threatens to interfere to prevent bloodshed.

Parties just in from Devil's lake corroborate the above statement, and give additional facts, which the *Herald* correspondent who is at the fort, would not care to divulge. It is rumored, though there is no proof of the fact, that Lieut. Creel of the fort has employed the 20 men above mentioned to hold nearly four thousand acres of timber until such time as it shall come into the market. The men, of course, will not state who is employing them. They are well drilled and have a code of signals by which they communicate with each other. When a squatter attempts to settle as stated, they gather to the number of ten or a dozen and tear down his shanty, driving him off by threats of killing. The leader of the gang is an ex-Montana cowboy, who is slightly known in this section. About a week ago a poor man came to the fort with a story to the effect that his shanty had been torn to pieces, and that he had been ordered to leave the country. He had a wife and several small children, who were exposed all night without shelter.

The Stinging Tree.

Among the luxuriant and beautiful shrubs of Queensland is one known as the "stinging tree," which is exceedingly dangerous, and often fatal to life. It grows from two or three inches to 10 or 15 feet in height, and emits a very disagreeable smell. It is also easily distinguished by the peculiar shape of its leaves. "Sometimes," says a traveler, "while shooting turkeys in the scrubs, I have entirely forgotten the stinging tree till warned of its close proximity by its smell, and have often found myself in a little forest of them. I was only once stung and that very lightly. Its effect was curious; it leaves no mark, but the pain is maddening; and for months afterwards the part when touched is tender in rainy weather, or when it gets wet in washing, etc. I have seen a man who treats an ordinary pain lightly, roll on the ground in agony after being stung, and I have known a horse so completely mad after getting into a grove of the trees that he rushed open-mouthed at every one who approached him, and had to be shot. Dogs, when stung, will rush about whining piteously, biting pieces from the affected part."

From a crevice in the stone front of the state library building at Albany, N. Y., a vigorous young elm, now five feet in height, has pushed its way into the world. A large elm, doubtless its mother, stands almost opposite the entrance to the library, and the offspring is as green and hardy as the parent. Nature evidently determined that such an ambitious sprout shall not perish, but in what manner she supplies it with sustenance it is impossible to say. The building is soon to be demolished, and then perhaps the mystery will be solved.

The Lindsay Post says a large quantity of square timber is being loaded on the cars at the Midland Railway. It rather contradicts the theory that there are no sizeable timber trees in the country north of us to look at the sticks. In girth they are all on the large size, and in length a very fair average. It generally calls for two flat cars to each tier of timber. The hauling powers of the engines are severely tested under the immediate loads.

ST. JACOBS OIL

TRADE MARK.



THE GREAT GERMAN REMEDY FOR RHEUMATISM,

Neuralgia, Sciatica, Lumbago, Backache, Soreness of the Chest, Gout, Quinsy, Sore Throat, Swellings and Sprains, Burns and Scalds, General Bodily Pains,

Tooth, Ear and Headache, Frosted Foot and Ears, and all other Pains and Aches.

No Preparation on earth equals St. Jacobs Oil as a safe, sure, simple and cheap External Remedy. A trial entails but the comparatively trifling outlay of 50 Cents, and every one suffering with pain can have cheap and positive proof of its claims.

Directions in Every Language.
SOLD BY ALL DRUGGISTS AND DEALERS IN MEDICINE.

A. VOGELER & CO.,
Baltimore, Md., U. S. A.

ROBERT W. LOWE,
AUCTIONEER AND COMMISSION MERCHANT
 81 SANDS BUILDING, PRINCE WILLIAM STREET.

Cash advanced on Goods put in for sale. *No Storage charged.* All kinds of Merchandise Bought and Sold. New and Second-hand Furniture always on hand. Agent for Hazelhurst & Co's WINTHROP COOKING RANGES, WATERLOO WOOD STOVES, FRANKLIN, &c., &c., &c.

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SAINT JOHN, NEW BRUNSWICK.

MILL SUPPLIES.

Extra Stretched and Patent Smooth Surface

RUBBER BELTING—in Stock, 2, 3, 4, 5, and 6 Plies.
 HOYT'S CELEBRATED LEATHER BELTING.
 COTTON BELTING, for Flour Mills. &c., Superior Quality.

DISSTON'S CELEBRATED MILL SAWS.

Steam Packing of all kinds, Rubber and Linen Hose, Silk Bolting Cloth, Emery Wheels, Lacing Leather (Page's Genuine), Lard Seal, Cylinder, Spindle, West Virginia and Wool Oils. Our Stock includes Mill Supplies and Rubber Goods of all kinds. *Quotations furnished for any part of Canada.*

ESTEY, ALLWOOD & CO., SAINT JOHN, NEW BRUNSWICK.

**ROBIN &
 SADLER**

594, 596, 598, St. Joseph St.

MONTREAL

Manufacturers

of

LEATHER BELTING

Fire-Engine

HOSE,

Lace Leather,

Mill Supplies, &c.

1113



Farmers and Mechanics.

Provide yourselves with a bottle of *PAIN-KILLER* at this season of the year, when summer complaints are so prevalent; it is a prompt, safe, and sure cure. It may save you days of sickness, and you will find it is more valuable than gold. Be sure you buy the genuine *PERRY DAVIS PAIN-KILLER*, and take no other mixture.

Concord, Ont., March 3, 1830.

I have been selling Perry Davis' Pain-Killer for the past six years, and have much pleasure in stating that its sale in that time has been larger than any other patent medicine that I have on my shelves, and in those years I have never heard a customer say aught but words of the highest praise in its favor. It is an article that seems to have combined in it all that goes to make a *first-class family medicine*, and as long as I have a house and store, Perry Davis Pain-Killer will be found in both.

Yours, &c.,

J. E. KENNEDY

Beware of Counterfeits and Imitations.

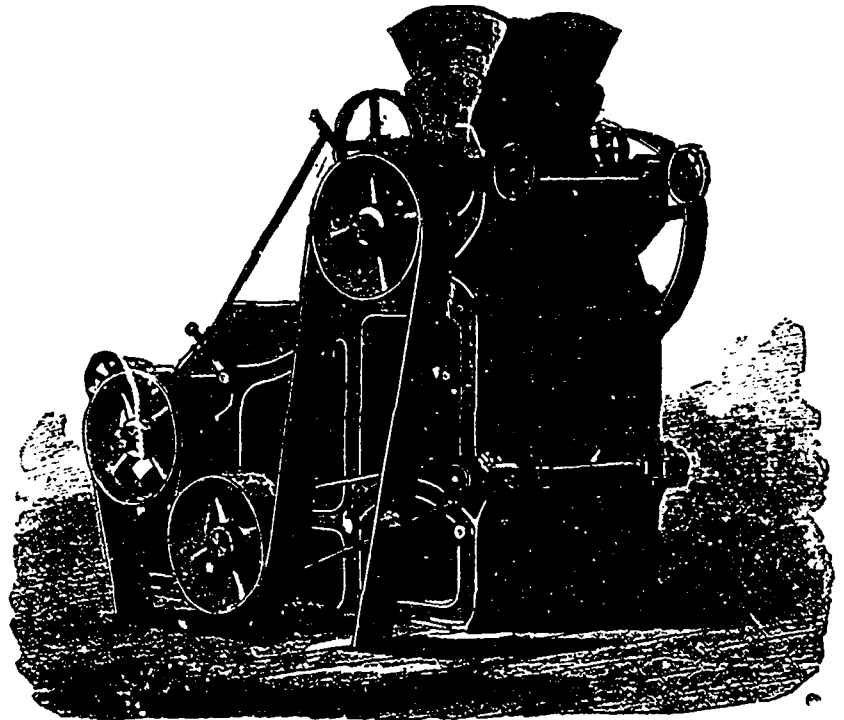
Price 20c., 25c., and 50c. per bottle.

THE LATEST

For Flour Mills of 50 to 125 Barrels Capacity.

GRAY'S PATENT

Gradual Reduction Machine



The above engraving shows the driving side of Machine.

This Machine is by far the Best and Simplest Combined ROLLER and SEPARATING Machine made. It has two pairs of Corrugated Rolls and two Reciprocating Sieves.

The Grain passing down from the hopper and over the feed roll, passes through the first or upper pair of rolls and on to the first or upper sieve, where a complete separation of the product is made, the flour and middlings passing through the sieve and out from the Machine, and the large unreduced portion passing over the tail of the sieve and through the second or lower pair of rolls, when a second separation is made. Each Machine makes two reductions and two separations.

The Machine is perfectly adjustable, the same devices being used as on the simple roller machines. The same feed gate and roll is used, and the same adjustable and self-oiling boxes. The Machine is driven by a single belt. Both pairs of rolls can be spread simultaneously when feed is stopped. The Machine is NOISELESS and DUSTLESS.

These Machines are designed for use where economy in space is desirable, as they save the room required by two scalping reels and an elevator, thus affording to smaller mills the great advantages of the roller system at a comparatively slight cost. Send for particulars

MANUFACTURED EXCLUSIVELY BY

MILLER BROS. & MITCHELL,

Nos. 110, 112, 114 and 116 KING STREET

MONTREAL.

Sole Licensees for Dominion for Gray's Patent Noiseless Roller Mills and Gradual Reduction Machines.

1119

Mention this Paper.

PARKER & EVANS

SOLE PROPRIETORS OF THE
FAMOUS INTERNATIONAL
BOILER FLUID COMPOUND.

Patented 5th March, 1877.

This Compound will save its Cost many times in one year by saving fuel. It eradicates scale, and when the Boiler is once Clean a very small quantity keeps it Clean and Free from all Incrustation. It is perfectly harmless to Iron, and emits a clear pure Steam. In ordering, mention the CANADA LUMBERMAN.

504 St. Paul Street, MONTREAL.

AMERICAN HEAVY Oak Tanned Leather Belting

Rubber Belting, Rubber Packing,
Rubber Hose, Linen Hose,
And Cotton Hose.

A Full and Complete Stock always on hand.
Write for Prices and Discounts.

T. McILROY, JR.

WAREHOUSE—10 & 12 King Street East,

P.O. BOX 556.

TORONTO.

D. McLACHLAN & SONS,

Manufacturers of all Descriptions of
STEAM BOILERS.
SHIPS' WATER-TANKS. Repairing Punctually Attended to.

1115

NORTH SLIP, ST. JOHN, NEW BRUNSWICK.

STEAM SAW MILL OWNERS

Have your Boilers thoroughly Inspected and Insured against Explosion by

The Canadian Steam Users' Insurance Association

HEAD OFFICE, 9 VICTORIA STREET, TORONTO.

SIR ALEX. CAMPBELL, President.
HON. JNO. McMURRICH, Vice-Pres.

GEORGE C. ROBB, Chief Engineer.
A. F. JONES, Secretary-Treasurer. 1-13

MACHINE OILS, ETC.

McCOLL BROS. & Co.

TORONTO,

MANUFACTURERS and WHOLESALE DEALERS IN

Machine and Illuminating Oils

Four (4) Medals and Three (3) Diplomas awarded to them in 1881, by the Leading Exhibitions of the Dominion.

SEND FOR PRICES, ETC.

512

M. Covel's Latest Improved Automatic Saw Sharpener!

Is the Most Perfect Machine that has ever been Introduced into Mills for that purpose.

CIRCULAR SAW STEAM FEED!

I would also call special attention to my

Heavy Circular Saw Mills

and for STEAM MILLS, would recommend the Steam Feed, having put in several which are giving the best of satisfaction, as will be seen by the following testimonials:—

GRAVENHURST, August 20th, 1880.

WM. HAMILTON, Esq., Peterborough.
DEAR SIR—I have used your Steam Feed for near four months, and it has given me perfect satisfaction in every way; it is admitted by every person who has seen it work to be the best feed ever invented. Since I put it into my mill, I have not lost ten minutes time fixing anything belonging to it. I can cut 18 bears 13 ft. long in one minute. It can do much smoother and better work than the piston feed. It is easily governed and reverses the carriages instantly. I am thoroughly satisfied with it and can recommend it to any person who has a Circular Saw Mill for cutting long or short logs. I consider I have cut more lumber than will pay for the Steam Feed since I got it than I would have cut had I not put it in.

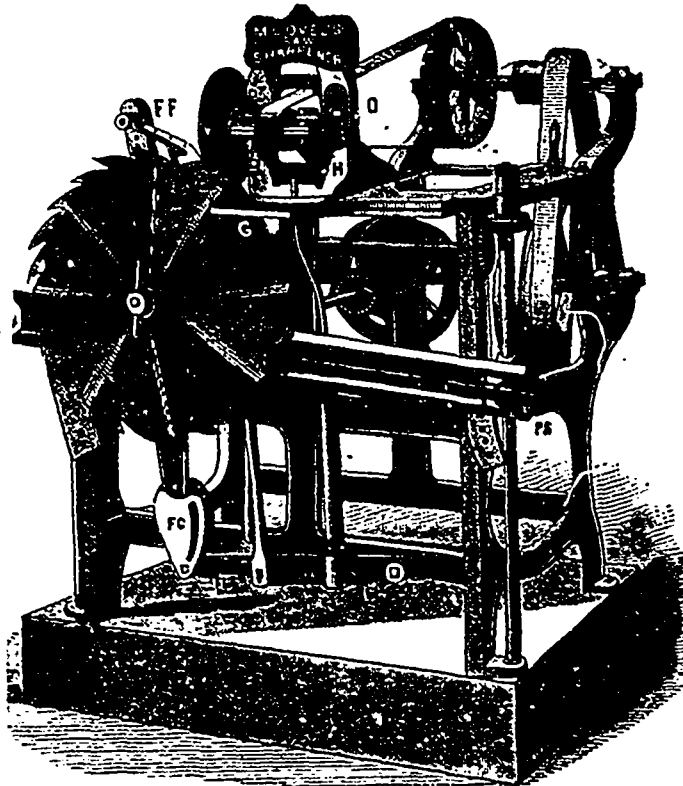
Yours respectfully,

WILLIAM TAIT,
Lumberman, Gravenhurst.

TORONTO, August 11th, 1880.

WM. HAMILTON, Peterborough, Ont.
DEAR SIR—The Steam Feed you put in is working splendidly.

Yours, etc.,
THOMPSON, SMITH & SON.



MILL MACHINERY!

I am also manufacturing Saw Mill Machinery, for all sizes of Gang or Circular Mills, Span or Double Circulars for Slabbing Small Logs. My Patent Jack Chain for drawing logs into Saw Mills, acknowledged by all to be the Cheapest and best ever got up; also, my Patent Lumber Markers, different sizes of Edgers, Gang Lath Mills, Trimmers, Power Gummers, and all Machinery used in a first class Gang or Circular Saw Mill; also, small Hand Gummers for use in the woods, for Cross-cut Saws. Rotary Pumps of different sizes, for Fire Protection in Mills, &c.

HORIZONTAL ENGINES and BOILERS



Where economy of fuel is the great consideration, along with uniformity of speed, such as is required in Grist and Flouring Mills, Woollen and Cotton Factories, or large Factories of any kind, I supply the Corliss Engine. I feel justified in saying that our Style, Workmanship and Finish on this Engine will do no discredit to its renown, and certainly is not equalled in this country for economy of fuel. I have them working at 2½ pounds of coal per horse-power per hour.

1117

WILLIAM HAMILTON,

PETERBOROUGH, ONT.

HART EMERY WHEEL COMPANY, Limited

HAMILTON, CANADA.

GILBERT HART, Detroit,
President.

JAMES T. BARNARD, Hamilton,
Secretary-Treasurer.

SAMUEL BRIGGS, Hamilton,
Superintendent.

MANUFACTURERS OF THE CELEBRATED

DETROIT

EMERY and CORUNDUM WHEELS

These Wheels are

Wire Strengthened



And Specially Adapted

For Saw Gumming

Neither Animal nor Vegetable Glue or Gum being used in their composition, they are NOT LIABLE TO HEAT, and give out no Odors, while

They Surpass All Other Wheels for Free Cutting and Durability.

We refer to the following well known Saw Manufacturers for Opinions as to the Quality of our Wheels :

Messrs. SHURLEY & DIETRICH,
GALT.

Messrs. R. H. SMITH & CO.,
ST. CATHERINES.

JAMES ROBERTSON, ESQ.,
MONTREAL.

Messrs. JAMES ROBERTSON & CO.,
TORONTO.

WE ALSO REFER TO

WILLIAM HAMILTON, ESQ.,
PETERBOROUGH,
Manufacturer of the Covell Saw Sharpeners.

Messrs. H. B. RATHBUN & SON,
DESERONTO,
Lumber Merchants.

EMERY WHEELS FOR SAW GUMMING!



Solid Emery Wheels are now almost in universal use for the purpose of gulletting and gumming saws. Statistics show from 25,000 to 30,000 saw-mills in the United States. Many of these run only a single saw each. A one-saw mill would use one or two wheels a year, costing \$3 to \$4 each, and when such small mills order single Emery Wheels from the factory, (the express charges often equal the cost of the wheel. There was a time when the quality of Emery Wheels was so uncertain, and the demand so flickle, that storekeepers could not afford to carry them in stock. Now, however, Saw Gumming Wheels have become a staple article as Files, and every dealer in saws, Hardware and Mill Supplies can afford to carry a few dozen standard sizes in stock. Large dealers order stocks of \$500 to \$750 worth at a time. Saw Gumming Wheels are used with the edge (or face) square, round or beveled. Probably seven-eighths of all in use are beveled.

The principal sizes are:

8x $\frac{1}{2}$	} 2 in. hole.	10x $\frac{1}{2}$	} 2 in. hole.	12x $\frac{1}{2}$	} Holes, 2, 1 and 1 inch.
8x $\frac{3}{4}$		10x $\frac{3}{4}$		12x $\frac{3}{4}$	
8x $\frac{7}{8}$		10x $\frac{7}{8}$		12x $\frac{7}{8}$	
	10x $\frac{1}{2}$	12x $\frac{1}{2}$			
	10x $\frac{3}{4}$	12x $\frac{3}{4}$			
	10x $\frac{7}{8}$	12x $\frac{7}{8}$			

Probably more wheels 12x $\frac{1}{2}$, 12x $\frac{3}{4}$ and 12x $\frac{7}{8}$ are used than all the other sizes together. Saw Gumming Wheels are used, however, of all sizes up to 21x1. The most frequent complaint is that Emery Wheels harden the saw so that a file won't touch it. The answer is that you don't want a file to touch it. An expert workman will shape and sharpen the teeth with an Emery Wheel, leaving the teeth case hardened, in which condition the saw will cut about 83 per cent. more lumber than a soft saw will. Those who want to use the file, however, have only to touch the saw lightly a second time (after going all over it once), and this second touch will cut through the case-hardened scale.

A QUESTION OF QUALITY.

Thirteen years of experience as makers of, dealers in, and actual users of Emery Wheels, have led us to a decided opinion as to what quality is the best. We prefer for almost every use an "Extra Soft" wheel like the "Pocono." We believe that money lost through the rapid wear of the wheel is more than made up by the money saved on wages. As we cannot get every one to adopt our views, we make several qualities, so as to meet their views. We say to those who think they can only be satisfied with some other make of wheels (not Tanite), that we can furnish qualities to match any and every other make. If you have got used to some special quality of wheel, let us know what it is, and we can send you a Tanite Wheel of similar quality. Our regular classification of Saw Gumming Wheels is as follows:

CLASS 2. MEDIUM-HARD.—This Wheel is THE STANDARD Saw Gumming Wheel all over the world. Probably seven-eighths of all the Saw Gumming Wheels used are "Class 2. It cuts fast and keeps its shape well. Some think it too hard, some too soft. We prefer the "Pocono."

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