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NO. 19.

### FORESTRY IN CANADA.

Among the papers read at the meeting in Montreal of the British Association for the Advancement of Science was one by Mr. A. T. Drummond, on "The Distribution of Canadian Forest Trees in its relation to climate and other causes," in which it was pointed out that there are ninety-five species of forest trees in Canada. The Province of Ontario has 65 species of which 61 are found in the districts bordering Lake Erie. Of these 65 species 52 extend eastward to the Province of Quebec, 35 are found on the easterly and westerly sides of Lake Superior, whilst only 14 range westerly into the prairie country at and beyond the Red River. Again, in British Columbia there are 33 species, of which only seven extend eastward beyond the influence of the Rocky Mountains, and with one exception these seven are well distributed over the whole Dominion. Only three of our Canadian trees are identical with European species, the chestnut, white birch and yew. Canada may be divided into four great forest areas or zones, which may for convenience be termed the zones of the (1) Douglas fir, occupying Central and Southern British Columbia. (2) Poplars, covering the whole country from the most northern limit of the growth of trees southward, east of the Rocky Mountains, to the South Saskatchewan, Qu'Appelle and Winnipeg rivers, Lake Nepigon and Anticosti, in the Gulf of St. Lawrence. (3) White and red pine, extending from Lake of the Woods and Lake Nepigon to Anticosti, thence to the Georgian Bay, Lower Ottawa River and Nova Scotia. (4) Beech and maple, occupying those parts of Ontario and Quebec lying south of the zone of the pines. Along the shores of Lake Erie is what might be almost regarded a fifth zone, very circumscribed in area, but having within it several outliers of the forests of the Middle States. The frequent peculiarities in range of forest trees in Canada are due to physical conditions and differences in climate, resulting from differences in these conditions. The northern half of the American continent consists on the one side, of enormous stretches of continuous land and has, on the other in its midst, immense areas of water and widely and deeply indented shores—Labrador and the great section of country lying between Hudson Bay and the great lakes and the Gulf of St. Lawrence being virtually one immense peninsula. The double effect of a northern latitude, and the presence of these great bodies of water is very marked in the lower general temperature, the shorter summers and more severe winters. These influences check the northern range of forest trees beyond the outlet of Lake Superior, and, with the aid of the branch Labrador current, prevent their extension down the St. Lawrence below Quebec. The great chain of lakes from Superior to Ontario have not only their effect on temperature, but, by their great

width, create a barrier to the northward extension into Canada of many United States forest trees. A remarkable feature in forest distribution is the fact that immediately west of Lake Superior many of the most important trees, as white pine, basswood, red oak and sugar maple, are no longer found. The prairie appears to form a barrier to westward distribution. The prairies were probably at one time covered with trees which have been destroyed by fires. The effect of this has been to create a less rainfall, a quicker drainage from the soil, a dry atmosphere and constant exposure to high prairie winds, all of which appear to be inimical to many forest trees. British Columbia has a distinctive forest area of its own. The trees are largely of the pine family, and, with seven exceptions, do not range east of the Rocky Mountains. They are similar to those of Oregon and Washington, and the direction of the mountain ranges and similar moist climate has favored this. The white pine, yellow pine, and Douglas spruce are more or less known to commerce, but there are several other British Columbia trees which are as yet comparatively untried. In the near future the lumber trade there is likely to attain large proportions. Referring to the North West it was pointed out that the future cities and towns could exist only where abundant water was present and that thus the supply of water in the rivers was of vast importance. To preserve a constant and uniform supply it was absolutely necessary to have the source of each important stream examined. If forests already exist there, then reserve a large area of them from public sale, if they do not, then the Government should at once promote the planting of forests or institution of national parks at such points. There are numerous rivers requiring such attention.

The above paper was followed by one by Mr. G. P. Hughes on "Forests, their value meteorologically and as national reserves." The author, taking a retrospect of the primeval forest, and regarding it geologically, pointed out that civilization and the arts must ever remain indebted to the imbedded forests of proglacial times. He referred to some of the instances we have in Great Britain and America of forests perpendicularly fossilized by subsidence into tranquil water, thereby furnishing a means by which the age of the formation may be calculated, and the structure of tree be observed. He referred to the dependence of man in all ages of his history upon the forest for material for houses, ships, implements and the production of heat. Calling attention to the denudation of most eastern countries once famous for civilization and the arts, and to the hurtful destruction of valuable timber even in one day. The result has been greater climatic changes, and in the tropics a barren deadness, where once great states held sway. He advocated planting

the creek and reservoir margins in Northern Australia and tropical India, and quoted authority to back out his own opinion that among improvements to property planting offers the most certain returns in material, shelter and ornament. He gave a sketch of a course of study for a school of forestry and advocated state and a privilege to such institutions in order that our national forests may be supplied with scientific heads of departments. He made an appeal to British America to set aside forest reserves adequate for all future requirements.

The President announced that he had received a paper from Dr. Franklin A. Houghton on "The Future Policy of the Forest Management of the United States," the general conclusions of which were that the people needed instruction and that colleges should take the matter up, as well as schools, for which there should be teachers capable of giving practical instruction on the subject.

After a brief discussion Sir Richard Temple recommended Canadian foresters to visit the Norwegian forests.

### PRACTICAL FORESTRY.

To the Editor of the Canada Lumberman.

DEAR SIR,—I have contracted for 6,000 black walnut trees, four feet high, to come from the Western States. The cost will, laid down free in Oshawa, including distribution, freight, duty, etc., not exceed twenty cents a ch coming in car loads. I bought them for the purpose of inducing the residents of Pickering, East and West Wharby, Reach and Darlington, including the towns and villages, to plant them in and about their homes. I will give them to anyone who desires them (not exceeding ten) at actual cost. They are a very rapid grower; make a beautiful shade tree, bear a delicious nut and are very valuable for lumber whenever it might be desirable to cut them down. I have thought that five or six of them planted in a circle, say 7½ feet in diameter and one in the centre, would make a very beautiful and desirable group of trees for shade for cattle. They will also add to the beauty and comfort of homes when planted in and about the houses and barns; but, I would suggest to those who plant them that they trim them when very young, by degrees, so as to leave the main trunk 18 or 20 feet high before any limbs are allowed to branch out. This will add to their value in the future for lumber. Three trees planted near Hamilton, 30 years ago, are said to be now worth \$100 each to cut down for lumber.

I will file any applications which are sent to me for them in the order in which they are received and fill them in the same order. They will come early in the spring, but I would like to know, at as early a date as possible, who would like them. I have taken the trouble to get these trees solely for the purpose of adding

to the beauty and comfort of the homes in this section. I am sure any one who plants them will feel repaid within a very few years and that his children and children's children will thank him for it. One planted in my garden bore nuts the third year after planting.

I am, dear sir, yours very truly,

F. W. GLEN.

### WORTH SEEING.

The following letter is from the Hamilton Spectator:

DEAR SPEC.—Taking advantage of the last warm spell, and combining business with pleasure, I started from Hamilton by steamer Southern Belle for Toronto, where taking the steamer Passport I proceeded to Montreal. Staying over night at that city I took the 8.45 a. m. train of the Canada Atlantic Railway and arrived at Casselman, a distance of 87 miles from Montreal at 11.20. A very fine country is passed through and fairly timbered. At Casselman I was met by Mr. Mackay, the courteous representative of Messrs. Platt & Bradley, who showed me over the mill, which is well worth seeing. The mill stands alongside the Nation River, is substantially built and with machinery of the latest improvement, and everything about it so perfect that one is astonished at the rapidity with which the logs are handled. Stretching away to the south and to the east are the timber limits belonging to the firm, and here you see the virgin forest to perfection as not a stick has been culled from the land. Stately pines, of a growth to gladden the heart of a lumberman, magnificent oaks and other trees meet your view in all directions; and as you return your steps to the station from this almost primeval spot, now abounding with game, you say to yourself, in a few years all this will be smiling farms, and as you step into the cars and are borne along you turn once more to gaze at the mill, which stand a monument to the energy and enterprise of this well known firm.

J. T. ROUTH.

### Reducing Expenses.

A novel project is on foot among the owners of lumber vessels in the Chicago and Michigan trade to reduce expenses. Says the Chicago Inter-Ocean: "It is proposed to arrange with certain tugs in Chicago and at Muskegon for the towing of vessels all the way across the lake from port to port. Tows of three vessels each are to be made up. A Muskegon tug will bring a tow of loaded craft half way across the lake, where she will be met by a Chicago tug with three light vessels. The tugs will exchange tows and return to their home ports." By this arrangement schooners can compete with steam barges, and the tugs, it is claimed, can also be sure of towing and can make some money out of it."

**BOARD OF TRADE RETURNS.**

The following are the returns issued by the Board of Trade, for the month of Aug. 1884, and first eight months of the year:

| MONTHS ENDED 31st AUG, 1884.                      |                            |
|---|----------------------------|
| Quantity.   | Value.                     |
| <i>Timber (Heaven).</i>                           | <i>Loads.</i>              |
| Russia.....                                       | 24,717 45,006              |
| Sweden and Norway.....                            | 97,280 97,834              |
| Germany.....                                      | 23,885 99,044              |
| United States.....                                | 15,804 50,304              |
| British India.....                                | 210 2,083                  |
| British North America.....                        | 69,529 204,092             |
| Other Countries.....                              | 32,313 60,009              |
| <b>Total.....</b>                                 | <b>223,807 680,821</b>     |
| <i>Timber (Sawn or Split, Planed or Dressed).</i> |                            |
| Russia.....                                       | 202,237 437,500            |
| Sweden and Norway.....                            | 214,225 453,930            |
| British North America.....                        | 108,431 400,006            |
| Other Countries.....                              | 35,323 107,771             |
| <b>Total.....</b>                                 | <b>620,216 1,399,873</b>   |
| Staves, (all sizes).....                          | 15,841 64,915              |
| Mahogany (tons).....                              | 1,660 16,818               |
| <b>Total of Hewn and Sawn.....</b>                | <b>849,023 1,930,694</b>   |
| EIGHT MONTHS ENDED 31st AUG, 1884.                |                            |
| <i>Timber (Heaven).</i>                           |                            |
| Russia.....                                       | 159,847 303,676            |
| Sweden and Norway.....                            | 428,307 638,703            |
| Germany.....                                      | 202,579 400,957            |
| United States.....                                | 159,493 609,843            |
| British India.....                                | 20,102 377. 92             |
| British North America.....                        | 140,855 615,300            |
| Other Countries.....                              | 234,444 394,673            |
| <b>Total.....</b>                                 | <b>1,331,747 3,830,203</b> |
| <i>Timber (Sawn or Split, Planed or Dressed).</i> |                            |
| Russia.....                                       | 638,591 1,336,020          |
| Sweden and Norway.....                            | 1,079,747 2,306,428        |
| British North America.....                        | 659,930 1,893,107          |
| Other Countries.....                              | 304,592 935,707            |
| <b>Total.....</b>                                 | <b>2,012,910 5,971,356</b> |
| Staves (all sizes).....                           | 88,607 340,127             |
| Mahogany (tons).....                              | 41,010 376,861             |
| <b>Total of Hewn and Sawn.....</b>                | <b>3,994,657 9,801,610</b> |

**FUTURE PROSPECTS.**

The Montreal Witness takes a look into the future and believes that it would be better for lumbermen to curtail the amount of timber cut, as the most of timber trade will fall into their hands. It says:—

"It is stated that an unusually large number of lumbermen will be sent into the woods this fall, and therefore that the amount of lumber taken out will be unusually large, as the cheapness of supplies is a great inducement. Supplies are undoubtedly much cheaper this year than they have been for some time, but, unfortunately, it is impossible to dispose of the lumber already cut at its value, and it would be better to allow it to remain in the woods to increase in size than to cut it and then allow it to lie and rot in a piling ground, or sacrifice it at a price that will not cover the expense of cutting it. Matters will soon reach such a point on this continent that we Canadians will have the most of the timber trade, and the less lumber that is taken out now the greater will be our gain in the future."

**MEETING OF LUMBERMEN.**

A meeting of nearly forty of the lumber manufacturers on the Saginaw river met at the board of trade rooms at East Saginaw on Saturday, Sept. 20, to take into consideration the general condition of the lumber market and the best plan of relief. We learn from the *Lumberman's Gazette* that after a long discussion the Hon. N. B. Bradley submitted the following preamble and resolution:

"Whereas, It is unwise to manufacture more lumber than the markets require and will take at fair prices, and there being large amounts of manufactured lumber now on the docks, with a large stock of logs at the mills, it is, therefore, expedient that some action be taken looking to the reduction of that stock for the balance of the season, therefore:

Resolved, That the several boom companies which raft logs tributary to the Saginaw river mills, are hereby requested to close operations for the season immediately."

The resolution was unanimously adopted by a rising vote.

Mr. Bradley said he hoped every manufacturer and log owner would sign the agreement now

being prepared for signature, as upon it the action of the boom companies would be largely predicated.

Mr. Arthur Hill submitted the following: To the *Tillabawasse Boom Co.*:

GENTLEMEN,—You are hereby notified that we, the undersigned, are unable to receive more logs from your boom this season.

You will therefore cease rafting our logs at once for the balance of the season, and we hereby waive all claims for damages for failure to raft our logs during the present season.

The petition was agreed to and signed by all the firms present at the meeting.

Mr. Rust moved that similar petitions be prepared for presentation to the Au Gres and Rifle Boom companies. Carried.

Mr. Rust moved that the chair appoint a committee of three to circulate the petitions to the boom companies and obtain signatures of the log owners thereto, and present the same to the boom companies. Carried.

The chair appointed as such committee N. B. Brady, J. A. Whittier and Arthur Hill.

The meeting then adjourned.

**WHEN TO CUT WOOD.**

Many seem to have an idea that wood should be cut in cold weather to have the stump sprout well, and there is a great prejudice against cutting in August, unless it is desired to clear up the land, because it is believed that a tree cut at this season of the year kills the root, or injures it so much that it will sprout but little, if any. June is also considered a bad month. Last year we had occasion to begin to cut wood in August, and continue it every month until August came again. The 20th of July a careful examination was made of the sprouts growing from the stump cut at the different seasons, and measurements made. We confess that the difference was so slight that it surprised us. The sprouts coming from maple stumps from which the wood was cut last August measured five feet, and we could discover no difference in the growth from the other stumps until we come to those that were cut in June. The sprouts from stumps that the wood was cut from during the first two weeks in June were about 12 inches in height, but it must be remembered that these stumps had to force out buds and make the growth in from five to six weeks. As the land is being cleared up the sprouts were all broken off the last of July, so the experiments ended, but it would have been interesting to have continued it, that the full growth of the year might have been ascertained; to all appearance those cut in June promised the best. The stumps looked in the best condition, and the sprouts were growing very rapidly, much more so than those cut in the autumn or winter. The stump from which the wood was cut in March and April was wet and mouldy from the sap that flowed from them, while the stumps of those cut in the autumn and in June were dry and hard.

From former experience we have found that the stumps of trees cut in March often decay so rapidly that the sprouts when two years old will often blow down, because of the rottenness of the stump, while the stump of a tree cut in autumn, will dry hard and remain comparatively sound until the sprouts get large enough to support themselves.

The stump from which the wood was cut in July are sending up sprouts, but the first of August, were not more than 6 to 12 inches high. —*Massachusetts Ploughman.*

**Another Canadian Enterprise.**

A despatch from Detroit says that the large saw mills which have lately been erected by the timber companies at Wallaceburg, and along the Sydenham river, have been the means of employing a number of barges in a somewhat novel enterprise, that of carrying elm bark from the mills to the soap factories at Mount Clemens and other Michigan factories. The bark is burned, and when consumed to ashes and leached the lye in the strongest kind. The immense quantity of bark stripped from the logs at the mills before they are sawed is sufficient to keep quite a large fleet of barges running. The bark has hitherto been thrown away. The first cargoes of this kind just arrived in Mount Clemens.

**LIST OF PATENTS.**

The following list of patents upon improvements in wood-working machinery, granted by the United States Patent office, Sept. 9, 1884, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of American and foreign patents, No. 617 Seventh St., Washington, D. C. :—

- 304,815.—Log-binder—J. Flynn, Roseconnon, Mich.
- 304,700.—Lumber stacker—W. T. Smith, Bozeman, Ala.
- 304,826.—Match-split machine—A. G. Jones, Rochester, Ontario, Can.
- 304,724.—Planer, sliding—C. A. Graff, New York, N. Y.
- 304,715.—Saw—J. E. Emerson, Beaver Falls, Pa.
- 304,983.—Saw mill, gang—W. M. Wilkin, Erie, Pa.
- 304,990.—Saw, motor for driving—D. E. Dutrow, Washington, D. C.
- 304,873.—Stave-jointing machine—R. W. Travener, Bay City, Mich.

**PATENTS ISSUED SEPT. 16.**

- 305,054.—Bit brace—W. F. & E. B. Dake, Grand Haven, Mich.
- 305,130.—Bit stock—W. C. Marr & A. J. Maughlin, Onawa, Iowa.
- 305,170.—Log loader—M. Garland, Bay City, Mich.
- 305,072.—Match sticks, device for cutting—F. & B. Graham, Rockford, Ill.
- 305,393.—Plane bit.—W. F. Kellett, Chicago, Ill.
- 305,062 & 305,063.—Pulp machine for the reduction of wood—E. P. Ely, South Vallingford, Vt.
- 305,206.—Saw—C. J. Lowe, Cherryfield, Me.
- 305,391.—Saw table gauge—J. Cheney, Athol, Mass.
- 305,344.—Wood, etc., tools for finishing the surfaces of—J. Y. Simons, Amsterdam, N. Y.

**PATENTS ISSUED SEPT. 23.**

- 305,711.—Bark breaking mill—J. T. Phillips, Grand Rapids, Mich.
- 305,447.—Barrel heads, machine for trimming—A. Guerdan, New York.
- 305,712.—Latho for turning polygonal forms—P. Prybil & E. D. Mackintosh, New York, N. Y.
- 305,519.—Lathes, cutter support for hollow mandrel—E. H. Hudson, Pottersville, Mich.
- 305,485.—Sash rails, machine for shaping—G. W. Steele, Paterson.
- 305,660.—Saw-filing and gaging device—D. E. Berger, Coal Hill, Pa.
- 305,556.—Saw-horse—R. Wylie, Napa City, Cal.
- 305,598.—Saw mill circular—J. H. Jones, Dardanelle, Ark.
- 305,538.—Saw mill head block—R. W. Shelburne, Blandville.
- 305,563.—Saw table gauge—E. Baer, New York, N. Y.
- 305,520.—Shaping and planing machine—G. Jungst, New York, N. Y.
- 305,518.—Stump puller—J. A. Horseman, Du Bois, Pa.

**WHITE PINE ORNAMENTATION.**

Some recent attempts with white pine appears to give it a value as an ornamental wood which its common uses have not heretofore suggested. The softness of its texture and its susceptibility to injury may have had some influence in preventing its general use for ornamental purposes, but the wood can be "filled," so that much of this objection is removed. Its pure white color—white as compared with other woods—recommends it for purposes for which holly has been heretofore used; and the size of the timber from which clear lumber may be cut is greatly in its favor, boards of a width of sixteen and even twenty inches being not uncommon, with no shade of distinction between sap wood and heart, and only the faintest perceptible grain.

Some specimens lately examined show a greatly enhanced beauty by very simple treatment—the filling with warm shellac varnish, bleached shellac in alcohol, applied with a brush while warm. Several coats are given, the last coat being rubbed with pumice and rotten stone moistened with water, not oil. A finish of a flowing coat of copal varnish completes the

preparation. Thus treated the wood is of a faint creamy tint with an appearance of semi transparency. Beautiful gradations of color were obtained by panels of this prepared pine, mouldings of holly, and stiles of curly or birds-eye maple, and fine contrasts were made with the pine and oiled black walnut.

The pine is too soft for floors, but for doors, casings, and chamber furniture it seems to be admirably adapted. The finest specimens of the wood noted come from Michigan, having fewer pitchy streaks and being of a more uniform color than the Maine product. Its ease of working by carving, and the coherence of its grain, are being utilized by masters and amateurs in the interior wood decorations. A beautiful carved mantel relieved by pilasters of oiled black walnut has been recently finished, which suggests the mellow tints of statuary marble after a short exposure to the atmosphere, while being free from the chilling sparkle and sheen of the marble.

**ANOTHER FIRE IN CLEVELAND.**

CLEVELAND, Sept. 21.—The scenes at the fire two weeks ago were repeated to-day on a smaller scale. The first fire, it was thought, originated accidentally, but to-day's occurrences lead to the belief that it may have been incendiary. The fire occurred at noon in Monroe Bros. & Co.'s lumber yards on the upper flats. A large amount of property was destroyed, including 2,000,000 feet of lumber. When the flames were fairly under control, a dense smoke was seen pouring from the inside of the firm's dry house. There was no fire outside of the building and no wind to blow sparks from the large fire. It was undoubtedly the work of incendiaries. The second fire was extinguished with trifling loss. Between 3 and 4 p. m., when the fire department was about returning home, thick smoke, as if from coal oil, suddenly poured from the inside of the dry shed in Browne, Strong & Co.'s lumber yard, some distance from the other fire. Two suspicious looking men were seen watching this fire at its inception without giving an alarm, which strengthens the theory of arson. When the last fire broke out and it became certain incendiaries were at work, word was sent to the neighboring town for help and engines from Akron, Painesville, Sandusky, Elyria and Ashtabula. At 9 p. m. the fire was under control. No further danger is apprehended. Monroe Bros. & Co.'s loss is estimated at \$60,000; insurance \$160,000; Brown, Strong & Co.'s loss is estimated at \$170,000; insurance about the same.

**A Forest Mine.**

There is a sunken forest of white cedar in New Jersey which has been mined for timber over seventy years. The industry of digging the sunken logs is carried on by the people of Dennisville, a village which was brought into existence through the buried wealth of lumber in its vicinity. Over the sunken forest, trees of large size are growing, and in many instances these are cut away to reach the more valuable timber three or four feet below the surface. The sunken trees are of enormous size. Their age is a matter of curious conjecture. It is probable they were buried many centuries ago by the action of an earthquake.

**Lumber Insurance.**

MONTREAL, Sept. 26.—The principal business transacted by the Fire Underwriters' Association was the classification of lumber risks, the rates on which were materially increased. The principal adopted was that of graduating the rate according to the distance of the lumber from the saw mill, discrimination between steam and water mills was observed. Rates are to be graduated with or without the average clause.

**Advice to Mothers.**

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable. It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea, regulates the stomach and bowels, cures wind, colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system. Mrs. Winslow's Soothing Syrup for children teething is pleasant to the taste, and is the prescription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world. Price 25 cents a bottle.





### FORESTRY AND LUMBER TRADE OF CANADA.

We take the following in regard to the forestry and the lumber trade of Canada, from a work, "Hand Book of the Dominion of Canada," by Mr. S. E. Dawson, one of the local secretaries of the British Association, which was published for the guidance of members of the Association:

#### FORESTRY OF CANADA.

Taking a general view of the great forest areas of the Dominion, some striking facts present themselves. The line of separation between the wooded and the prairie country west of the Lake of the Woods forms an abrupt barrier beyond which but few of the trees of Ontario, Quebec and the Maritime Provinces extend; whilst the Rocky Mountains are found to be a divide separating from the rest of the Dominion a forest flora, which, with few exceptions, is distinctive of British Columbia, Washington, and Oregon.

There are ninety-five species of forest trees in Canada, of which Ontario, the most southerly of the Provinces, has sixty-five. Of these, all, with five exceptions, occur in the Lake Erie districts, fifty-two extend eastward into the Province of Quebec, thirty-four are found to a greater or less extent on the eastern and western coasts of Lake Superior; whilst only fourteen have been observed to range westward to the Red River and the prairie country thence to the Rocky Mountains. On the other hand, thirty-four species of trees are found in British Columbia, of which only seven—the aspen poplar (*Populus tremuloides*), balsam poplar (*P. balsamifera*), canoe birch (*Betula papyracea*), white spruce (*Abies alba*), black spruce (*A. nigra*), balsam (*A. balsamea*) and red cedar (*Juniperus Virginiana*)—extend eastward beyond the influence of the Rocky Mountains, but these seven are, with the exception of the red cedar, which is more limited in range, very generally distributed over the whole Dominion from the Mackenzie River to Nova Scotia. Eighteen, or more than one half, of the British Columbia trees belong to the Conifer or Pine family.

The leading economic trees of Ontario, nearly all of which range into the other eastern provinces, are

Basswood (*Tilia Americana*).  
 Red maple (*Acer rubrum*).  
 Sugar maple (*Acer saccharinum*).  
 Black ash (*Fraxinus sambucifolia*).  
 White ash (*F. Americana*).  
 Red elm (*Ulmus fulva*).  
 White elm (*U. Americana*).  
 Plane tree (*Platanus occidentalis*).  
 Butternut (*Juglans cinerea*).  
 Walnut (*J. nigra*).  
 Hickory (*Carya alba*).  
 Bur oak (*Quercus macrocarpa*).  
 White oak (*Q. alba*).  
 Red oak (*Q. rubra*).  
 Beech (*Fagus ferruginea*).  
 Hop hornbeam (*Ostrya Virginica*).  
 Canoe birch (*Betula papyracea*).  
 Black birch (*B. lenta*).  
 Aspen (*Populus tremuloides*).  
 Aspen (*P. grandidentata*).  
 Balsam poplar (*P. balsamifera*).  
 Red pine (*Pinus resinosa*).  
 White pine (*Pinus Strobus*).  
 Balsam fir (*Abies balsamea*).  
 Hemlock (*A. Canadensis*).  
 Black spruce (*A. nigra*).  
 White spruce (*A. alba*).  
 Tamarac (*Larix Americana*).  
 Arbor vite (*Thuja occidentalis*).

The prominent trees of Manitoba, which province may be considered as representing the Central District of Canada—are  
 Basswood (*Tilia Americana*).  
 Ash-leaved maple (*Oegundo aceroides*).  
 Green ash (*Fraxinus viridis*).  
 White elm (*Ulmus Am. ericana*).  
 Canoe birch (*Betula papyracea*).  
 Aspen (*Populus tremuloides*).  
 Balsam poplar (*P. balsamifera*).  
 Black spruce (*A. nigra*).  
 Tamarac (*Larix Americana*).  
 In British Columbia the leading trees, in addition to the six previously mentioned, are  
 Maple (*Acer macrophyllum*).  
 Alder (*Alnus rubra*).  
 Oak (*Quercus Garryana*).

Cottonwood (*Populus trichocarpa*).  
 Western birch (*Betula occidentalis*).  
 Western scrub pine (*Pinus contorta*).  
 White pine (*P. monticola*).  
 Yellow pine (*P. ponderosa*).  
 Menzies' spruce (*Picea Menziesii*).  
 Engelmann's spruce (*Picea Engelmannii*).  
 Spruce (*Abies grandis*).  
 Balsam spruce (*A. subalpina*).  
 Western hemlock (*Tsuga Mertensiana*).  
 Williamson's hemlock (*T. Pattoniana*).  
 Douglas fir (*Pseudotsuga Douglasii*).  
 Giant cedar (*Thuja gigantea*).  
 Yellow cypress (*Chamaecyparis Nutkaensis*).  
 Yew (*Taxus brevifolia*).  
 Western larch (*Larix occidentalis*).

The Government of the Province of Ontario has recently taken up seriously the question of preserving and replanting forests, and of tree-planting upon the high-roads and farms. The Government of Quebec has also awakened up to the importance of the subject, and has instituted an "arbor day" or annual tree-planting holiday throughout the province. But the efforts of those concerned in forestry have hitherto been turned chiefly towards obtaining more stringent regulations for preventing forest fires and for compelling the lumbermen to work their limits in a more economical manner. The forestry associations throughout the country are doing good, useful work in calling the attention of the farmers and settlers to the great and increasing value of wooded land.

#### THE LUMBER TRADE.

The lumber trade of the Dominion is still its most important commercial interest. The products of the forest considerably exceed in value those of the farm. The home consumption of lumber is large, inasmuch as building is chiefly done in wood. The quantity required for domestic use is estimated at two-thirds of the total quantity made, the balance finding its way to England, the United States, the West Indies, and South America.

The principal areas of timber lands lie in the provinces of Quebec and Ontario. The province of Quebec has under license 48,500 square miles producing 2,500,000 pine logs, equal to 386,000,000 feet B. M., and 1,301,000 spruce logs, equal to 106,000,000 feet B. M.; white and red pine timber, 3,110,000 cubic feet equal to 37,320,000 feet B. M.; hardwood, 51,000 cubic feet or 611,000 feet B. M.; railroad ties, 143,000 pieces 32 feet each, making 4,576,000 feet B. M.; cedar, equal to 4,500,000 feet; pine and spruce, round timber, 5,760,000 feet B. M.; besides tamarac, hemlock and cordwood, in all 549,976,000 feet, giving a gross revenue of \$668,596 to the Province.

The Province of Ontario has 18,000 square miles under license, furnishing 2,600,000 standard pine logs equal to 620,000,000 feet of lumber; 6,790,090 cubic feet of white and red pine, or 81,000,000 feet B. M.; dimension timber 23,000,000 feet B. M.; hardwood, cedar, &c., in all 635,500,000 feet B. M.; paying to the Provincial Government \$547,000. These figures are for the year 1880-81. The revenue from the crown lands both in Ontario and Quebec has increased since, for in 1883 Quebec shows \$856,872, and Ontario \$635,447.

In New Brunswick the cut of timber on Government lands equals 160,000,000 feet, yielding to the Province \$152,000. Prince Edward Island yields no more than is required for home use. Manitoba and the North-west territories are sparsely provided with timber, and the trade therein is still unimportant. British Columbia is more amply supplied, and as its facilities for export increase, it must develop a large trade. Its most important timber tree is the Douglas spruce or Oregon pine, which is the only kind that has as yet become of economic value. Its wood is yellow or reddish and coarse grained. It is considered inferior to the pine of the Ottawa region for finer kinds of work.

The most highly prized timber in the country is white pine, and the best qualities are to be found on the Ottawa river. The Ottawa white pine is justly famous for its softness, owing to which it can be easily moulded into the forms required for interior work. But the better qualities are being gradually depleted, and it is said that the proportion of high grade pine produced on the Ottawa river is rapidly de-

creasing. The production of spruce is relatively on the increase as a substitute in many ways for pine.

The timber lands held under license are operated subject to the following regulations:—Licensed lands are divided into limits commonly of about fifty square miles each. Upon the sale of a limit the Government retains its proprietary right in the land, selling only the privilege to cut and carry off the timber. The purchaser then has to pay a ground rent of \$2 per mile annually. The licenses under which the land is held are renewable every year, and may be continued as long as the owner of standing timber requires the use of the land for his operations. In addition to this charge, the timber, when cut and brought away, is subject to crown dues, which vary according to the description of the produce. Pine logs pay 15 cents per standard log of 200 feet, board measure, and spruce logs pay 10 cents per log in Quebec. In Ontario, pine and spruce pay 22 and 5 cents respectively.

Operations in the woods are commenced about the middle of December. Gangs of men are sent up by the first snow roads. Arriving on the spot of their labor, they build themselves *chantiers*, of rough logs, and prepare stabling for the horses, to follow about a month later. The work of felling and hauling goes on till about the 15th of March. By that time the product of the winter's work has been hauled to the bank of some stream and piled up on the rollway ready to be thrown into the river. The camps are then broken up, and the men are paid off. About a month later fresh gangs of men are sent up the river to tumble in the stuff and drive it to its destination at the market or the mill.

Consequent upon the alteration in the commercial policy of England which took place in 1849, the trade in lumber commenced to change its direction towards the United States. Between the years 1821 and 1832 the total export of productions of all kinds to that country averaged \$3,257,153 annually, while in 1882 the trade in lumber alone with the United States amounted to \$10,192,933. This further change also ensued that whereas in former years the lumber was exported to England in the shape of large pieces of square timber; under the changed policy, saw mills of larger dimensions and increased capacity sprang up and the lumber was exported to England as deals and to the United States as boards. Thus employment was provided for an additional number of hands in Canada.

#### AN EVIDENCE OF RAPID GROWTH.

In the township of Freedom, Cheboygan county, Mich., a farmer, Mr. Charles Wilson, has discovered distinctive evidence that where now stands an immense growth of hard maple timber, there was once a corn field. Scattered through the forest are numerous piles of stone, apparently gathered off the land to make room for cultivation, and the corn hills are still distinctly visible and as regular in order and distance apart as if planted recently. Mr. Wilson concludes that these corn fields must have been extant centuries ago, since the full growth of maple timber has risen since. Though Mr. Wilson has probably let his imagination run backward too far, the discovery he has made suggests an interesting question in regard to tree growth in the northern part of the southern peninsula. Nowhere in the country is there a more prolific growth of rock or sugar maple. It is likely that the remains of the old corn fields that Mr. Wilson has found is evidence that the forests in that locality have grown more rapidly than is generally supposed. The corn hills spoken of are possibly the signs of cultivation in the days of the French missionary occupation in that region, when Marquette exercised the function of spiritual and civil dictator over the Indian tribes thereabout. Corn hills are found in the woods all along the lake shore from Cheboygan to Grand Traverse. The Indian method was to make a conical hillock, in the top of which the corn was planted. These "hills" were used for the same purpose year after year, and became so hard that they have endured to this day. Apple trees, yet in bearing, spindling up like forest growths, as if reaching for sunlight and a free space in

which to spread, are also still standing. How far back these agricultural and horticultural endeavors date it is impossible now to determine. Often the corn hills are found in little circular cleared spaces, devoid of giant tree growths, but often again they are scattered where the tall trees stand thickly. Viewing the subject in any historical light we may, it is certain that the prolific forests of the northwest counties of the lower peninsula have developed very rapidly, showing the adaptability of the soil and climate of that region for tree growth. *Northwestern Lumberman.*

#### WIND, FIRE AND FLOOD.

Fire and floods, says the *Lumberman's Gazette*, have been fruitful of destruction to property, especially to lumber. The Chippewa and Eau Claire rivers in Wisconsin, and other streams in that state which poured their volume of water into the rivers named, spread devastation and ruin on every hand. The flood reached the highest point known for years, and nothing could withstand the force of the elements. Buildings, bridges, logs, lumber, and even the roads, were swept away by the volume of the waters. In Eau Claire the destruction was terrible, over two hundred buildings being carried away, according to the despatches sent over the wires from that place. The losses are appalling, although a dispatch received from there on the 13th inst. says that all of the saw mills are left in good shape. They are temporarily shut down, but able to resume operations the coming week. There are plenty of available logs, but all of the dams on the Chippewa save the Della, were carried off. Lumbermen are discouraged but not disheartened.

At Alpena, Mich., the wind blew a hurricane, and the rainfall was wonderful—an inch in eight minutes. Houses, mill smoke stacks, and lumber piles were demolished. One mill lost its roof and 40,000 feet of lumber blown into the lake.

The fire scourge has been equally appalling and spread more generally over the country. Mitchell, Dakota, lost over \$35,000 in lumber, besides \$125,000 in other property; Dubuque, Iowa, lost 6,000,000 feet of lumber by the fire fiend; forest fires ravaged \$10,000 worth near Reed City, Mich.; Lumberton near Grand Rapids, lost 1,000,000 feet of pine besides other property; Milton Junction lost \$4,000 in lumber and tan bark; a small saw mill near Coloma, Michigan, destroyed, loss \$9,000; McLean's Siding, a station on the C. & W. M. railroad, destroyed, with lumber amounting to \$20,000. These and numerous other fires throughout the country have struck the lumber piles hard, coming as they do on the heels of the destructive fire at Cleveland. It is estimated that 150,000,000 feet lumber has been licked up by the fire fiend during the season.

#### DEAL SHIPMENT.

Shipments of deals from Chatham, N. B., this season have been fully up to those of 1883, but only limited shipments will likely be made for the balance of the year. In 1883 about 140,000,000 feet was forwarded from Chatham and Newcastle, and 70,000,000 feet more was wintered over. Of the latter quantity, 40,000,000 feet have been shipped this season, so that, although Liverpool dealers were notified that the Miramichi quota this year would fall one-third short of 1883, the large amount wintered over and forwarded early this season brings the total figures up to those of last year. Rafting operations have been concluded a month earlier than usual, and preparations are already being made for next winter's campaign in the woods. The prospect is that the cut of 1885 will scarcely reach beyond 50 per cent. of an average year. *Monetary Times.*

#### Lumber Destroyed by an Incendiary.

DUNNVILLE, Sept. 16.—Early this morning a fire broke out in some lumber and ties which were piled on the canal bank about two miles below here. The lumber destroyed consisted chiefly of chestnut and maple, valued at about \$5,000, and was the property of Mr. G. P. Moore, of Welland. The cause of the fire is not known, but is supposed to be the work of an incendiary. A very high wind was blowing at the time, which made it impossible to save anything.

**THE MEXICAN WOOD-SELLER.**

Beyond all artisans in the world, writes George Jacob Holyoake, I envy the Mexican wood-seller. He takes three days to cut his wood in the most romantic dells in the universe. He loads his asses in the morning sun. Spends a day in roadless gorges by the side of his four-footed friends. He takes another day in the quaint, sunny city of Santa Fe, selling his bundles. Another day he returns. For his six days' work he obtains five, or, if wood is scarce in the city, six shillings. With this money in hand he buys a pint of whisky, of quality very doubtful, the backbone of a couple of sheep, some coffee, or pepper, or some other spice. He does no more work while these provisions last. He takes no notice of the market, whether the prices are high or low. He revisits it only when his necessity compels him. He has no care, no master, no overlooker, no bell rings him up to work. He has no artificial wants—he breathes some of the purest air on this planet. In the far distance silver-capped mountains wait for his glance, sweet streams ripple at his feet, and if the sun fatigues him he sleeps under the bushes, and his faithful asses lie down and await his pleasure. The day is warm and undamp, the night cold but dry. No vermin, large fruit, grass not green, but rich, which feeds his asses without cost. When he pleases to waken he calls to his loaded friends, and they jointly pursue their way. No electoral agitation is about here. He knows nothing of Irish discontent or ritualistic troubles. Democrat and Republican, Tory and Liberal are alike unknown to him. The ballot box is not set up in his parts. He has health without effort, good teeth and black hair. His garments last for a generation—appearances and fashion concern him in nowise.

**THE ECONOMY OF WOOD IN FRANCE.**

A correspondent to the New York World describing how every foot of the soil is utilized in France, mentions the method pursued to supply the country with fuel by the growth of Lombardy poplar. The correspondent says: "In going from Paris to Geneva, via Dijon, we pass through the best portion of France. For hundreds of miles every inch of land is cultivated. The abrupt side hills are in grape vines and the flat land in grain. Here we see the phenomenon of double crops—a crop of grain and vegetables growing under a crop of trees. The Normandy poplar trees are from an inch to three feet in diameter. They are planted thickly, but give no shade. They are trimmed within six feet of the tops. The boughs, which are cut off every year, make fagots enough to warm France. We often see men and women cradling wheat or hoeing beets in the midst of a wood giving no shade. When you look across the country the tall, boughless trunks look like black streaks painted against the sky. They make the view very picturesque. Wood in France is sold for a third of a cent a pound. It is worth as much as corn in Kansas by the pound. So when the Kansas man burns corn, he is no more profligate than the Frenchman who burns fagots."

**A Shining Tree.**

A most remarkable tree or shrub grows in a small gulch near some springs, about twelve miles north of Tuscarora, is about six or seven feet in height, with a trunk which, at its base, is three times the size of a man's wrist. It has innumerable branches and twigs, and resembles somewhat the barberry trees. Its foliage at certain seasons of the year is so luminous that it can be plainly distinguished in the darkest night for a distance of more than a mile, while in its immediate vicinity it emits sufficient light to enable a person to read the finest print. Its foliage is extremely rank, and its leaves resemble somewhat, in size shape and color, those of the aromatic bay tree of California. The luminous property is evidently parasitic, and consists of a sort of gummy substance, which, upon being transferred by rubbing to person's hand, imparts to it the same apparently phosphorescent light, while that on the leaf entirely disappears.—*Tuscarora, Nev., Times.*

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**REMEDY FOR DRY ROT.**

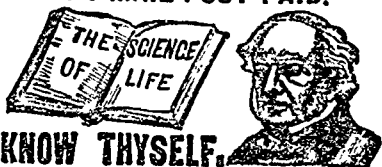
A remedy has been discovered, says the *Mechanical World*, by the use of which this destructive enemy to the woodwork of a house may be destroyed or arrested. What is known as "dry rot" is caused by the spores of a species of fungus (the *Merulius lacrymans*), which, though they are sometimes carried by currents of air to the scene of their future devastations, are more frequently present in the soil upon which the house is built at the time of erection, and are brought into near contact with the woodwork in the filling up between the joists, or sometimes even in the mortar. Notwithstanding its name, dry rot does not act upon perfectly dry timber, but begins its ravages whenever the wood is in the necessary state of humidity. It may be prevented by mixing with the rubbish used for filling in the floors the "tank waste" from alkali works, or the same substance will completely check it if already developed. Tank waste is of no commercial value, and may be had at alkali works for fetching; it wholly destroys this species of vegetable life, and generates no bad smell whatever.

**WHAT COLORS OF BUOYS MEAN.**

When you enter any harbor in the world, said a pilot to a *Sun* reporter, where the channel is marked by buoys, you will find that those on your right as you pass in are painted red, and those on your left black. If you should see one painted in red and black horizontal bands, the ship should run as close to it as possible, because that indicates the centre of a narrow channel. Buoys with red and black checkers are painted on a buoy, it marks either a rock in the open sea or an obstruction in the harbor of small extent with a channel all around. If there are two such obstructions and a channel between them, the buoy on the right of you will have red and white checkers, and the one on the left will have black and white checkers. When a wreck obstructs the channel a green buoy will be placed on the sea side of the wreck, with the word "wreck" plainly painted on it in white letters, provided there is a clear channel all around it; otherwise, an even number will be painted in white above the word "wreck" when the buoy is on the right side of the channel, and an odd number if the buoy is on the left.

THE Wisconsin Sash and Door Company, of Chicago, Ill., which closed up its business last week, has sold its stock on hand to the amount of about \$30,000 to Gauger, Olver & Co., Chicago, and its lease on warehouse with personal property and fixtures to the Hintzo & Baker Company, who will make use of the establishment as a factory and setting up shop.—*Northwestern Lumberman.*

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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.

The CANADA LUMBERMAN is filed at the Offices of Messrs. SAMUEL DRACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., OCT. 1, 1884.

LARGE tracts of valuable cedar have been burned in the vicinity of Kincardine, Canada.

THE schooner Regina, from Quebec for Buenos Ayres, with lumber, which put in to Gaspé damaged, had jettisoned a portion of her cargo.

THE saw mill, lumber yard and grist mill of F. S. Hall, at Southport, Chemung county, N. Y., were burned September 8. Loss about \$18,000.

THE village of Pinconning, Mich., was surrounded by forest fires, Sept. 17, and was in great danger of being burned. All business was suspended.

REPORTS from Port Huron, Mich., Sept. 17, stated that forest fires were burning fiercely west of the town, and unless rain came its safety was threatened.

THE gang in the mill of the Conger Lumber Company, Parry Sound, Ont., broke twice within a week recently. The mill will probably be closed for the season September 20.

THE lumbermen around Ottawa are commencing to engage men for the shanties. An unusually large number will likely go to the woods this season owing to the low price of hay and grain.

FIRE totally destroyed the sash and door factory of T. Lewis, Trenton, Ont., on the morning of September 13, together with several other buildings. Total loss \$4,000. Lewis had no insurance.

J. YORUM, working in Williams Bros.' mill, at Saginaw, Mich., was recently struck by a heavy piece of timber under the chin. It cut clear through and severed his tongue half an inch from the end.

THE big Casino mill, owned by W. H. Watson, near Cottonwood City, McGeary county, Mo., was burned September 5, together with the surrounding buildings and a quantity of logs. Loss, \$60,000.

FOREST fires which have been burning for a week are causing much alarm in the villages of Ballston and Pleasant Mills, on the borders of Atlantic and Burlington counties New Jersey.

THE barge Conard Reed, lumber laden, was towed into Amherstburg, Canada, September 13, being waterlogged. It will be necessary to discharge her cargo and pump her out before the leak can be repaired.

J. M. HOLT & Co.'s saw mill at Loch Lomond, two miles north of Philipsburg, Pa., burned September 10, together with several million feet of lumber, with shingles, lath, etc. Loss estimated at over \$100,000; insurance, \$75,000.

THE tug Sherwood, owned by Messrs. Rathbun & Son, Deseronto, was burned in the Bay of Quinte on Sept. 17th. There were six men and a woman aboard. Those who could swim got on shore, and by showing out rails managed to save the others. Everything aboard including the books were burned.

J. R. Sutherland & Co.'s extensive saw mill at St. Boniface, Man., was burned on Sept. 25, with its contents and a large quantity of lumber destroyed. The fire brigade from Winnipeg were quickly in attendance and prevented the spread of the flames. Cause of the fire unknown. Loss not yet estimated, but expected to exceed \$15,000 or \$20,000. Well insured.

THE exports of lumber from Montreal in August last amounted to 6,626,000 feet. Of this total nearly 3,000,000 feet in twelve steamships, went to Liverpool, 1,831,820 feet in four steamers, to London, the remainder to Glasgow, Bristol, Sharpness, Gloucester and Penarth Roads. All were steamers except two barques and a brig, the total number of crafts lumber laden, being 29.

THE latest news from Pinonning, Bay county, Mich., says the danger from forest fires is over for the present. The wind has subsided and the progress of the flames is checked. Fire fighting is still kept up, however, on all sides. The village of Arenac is in about the same condition. The danger seems over unless the wind changes and increases in velocity.

A MEETING of the creditors of the lumber firm of S. S. Mutton & Co., Toronto, has been called. The liabilities are heavy; the assets are not yet ascertainable. The direct cause of the trouble lies in certain of the firm's notes going to protest while in the hands of the Standard Bank, which is said to be interested. Last year the firm was stated to be worth \$70,000 with \$17,080 liabilities.

CANADA ranked low down in the list of prizes at the forestry exhibition at Edinburgh. Not one first or second class gold medal was awarded to this country. This is attributable to the supineness of our own people, for the only provinces represented at the exhibition was New Brunswick, Canada, properly represented, should be able to hold its own with any country in the world at such an exhibition.—*Ottawa Sun.*

FOSTER, BLACKBURN & Co., of Big Rapids and Baldwin, Mich., September 4th filed chattel mortgages to the amount of \$93,022, to secure commercial and accommodation paper covering all their lumber, lath and saw logs at their mills in the vicinity of Baldwin, and a stock of goods at Baldwin. They also gave a trust deed to E. F. Uhl and D. F. Comstock, to secure certain creditors. It is thought the liabilities of the firm will exceed \$100,000, and that assets will exceed liabilities.—*Northwestern Lumberman.*

**Peterborough.**

Mr. R. C. Strickland has just returned from the east, having sold to R. R. Dobell & Co. all the waney and square timber of his firm, realizing in the neighborhood of \$90,000. The sale of timber at present is very slow, but the extra quality and average of the timber enabled him to effect a satisfactory sale. He has contracted for another hundred thousand to be delivered next year to the same firm.—*Review.*

**FORESTRY.**

Mr. Phipps is busy in the northern forests. We clip the following from the *Pembroke Observer*:

FOREST PRESERVATION.—Mr. R. W. Phipps, the Forest Conservator of the Ontario Government, is up here at present on a tour of observation through the woods. He left Pembroke by train yesterday for Mattawa, and will go on to Lake Nipissing, intending to stop at the various lumber stations, and traverse the intervening country by canoe or otherwise. The main purpose of his visit to the lumber regions at this time is to get opinions from practical men, and ideas from personal observation, as to the best means of preventing forest fires, and also the most effectual method of preserving the pine forests in a reproductive condition. There is no doubt that if these objects can be carried out, the result will be very valuable to the country.

**LOOKING FOR \$75,000.**

The *Brockville Recorder* says:—Benjamin Campbell is the name of the man who is searching for the raft of oak timber, sunk in the St. Lawrence river above Chippewa Point. Mr. Campbell has succeeded in finding what he thinks must be the timber. It seems to be in three parts in forty feet of water. The wreckers are expected this week to raise the timber. Mr. Campbell says his father was engaged in the lumber business before the war of 1812 and had got out a large quantity of oak timber in the town of Clayton, made it into a raft there and started for Montreal with it. When he heard that war had been declared he cut the withs and the floats and let the timber sink. The raft is said to have covered five acres of surface and is valued at \$75,000.

**THE FORESTRY CONGRESS.**

The following in reference to the Forestry Congress appears in the *Montreal Witness*:

Hearing that the Hon. Mr. Joly, ex-Premier of Quebec, was at the Windsor Hotel on his return from the Forestry Congress at Saratoga, a *Witness* reporter waited on him yesterday, and found him taking a hasty lunch previous to his departure for home. In reference to the Forestry Congress, the hon. gentleman stated that it was not attended by Canadians as well as it ought to have been. There were only present from Canada Messrs. William Little and J. K. Ward, of Montreal, and himself. Mr. Ward read a paper on "Lumbering in Canada," which excited great interest; in fact, it was one of the documents which was listened to with the greatest of pleasure by the congress, and no one could wonder at Mr. Ward's success who remembered the magnificent lecture he delivered on the same subject before the Y. M. C. A., in Montreal last winter.

The Congress acknowledged with gratitude the ready compliance of the different Governments of the Dominion, and especially those of Quebec, Ontario and Nova Scotia, with the report made in the Montreal session in 1882, by a special committee, of which the late Hon. Geo. Bryson was chairman, "for the better protection of our forests." A regret was expressed that in the United States the same action had not been taken.

The meeting had a very practical purpose in the study of the question, which, though for the present effecting only the prosperity of the State of New York, and its great commercial metropolis, was nevertheless one of great interest in Canada, viz., "the effect produced upon the volume of water of the river Hudson by the destruction of the Adirondack forests, whence the river takes its source."

The waters of the Hudson are getting gradually lower every summer, so as to render navigation more and more difficult. It was evidently the opinion of the immense majority of the Congress that the shrinkage of the water or the irregularity of its flow was owing to the wholesale destruction of the forests. In order to ascertain the state of these forests a number of members, including himself, started for the Adirondack Mountains immediately after the Congress adjourned, and their report will be looked forward to with great interest, as the Legislature of the State of New York has taken the whole matter of forests under their earnest

consideration. A report of the proceedings of the Congress, which will contain some highly interesting matter, will shortly be published, and copy forwarded to each member.

Speaking of his pleasure trip, Mr. Joly said he had taken his wife with him and they had enjoyed themselves very much. Saratoga was perfectly lovely and the weather was charming. When up among the beautiful mountains and lakes of the Adirondacks, he had never felt so delighted with nature's scenery. The party went over a number of lakes at the head waters of the Hudson and came back, one and all, delighted with the American Switzerland.

**TYNE.**

The *Timber Trades Journal* of Sept. 13, says. The arrivals of the past seven days have been on a very much larger scale, and comprise several cargoes of respectable proportions, amongst them being one steamer with an entire cargo of Sundavall deals; there is, however, no very heavy importation, and so far all the sawn goods coming forward appear to be finding their way into consumption, and are not preceptibly increasing the stocks. American goods are coming only very slowly to hand this season; few cargoes have as yet been imported, and, as the demand for all except yellow pine deals is very small, and stocks of other goods sufficiently large, it is well they are not coming forward in quantity. Pitch pine timber is still very largely held, and selling at very low rates, while in hardwood, oak, elm, etc., there is absolutely no sale at all. Firwood is still a drug in the market, and can be bought at ruinously low rates.

On the 9th inst. Mr. R. Mack offered a cargo of redwood deals and battens by auction at Howden Dock; there were very few buyers, and in consequence the bidding was lacking in spirit. The cargo was cleared at about £8 6s., £7 6s., and £6 6s. for mixed 3rd and 4th deals; battens at £6 6s., £5, and about £5 10s. Not being a first-class parcel the prices must not be accepted as an indication of possible values.

Trade is still very quiet; the housebuilding, which has hitherto been very active, is showing signs of slackening, and on all hands the indications point to a very quiet winter trade.

**RAFTS ARRIVED.**

The *Quebec Chronicle* has the following list of rafts arrived:

Sept. 15.—Collins Bay Co., pine, &c., Sillery cove.  
D. D. Calvin & Co., oak and pine, sundry coves.  
Collins Bay Co., oak, Ottawa cove.  
John R. McRae & Co., staves, St. Michael's cove.  
Sept. 17.—Collins Bay Co., staves, Bowen's (Sillery).  
Thos. Buck, elm, &c., Ottawa cove.  
John McRae & Co., staves, St. Michael's cove.  
Sept. 18.—Price, Bros & Co., spruce deals, Lake St. Joseph.

**QUEBEC CULLERS' OFFICE.**

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

|                       | 1882.      | 1883.     | 1884.     |
|-----------------------|------------|-----------|-----------|
| Waney White Pine..... | 2,135,250  | 2,670,000 | 1,749,047 |
| White Pine.....       | 7,023,350  | 3,057,814 | 3,241,683 |
| Red Pine.....         | 1,323,803  | 253,012   | 298,433   |
| Oak.....              | 1,015,625  | 1,151,280 | 625,550   |
| Elm.....              | 500,470    | 217,710   | 614,073   |
| Ash.....              | 243,618    | 153,677   | 377,105   |
| Basewood.....         | 1,273      | 1,850     | 3,992     |
| Butternut.....        | 2,535      | 980       | 1,121     |
| Tamarac.....          | 3,234      | 4,644     | 18,763    |
| Birch & Maple.....    | 263,812    | 137,249   | 195,176   |
| Masts & Bowsprits..   | 33pcs      | —pcs      | —pcs      |
| Spars.....            | 61 pcs     | —pcs      | 41 pcs    |
| Std. Staves.....      | 815,03.25  | 509,52.10 | 83,12.25  |
| W. I. Staves.....     | 1041,00.19 | 449,12.0  | 78,00.2   |
| Brl. Staves.....      | 428.1.17   | 87.1.127  | 0.0.213   |

JAMES PATTON,  
Supervisor of Cullers

Quebec, Sept. 13.

AN elm tree has been removed from Mr. Halo's estate at Alderley, Gloucester, 40 feet long and having a girth of 35 in., or nearly 4 yards in circumference, the weight being about 15 tons. It was sold in the early part of the year, at the timber sale of the estate.



# ST. CATHARINES SAW WORKS!



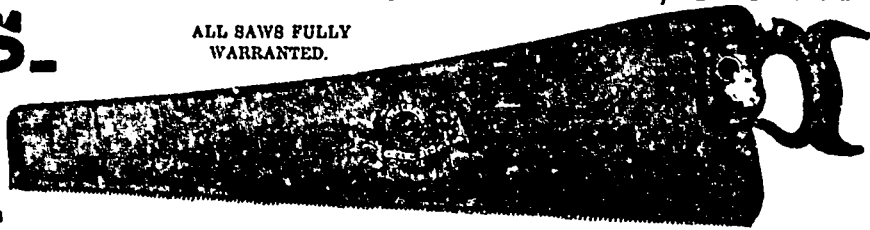
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# Canada Lumberman

### ANOTHER USE FOR SAWDUST.

*Forest and Stream*, a sporting journal, after referring to the very injurious effects which follow the depositing of saw dust in streams, says:—

"When urged to burn, or in some other way dispose of their sawdust, lumbermen have objected that they could not afford the cost. There is hope that the perplexing problem of dealing with this nuisance may now be solved, for a process has been discovered by which the refuse sawdust may be made to yield a handsome profit. When dry it is carbonized in iron retorts, and in the process there is given off 80 per cent. of volatile products, the remaining 20 per cent. being granulated charcoal, which can be used in making gun powder, filters, lining refrigerators, and as a disinfectant, and with a little tar it could be pressed into bricks and used for fuel; 22 of the 80 per cent. of the volatile product are in the form of fixed gases, which can be used for heating, lighting, etc.; 47 per cent. is pyrogenous acid, which is crude acetic acid, and after being purified and concentrated is used in white lead, color, print and vinegar manufactures.

There remain 10 per cent. of tar and one of wood alcohol. The tar has the same properties as coal tar, the almost endless uses of which, such as pitching roofs, lining water tanks, covering the bottom of vessels, protecting iron from rusting, covering the wounds made in pruning trees, and in the form of benzole, naphtha, carbolic and sulphuric acids, and the

whole splendid series of aniline dyes, constitute one of the chief glories of modern chemistry. The wood or methylic alcohol is used as a solvent for gums in varnish making, in the manufacture of aniline colors. The sawdust from yellow pine and other woods rich in resin yields also a considerable amount of turpentine, in the gathering of which so many trees are every year sacrificed. It is estimated that in sawing inch boards of pine, hemlock, etc., the one-fourth inch saw-kerf uses up one-fifth of the log. When lumber is sawed by the billion feet, one can easily see that the question of disposing of the sawdust in a way to yield a profit, instead of a first-class nuisance, is a very important one."

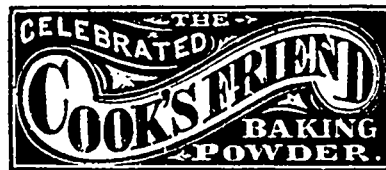
### A Great Fire

CHARDON, Ohio, Sept. 20.—A disastrous fire has been raging for forty-eight hours in the woods, about two miles from this place. Nearly 150 acres of valuable woodland have been burned. The flames have invaded the vast swamp of several hundred acres. Notwithstanding the effort to check their progress the flames continue to make great headway. The fire department of this place is on the way to the scene.

The evening session of the Forestry Congress at Saratoga, on Sept. 27th, began with a paper by J. K. Ward, of Montreal, on "Lumbering in Canada," giving a history of the business here, with a comparison of former and present methods of work.

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**PULP MADE OF MILL REFUSE.**

The Troy, N. Y., *Times* has the following description of the machine which reduces sawdust to pulp:—

"For several months past a machine has been under construction for the manufacture of paper pulp from sawdust and other refuse from saw mills. An experimental machine was completed some time ago. Sawdust, bits of lath, shavings, and refuse known as "driftwood" were converted into pulp in a very short time, the product being equal to any pulp manufactured. The working of the experimental machine was so satisfactory that the inventor found no difficulty in interesting others in the invention. The inventor having completed his machine, made pulp with it to his satisfaction the first time it was tried. The machine is cylindrical in shape and stands on the end. It is 14 feet and 4 inches in height and 6 feet and 2 inches in diameter in the clear. The gearing is on top of the cylinder. The saw is placed inside the cylinder—1,600 pounds being the charge—and it is reduced to pulp by rollers travelling around the inner surface of the cylinder, the principle being the same as a wagon rolling over a plank road or the chewing of a piece of wood. These rollers are two hundred in number and attached to the shaft hang on to what is known as a step at the top of the machine, the rollers, shafts, etc., making a total of 20,600 pounds hanging from the step. This apparatus presents a novelty in mechanism, the like of which was never seen before. The entire machine weighs 63,200 pounds; 15-horse power will operate the machine perfectly, and the steam pressure required is from 60 to 80 pounds. About three hours' time will convert a charge of 1,600 pounds of sawdust into pulp, the product being 1,200 pounds. A *Times* representative was present when the machine was in operation, and examined the pulp after having been taken from the machine. It showed a fine, long fibre, and a person could hardly believe, without witnessing the operation, that it had been made from sawdust. The inventor has an apparatus for bleaching the pulp. The product is cleaned automatically as it leaves the machine and is carried direct to the bleacher, where it is rendered as white as snow at an expense not exceeding 50 cents per ton. The invention will work a revolution in paper manufacture. His experiments show that a fine quality of letter paper, as well as book, news, and wrapping stock can be made from the products of the machine direct, thus doing away with the expense of beating engine and other ponderous machinery common to paper mills. It has already produced writing paper in a variety of shades, as well as all other grades capable of being manufactured from rags, jute, straw, or any other material, and his productions are in every way equal. As the raw material can be had for the carting, the manufacture of paper from sawdust pulp effects a wonderful saving.

**STRENGTH OF MATERIALS.**

With heavy timbers in positions where absolute strength is the primary motive, it often happens that it is optional with the builder whether he put in a single timber of one piece or a number of pieces the aggregate of which would be as large as the single timber, the great question being whether four pieces one foot square will bear a greater or less weight than one solid stick four feet square, each being of the same variety of wood and alike in all other respects.

Before a question of this kind can be answered in a manner to suit all contingencies, it becomes very important that the nature of the strain be fully understood. If the slight movement of the ends incident to the bowed condition be admissible, why it is reasonable to suppose that the four pieces would bend more without breaking, inasmuch as the moment a piece of timber is subjected to any influence causing it to assume any shape than the original, the molecular construction and cellular combination it disturbed; hence if we bend, forcibly, the timber four foot square a fraction out of line, the grains as the lower side are made to expand, at the upper become shorter, and as it is out of the question to contract vegetable matter without disturbance of some kind, this shortening of the upper portion is accomplished

either by forcibly tearing one layer from another and allowing each one to bend of itself to accommodate the inequalities, else the entire upper half will be composed of a series of wrinkles and the tension characteristic of the timber permanently and effectually destroyed. At the centre of the timber, the pressure being counterbalanced from above and below, the particles will be found inert; thus we have with the solid timber three forces of an unequal character, all acting in unison to restore an equilibrium, which, when accomplished, breaks the timber. If we measure the ends of the solid timber while the pressure is in full force, we will find them very uneven, or in the form of steps approaching the centre from below and receding from the centre above, and to do this it is but reasonable to conclude that these grains of wood must have elided past each other, of course materially effecting the power of resistance to pressure the timber ordinarily possessed.

With the four timbers, each one foot in diameter, this difficulty is overcome in exact proportion as we have brought mechanical means to bear and separated those tissues in an artificial manner. Now, if we apply the same pressure, though the four timbers may bend further than the solid stick with the same pressure, at the same time it has not lost its power of restoration and will stand repeated pressure much longer, and by examination we will find the same inequalities apparent at the ends, but more evenly divided, the greatest disparity being at the points of contact with the different sticks.

Again, timber sawn in two and the sides reversed will bear a greater pressure and resist it longer than the solid piece, for the simple reason that when these inequalities of pressure are brought to bear we present a side for expansion containing a greater degree of elasticity, and the portions to contract, or that side within the arc when bent, being nearer the centre of the tree, is more compact and solid, hence the wrinkling tendency is overcome in a measure. We shall have more to say of this at another time, awaiting, as we are, the results of some tests. — *Lumber Trade Journal.*

**GREEN AND SEASONED TIMBER.**

The question of using properly seasoned lumber is one of importance. The *National Car Builder* publishes the following on the use of seasoned lumber in car building:

"In the building of freight cars, one of the worst things car builders have to contend against is the difficulty of getting dry lumber of the proper dimensions for the various parts. There are few railway companies whose roads do not run through coal regions, that are willing to carry a stock of lumber sufficiently large to admit of its being properly seasoned before being used. Many roads that build cars in comparatively small lots, get their lumber in the open market and do not attempt to season it. The results of using green or half-seasoned lumber are strikingly visible in repair yards, where old cars show the extent of the shrinking of the timber with which they were constructed. In contract work, poorly seasoned stuff is the rule and well seasoned the exception, and the same is true to a certain extent of the road shops, but it is not the shops, as such, but those who run them, who are at fault. Many a so-called contract shop has sent out cars with oak sills almost fresh enough from the stump to sprout if it had not been for a coat of paint, when well seasoned oak that had been cut three or four years was lying in the lumber yard and could have been used without any increase of cost.

In such cases it may be said that the dimensions of the timber may have had something to do with it. Seasoned oak for freight car bolsters has been rejected at contract shops, in one instance at least, because the size was one-fourth of an inch smaller than what was required by the specifications, and green timber used in its stead. In road shops also, when dry stuff on hand varies a trifle from the required dimensions, it is not used because the size does not conform to "our standard." Now, it seems to us that the exact dimensions of car timber are not of such vital importance as some builders are inclined to believe. The variation of one

half inch in the thickness of a body bolster or of one and one-half or two inches in width, is not of much account as compared with the difference between dry and green timber as it effects the service and life of a car. A dry end sill, for example, that is an inch smaller than the specification, is vastly to be preferred to a green one of full size. Considering the loosening of bolts, opening of joints and consequent penetration of moisture into the structure, very few car builders will be likely to question this.

In view of the evils to which I have referred, it is a question whether it is not possible to agree upon and establish certain sizes of merchantable car lumber that would be recognized as standard sizes to be used for sills, posts, bolsters, braces, etc., and accepted in all contracts for construction. The results of such a system would not be very apparent perhaps at the start, nor are the advantages that would accrue so obvious as to make some mention of them out of place. The standard sizes once adopted, lumber manufacturers would feel safe in sawing stock to size and holding it to become seasoned, and the general market would be supplied with a larger quantity of seasoned stock from which the roads could draw for car work and thus be relieved from the necessity of carrying very large stocks themselves. So far as such a system would tend to increase the durability of freight cars and lessen the aggregate of repairs, it would be a boon to the roads, and enable builders to turn out more satisfactory work for the same prices. Most of the car building establishments would be willing to keep on hand large quantities of dry lumber if they could be sure of working it off without the waste of cutting it to a diversity of sizes for the same parts of a car. Under such an arrangement it would be possible for a road to get out 500 cars, more or less, at the shortest notice, and built of good material so far as the timber is concerned.

The suggestion of merchantable sizes for car timber may be considered as somewhat visionary by those who are looking for 'standard' freight car, or cars, within the next twelve months. But if such a standard or standards shall reach the climax of consummation within the period named, the event, instead of weakening will strengthen the suggestion."

**THE STRUCTURE OF TIMBER TREES.**

Regarding the structure of timber trees, Mr. Mr. Percy Russell, a well-known English botanist, writes:—"The structure of all bodies, more especially organised bodies, is always marvellous, and it is especially so in regard to vegetable productions. I know that the numerical wonders of the starry heavens, the overwhelming yet matter-of-fact stories of the stars whose light has not yet reached us, produce generally more impression on most minds than the less known wonders of the botanical universe, and this really because the anatomy of plants is less popularized than that of the heavens. Let us consider for a moment that wonderful structure, a full-grown oak. First, the substance of all plants consists of cells or vessels, separate or in unison. Cell is added to cell, and vessel to vessel by the natural process

of the vitalizing sap, and by means of continual accretion and the exercise of a silent, very gentle, but stupendous energy—if we rightly estimate its final results—the tree is built up, one of the most wonderful of buildings, and, properly studied, far surpassing in detail the elaboration of any structure due alone to human hands. Technically, the cellular substance of plants may be described as a series of cavities, formed of membrane, and in vascular plants we find the lines of cells at right angles to the vessels. The shape varies, but is, I believe, most generally hexagonal. Each cell has a very thin coat, and these coats or partitions appear endowed with a power at once of secreting and absorbing substances, and in brief, each of these minute chambers may be fairly likened to laboratories wherein are produced with absolute precision, the farina, gums, oils, acids, rosin, sugar, and coloring matters which go to constitute the various distinctive parts of the tree. Cork contains very minute cells indeed, as many as 1,200,000 have been counted in a cubic inch, and yet these inconceivable fine points, so to speak, secrete the suberic acid. It is not my purpose here to touch on the controversy as to the way in which these cells are formed originally. They are certainly in plants anterior to the vessels, and these again add cellular substance. The cells become indurated and, indeed, almost obliterated in the wood, and the hardness of the best timber is due in fact to the degree in which these cells have been compressed. Now the fibrous part of plants is composed of vascular substance, and there is reason for believing that in no cases are these threads, but always tubes. Leuwenhoek, the famous microscopical observer, calculated that in an oak hole but four inches in diameter, there would be 200,000,000 of these vessels, and in Damory's oak near Blandford, Dorsetshire, there would be in one section of the trunk, which was when cut down, eighty-four feet in circumference, no fewer than 1,411,200,000,000 of these vessels. To bring the matter home to the understanding, the vessels in one foot length of this gigantic oak, if extended end to end, would stretch away through the stellar universe for 240,000,000 of miles!"

**Wooden Houses for the Congo.**

SEVERAL hundred small frame houses are now building in Belgium for use at Vivi and other stations established by Stanley along the Congo. As Stanley possessed no facilities for taking lumber, his European assistants were compelled to live in tents or huts, and the discomfort of living in that way added largely to the sick list. The International Association is building at Boma, ninety miles above the mouth of Congo, a sanitarium, to which it proposes to send its invalid agents for treatment. Better facilities for preserving health and caring for the sick are among the innovations to be introduced on the Congo.

**Forest Fires in Michigan.**

DETROIT, Sept. 15.—Forest fires are raging again in the townships of Kimball, Fort Gratiot, and Port Huron, Huron county. In the latter they are within sight of the city of Port Huron. No buildings are reported burned as yet.

**LIVERPOOL STOCKS.**

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool on Sept. 1st, 1883 and 1884, and also the Consumption for the month of Aug. 1883 and 1884:—

|                                 | Stock, Sept. 1st. 1883. | Stock, Sept. 1st. 1884. | Consumption for the month of Aug., 1883. | Consumption for the month of Aug., 1884. |
|---------------------------------|-------------------------|-------------------------|--|--|
| Quebec Square Pine.....         | 485,000 ft.             | 424,000 ft.             | 440,000 ft.                              | 309,000 ft.                              |
| Waney Board.....                | 449,000 "               | 216,000 "               |  |  |
| St. John Pine.....              | 12,000 "                | 19,000 "                | 8,000 "                                  | 3,000 "                                  |
| Other Ports Pine.....           | 62,000 "                | 69,000 "                | 45,000 "                                 | 12,000 "                                 |
| Rod Pine.....                   | 54,000 "                | 66,000 "                | 8,000 "                                  | 4,000 "                                  |
| Pitch Pine, hewn.....           | 358,000 "               | 616,000 "               | 251,000 "                                | 105,000 "                                |
| " Sawn.....                     | 489,000 "               | 477,000 "               | 298,000 "                                | 122,000 "                                |
| Planks.....                     | 70,000 "                | 85,000 "                | 30,000 "                                 | 12,000 "                                 |
| Dantzig, &c., Fir.....          | 110,000 "               | 50,000 "                | 9,000 "                                  | 12,000 "                                 |
| Sweden and Norway Fir.....      | 17,000 "                | 67,000 "                | 0,000 "                                  | 0,000 "                                  |
| Oak, Canadian and American..... | 351,000 "               | 357,000 "               | 130,000 "                                | 108,000 "                                |
| " Planks.....                   | 109,000 "               | 211,000 "               | 61,000 "                                 | 119,000 "                                |
| " Baltic.....                   | 14,000 "                | 0,000 "                 | 5,000 "                                  | 3,000 "                                  |
| Elm.....                        | 39,000 "                | 44,000 "                | 20,000 "                                 | 21,000 "                                 |
| Ash.....                        | 25,000 "                | 43,000 "                | 13,000 "                                 | 7,000 "                                  |
| Birch.....                      | 83,000 "                | 69,000 "                | 53,000 "                                 | 61,000 "                                 |
| East India Teak.....            | 45,000 "                | 23,000 "                | 7,000 "                                  | 1,000 "                                  |
| Greenheart.....                 | 105,000 "               | 54,000 "                | 29,000 "                                 | 16,000 "                                 |
| N. B. & N. S. Spruce Deals..... | 14,039 stds.            | 22,421 stds.            | 12,610 stds.                             | 9,306 stds.                              |
| " Pine.....                     | 835 "                   | 1,100 "                 |  |  |
| Quebec Pine & Spruce Deals..... | 7,000 "                 | 7,395 "                 | 4,230 "                                  | 2,506 "                                  |
| Baltic Red Deals, &c.....       | 4,312 "                 | 8,507 "                 | 1,030 "                                  | 704 "                                    |
| Baltic Boards.....              | 185 "                   | 50 "                    | 145 "                                    | 20 "                                     |
| " prepared Flooring.....        | 3,829 "                 | 2,312 "                 | 607 "                                    | 714 "                                    |

**BUILDING TRADE IN ENGLAND.**

Over-production of tenant houses is what now seems to trouble the writers in England. The *Timber Trades Journal* says in relation thereto:—The aspect of the building trade as it now presents itself is not of the satisfactory kind that we should like to witness, and the question of what will be the ultimate result of all the over-building that is now going on is already becoming one for serious consideration. The reports all tally in giving an immense increase of tenanted houses each succeeding season, and landed property for which capitalists hung for so long, as affording them a certain field for investment, is rapidly losing its value, and house property, instead of offering good interest on the money expended, has become anything but safe security. In the metropolitan suburbs the over-building has reached a very critical stage, and what to do with all the houses not inhabited, and for which there is evidently no demand, it is by no means easy to determine. In the city of London things are little better, where suits of offices of modern construction being unoccupied, and the number to let in the various commercial thoroughfares, Queen Victoria and Cannon streets especially, are something to cause very grave reflections as to the possibility of a very serious collapse to this branch of trade.

**THE SHIPBUILDING TRADE ON THE WEAR.**

The very small demand for manufactured and unmanufactured timber has been keenly felt by local merchants for the last twelve months, and the present revival, although exceedingly poor compared to the work usually turned out on the Wear, will be hailed with considerable satisfaction, especially by those merchants who make a speciality of shipbuilding wood goods. On the Wear the prospects of shipbuilding have somewhat improved. Three of the leading yards, Messrs. James Lang & Sons, Messrs. W. Doxford & Sons, and Messrs. R. Thompson & Sons, are fairly busy, and in these instances, although the press of work is not so great, the contracts are sufficiently important to admit of a large number of men being engaged. Messrs. Short Bros., who have been doing very little lately, have secured an order for a large steamer, the construction of which will be proceeded with at once. A rumour is current that this boat is on speculation, but we cannot say whether the report is correct. At least three firms on the river that have been almost at a standstill for some time are now about to lay down keels, and there is some hope that one or two other firms will be in a position to set their frame furnaces going shortly.—*Timber Trades Journal.*

**QUEBEC CULLERS' OFFICE.**

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

|                      | 1882.     | 1883.     | 1884.     |
|----------------------|-----------|-----------|-----------|
| Waney White Pine..   | 1,035,078 | 2,222,271 | 1,720,409 |
| White Pine.....      | 6,524,244 | 4,829,837 | 3,029,783 |
| Red Pine.....        | 1,118,533 | 350,328   | 278,641   |
| Oak.....             | 1,003,949 | 1,423,030 | 620,560   |
| Elm.....             | 562,822   | 302,623   | 644,073   |
| Ash.....             | 211,091   | 222,108   | 377,105   |
| Basswood.....        | 1,273     | 2,214     | 3,992     |
| Butternut.....       | 2,535     | 1,023     | 1,121     |
| Tamarac.....         | 8,234     | 5,030     | 13,730    |
| Birch & Maple.....   | 263,812   | 133,760   | 195,175   |
| Masts & Bowsprits... | 33pcs     | —pcs      | —pcs      |
| Spars.....           | 51 pcs    | —pcs      | 41 pcs    |
| Std. Staves.....     | 310,013   | 509,521   | 83,122    |
| W. I. Staves.....    | 962,713   | 449,129   | 78,002    |
| Brl. Staves.....     | 42,023    | 87,127    | 0,321     |

JAMES PATTON,  
Supervisor of Cullers

Quebec, Sept. 12.

**Fire at Orillia.**

ORILLIA, Sept. 19.—At 11.30 last night a fire broke out in P. Madden's planing mill, which, despite the efforts of a number of citizens, soon enveloped the whole building in flames. A dwelling house adjoining next caught on fire, and from there it spread to the old lumber mill belonging to Andrew Tait, formerly the property of the Floss Lumbering Company, and in about half an hour \$3,000 worth of property was swept away. Mr. Tait's loss is estimated at about \$4,000; insurance, \$2,000. Mr. Madden's loss is about \$4,000; insurance not known.

**Chips.**

THE Eagle furniture factory in Baltimore was burned September 11th. Loss, \$100,000.

THE Big Mill at Deseronto, recently cut 2,033 logs in one day.

MR. JAMES H. TOTHAN, superintendent of the Big Mill, Deseronto, has invented a machine for sharpening circular saws.

A SHINGLE mill belonging to Mr. J. W. Taylor, Dummer, Ont., was burned on Sept. 14. Loss, \$600; insurance, \$400.

JOHN TRUMAN, an employee in Connor's mill, Indianapolis, Ind., fell against the circular, September 3, and his body was cut in two.

AFTER the returns are all in, the losses by fire at Cleveland foot up 50,000,000 feet of lumber and 25,000,000 shingles.

THE capital of the Western Lumber Company, at Manistique, Mich., has been increased to \$1,000,000.

It is announced by a Tawas paper that the logs to be held over at that point by one firm for next season's sawing amounts to 25,000,000 feet.

A GANG of men at Tonawanda recently took 631,000 feet of lumber of the barge Boscobel in 7½ hours; at least that is what is reported by the Tonawanda-papers.

A SAW mill belonging to D. W. Small at Cocolala, near Rathdrum, W. T., was burned together with 1,000,000 feet of lumber. The fire is supposed to have been incendiary.

FIRE destroyed poplar and walnut lumber, valued at \$35,000, belonging to the Indiana Lumber Company in their yards at Nashville, Tenn., September 10. Insurance \$22,500.

MR. JAMES McLAUREN, of Buckingham, purchased from Mr. McAllister, of Pembroke, extensive tracts of timber limits. The 1 paid is said to be in the vicinity of \$300,000.

T. E. & A. CRANE, of Oshkosh, Wis., have purchased pine land estimated capable of cutting 25,000,000 to 30,000,000 feet of pine tributary to the Milwaukee, Lake Shore & Western railroad, the timber being on Wolf river.

AT three o'clock, the morning of September 5th, fire was discovered in the planing mill owned by John Roach, Rochester, N. Y. The mill and a quantity of lumber was destroyed. Loss, \$9,000; insurance \$7,000.

Several Michigan saw mills are preparing fine Norway logs for shipment by rail to New York, and thence to England by steamer. They will be used for rebuilding old docks and quays.

An extensive forest fire in Talbot county, Md., after raging two days and nights, had burned over thousands of acres of woodland. The fire originated in the pine forest owned by Eugene Ross, at Medford's Wharf.

MR. W. F. FOWLER has secured the contract from the various lumbermen interested, to drive about 3,000,000 feet of logs, stranded at various points along the River between Woodstock and Grand Falls, says the *St. John Telegraph*.

NEARLY two million dollars' worth of lumber has been destroyed by fire during the past week. This should increase the demand somewhat. Much of this destruction occurred at points to which the Saginaw river is tributary. *Lumberman's Gazette.*

THE box and woodenware factory of Waspe & Loslier, on Clyde street, London, was destroyed by fire on September 11th. Loss on building, \$200, no insurance; loss on stock, \$800, fully covered by insurance in the Waterloo Mutual.

A PERTH journal states that Mr. Peter McLaren received a cheque for \$120,000 in full of the judgment obtained by him against the Canada Central, now the C. P. R., for lumber burned in his yard at Carleton Place—\$100,000 for damages and \$20,000 for costs.

MR. THOMAS PIDGEN, says the *Deseronto Tribune*, one of the foremen of the Big Mill, has made many changes during the season for the purpose of more speedily and effectively getting clear of the refuse, firewood, etc., and his department may well be considered a model one in that respect. By a lavish use of the hose he keeps down the dust and thus makes that section cool and comfortable for both men and horses.

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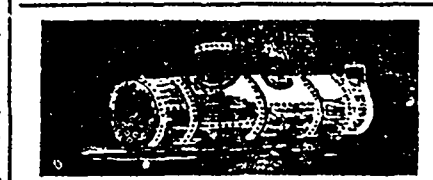
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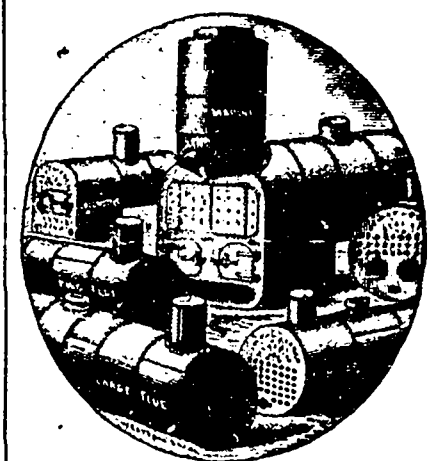
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Market Reports.

TORONTO.

From Our Own Correspondent

SEPT. 24.—Our citizens have had their attention diverted from their legitimate business during the last two weeks. Industrial exhibition on the brain has affected most of our population more or less, so that our yard men and wood workers with many other branches of trade, have been nearly idle during that time, and I can say but little to interest your readers. There is said to be considerable cutting on prices for small bills amongst our retailers. I cannot vouch for the truth of many of the reports as to prices. I have heard, however, of short bill stuff with boards for covering in, and material for working into flooring, having been furnished as low as \$10.50 per M all over. If this is correct, and I have it from what I consider a reliable source, I leave your readers to judge what must have been the figures paid at the mill. This paring down so low on small orders is a foolish policy, fair and remunerative prices might as well be obtained as not, and all dealers sell quite as much lumber.

Over our docks considerable lumber is moving off, and more of the coarse box than usual. The principal shippers operating at present are Messrs. Christie, Kerr & Co., S. C. Kanady & Co. and Messrs. Donogh & Oliver, the first named firm are shipping largely just now. Freights to Oswego remain at \$1.00 per M.

Table listing lumber prices for various grades and sizes, including Mill cutting boards and scantling, Shipping call boards, and various sizes of flooring and sheathing.

MONTREAL.

From Our Own Correspondent.

SEPT. 24.—Usually after the exhibition here a pretty fair trade has been done in lumber; this year, however, has, contrary to expectation, been an exception, as merchants here say that had it not been for advertisements in the papers they would hardly have known that there was an exhibition in the city, as it had no effect on business, and trade still keeps very dull as far as our local market is concerned. General business, however, has been rather better but no change has taken place in quotation, which on the whole are well maintained for limited lots. We still quote ex yard as under:

Table listing lumber prices for various grades and sizes in Montreal, including Pine, Spruce, Hemlock, and other types.

SHIPMENTS.

Shipping has been a fairly active for the past two weeks, and the demand for tonnage has been good at the following rates: To Glasgow, 40s.; to Liverpool, 40s.; to the River Plate, \$12.50 to \$13.00. The latest charter to the Plate was the ship Republic, 843 tons, at \$12.50, for Buenos Ayres direct. All the lumber on hand here is well provided with tonnage. The following are the

Shipments for the past two weeks: Bk. Felicia, for Buenos Ayres, 317,956 feet white pine boards; SS. Erl Ling, London, 7,833 pcs. deals; SS. Montreal, Liverpool, 4,893 pcs. deals, 5,830 pcs. boards, 6,281 sidings; SS. Cynthia, Glasgow, 6,000 ft. lumber; SS. Benona, Dublin, 320 bbl. shooks; Bk. Alexander Keith, Buenos Ayres, 524,196 ft. pine lumber; Bk. Trity Smith, Buenos Ayres, 358,115 ft. pine lumber; SS. Bristol, Bristol, 342 pcs. deals; SS. Lake Huron, Liverpool, 3,100 pcs. deals; Bk. Oregon, Hull, 212 standards white pine deals; SS. Cladow, London, 17,211 pcs. pine deals, 1,372 ends; SS. Vancouver, Liverpool, 7,476 pcs. deals; 537 boards and 209 pcs. lumber; SS. Castle Eden, Liverpool, 17,570 pcs. pine deals, 410 deal ends and 6,120 boards, also 10,000 ft. of lumber; Bk. Gaspo, River Platte, 267,000 ft. white pine.

CORWOOD.

Trade is getting a little brisker as the season advances and prices keep steady, the supply at the wharves Loth rail and boat is good. We quote at the wharves ex cartage as follows:

Table listing prices for various types of wood like Long Maple, Long Birch, Long Beech, and Amarack.

LIVERPOOL MARKETS.

Our latest report from Liverpool says that there has been a fair consumption for Canadian goods, but says, at the same time, shippers on this side would act wisely in restricting their shipments to that port as much as possible, as merchants seem determined not to increase their stocks of 2nd class and inferior goods, consequently goods of other than prime quality are difficult to sell, and very low prices have to be submitted to. Private sales of spruce deals from St. John, N. B., at £6 per standard, auction sales of the same averaged £5 2s. 6d.

ALBANY.

Quotations at the yards are as follows:—

Table listing prices for various types of lumber in Albany, including Pine, Spruce, Hemlock, and other grades.

CHICAGO.

AT THE DOCKS.

The Northwestern Lumberman of Sept. 20th says:—The number of cargoes arrived in port for the week ended Wednesday night was 175, as compared to 178 the week previous, so that although the week has been called a dull one as regards both arrivals in port and offerings on the market, business is by no means at a stand still.

Prices, on the whole, are very steady, considering the dragging condition of the market and the slow state of trade in the yards. The commission men say that this is owing to the fact that prices are as low as they can possibly be, unless there should be an utter break down and a general slaughter of stocks for the sake of realizing—a sort of neck-or-nothing market,

that could only come of the financial collapse of the holders, which is not likely. If the mill men only take counsel of the overcrowded state of the general market, and limit their input of logs next winter, and their output of lumber from now onward, relief would, to some degree, be realized by next spring.

An increasingly large proportion of good inch lumber is arriving. Thick and wide lumber, classed as No. 1, is not selling as readily, nor for relatively as good prices as inch lumber or strips. The latter moves off rapidly, and brings good prices ranging from \$15 to \$20.

Shingles are not glutting the market as they did earlier in the season, and the low range of prices is fairly maintained.

Quotations are as follows:—

Table listing prices for various types of lumber like Pine, Long timber, Coarse common, Boards and strips, etc.

LAKE FREIGHTS.

Table listing freight rates for various locations like Grand Haven, Muskegon, Whitehall, Ludington, etc.

AT THE YARDS.

Trade is jogging along at a fair gate, so far as shipments are concerned, though there is nothing like the September rush that was expected. There are plenty of dealers that say that the trade is positively dull; others say that it is fair; a few claim that there has been a slight increase of orders during the past week.

Receipts of lumber, shingles, etc., from Jan. 1st to Sept. 1st as reported from the Lumberman's Exchange:—

Table showing receipts of lumber and shingles for 1884 and 1883, including decrease and lake receipts from Jan 1 to Sept 17.

Table showing stock on hand for Sept 1, 1884, 1883, and 1882, including lumber and timber, shingles, lath, etc.

BOSTON.

The Journal of Commerce of Sept. 20 says. General trade is moving along rather slowly, but there are some signs of business starting up soon. Spruce is moving moderately, but at weak prices. White pine is moving quite well and the best grades are held quite firmly. Southern pine is moving slightly better but at low prices. Walnut moves fairly well for choice descriptions. Ash is dull and low. Cherry and oak sell slowly at present. White wood remains very low.

CANADA PINE.

Table listing prices for Canada Pine products like Selects, Dressing, Shoring, etc.

TONAWANDA.

Table listing cargo lots for TONAWANDA, including Three uppers, Common, and Culls.

OSWEGO, N.Y.

From Our Own Correspondent.

No change in prices or demand. Trade is very dull indeed and the prospect are that we shall not have the usual brisk trade we usually have during the fall months.

Table listing prices for various types of lumber in Oswego, including 1 1/2, 1, 2 & thicker uppers, pickings, cutting up, etc.

BUFFALO.

We quote cargo lots:—

Table listing prices for Buffalo cargo lots like Uppers, Common, and Culls.

LIVERPOOL.

The Timber Trades Journal of Sept. 13th says:—The number of vessels arriving with timber cargoes still keeps within moderate bounds, these being chiefly from Nova Scotia or New Brunswick with spruce deals, or from Norway with flooring. This moderation in imports is one of the few cheering aspects of the trade at present, and it is most devoutly to be hoped that it may continue so for some time to come, as it is only in this direction that we can look for relief from the depressed condition of the trade.

It is evidently hopeless to look for any improvement in the demand from the manufacturing district where the state of trade is reported to be still as listless and inactive as ever, and it is only by a large curtailment of imports that the heavy stocks on hand can now be reduced to moderate limits by the time the next import season arrives.

There have not been any public sales during the past week, but one is announced.

LONDON.

The Timber Trades Journal of Sept. 13th, in its account of Messrs. Churchill & Sim's sale, says:—Most of the pine submitted without reserve on Wednesday were oddments, and the parcel ex Lizzio Parry, from Quebec, lots 84 to 93 in the sale, had nothing particular to recommend it, being rough and not dry, hence the prices obtained were quite as good as could be expected. The two lots of 13 feet ex Juliet, 3x11 in., also Quebec at £8 15s. and £9, somewhat coarse but fairly dry, were undoubtedly cheap, and we question if the lucky purchaser could get any more at the price should he require them. The Rota parcel, of 7 to 10 in. 12 and 13 feet, described as bright, judging from appearance would pass very well for dry floated, were decided bargains at the prices paid for them and must leave a considerable loss on the original cost, having been held over since last year. The uncertainty appertaining to public sale valuations at the present time was never better exemplified than on the present occasion. Some St. John broad spruce at one period of the sale fetched £5 10s. that subsequently realized £6 for a somewhat similar lot (from Laddick), 9 in. and 8 in. deals from this port going lower than the St. John; the ends from the latter port, however, went better this time than at the sale of August 15th by 30s. a standard, which is another variation remarkable in such low-priced goods.

The 1st quality white planks in the Lockwood's cargo realized a capital price at £10. These were NP 1 mark, and a lot of 2nds at £8 15s. also a pound better than precisely similarly describe goods realized at the sale of this firm a fortnight ago. The unsorted St.



John's spruce ex Hudson called forth some spirited bidding, but it is questionable if the deals, although a very poor lot of stuff, fetched the first cost. Prices of low-class stuff generally seemed of this non-paying character, but with the specially low freights that have been paid this season it is just possible that even on the present prices the expenses are covered, but that any margin is left it is hardly possible to conceive under the most favorable circumstances.

Some of the reserved lots in Wednesday's sale were bid for, and several sold, amongst which were the 2nd spruce planks, ex Jarlen, from Quebec, 9 to 11 feet, realizing £7 10s., and some 3x8, 12 feet, £7; these prices, all things considered, seem fair enough. The cargo was a good one, and with other descriptions of white-wood going at all sorts of cheap figures it is illustrative of the esteem which Quebec wood is held in when we find packing case makers paying the same price for it as they do for Petersburg of similar quality; prices quoted in the open market for similar goods are £7 15s. to £8, which we believe there is no difficulty in securing. The Quebec oak, ex Oren, without reserve, fetched for the large-dimensioned logs £7 and £7 5s. a load, a tall price, especially when we consider that they have been two seasons in the docks. It was rumoured that these were bought in, but as they were put up without reserve we can hardly understand that can be so. At any rate, we record the sale; the smaller logs fetching a uniform price of £6 10s.; if the one parcel was brought in, the whole of it must have been, and that is hardly likely.

At Thursday's sale values throughout went low for the parcels disposed of; but as we have observed if values did not harden at all they certainly betrayed no further signs of weakness. The birch timber ex Hudson, from St. John, was cheap at the price, but it was not a very attractive parcel, and so with regard to the Odessa wainscot, one buyer took the whole parcel, 15 lots, at 4s. 12 ft. and upwards, and another 37s. 6d. for under that length; a couple of lots of the latter, however, went up to 42s. 6d., the same buyer being evidently determined to secure them. This was undoubtedly a very low crown logs.

The pitch pine planks ex Siberia, from Mobile, went slightly better than in the sale of the 27th, 4x12, which on that occasion went at £9, this time fetched £9 15s., and so by this we might describe the market as rather better the last week or two, were it not that other goods went proportionately lower. Uleaborg, for instance, 4 9, that fetched £8 10s. last month's sale, on this occasion went at £7 10s., and 2½x7, which in August realized £6 10s. to £7, in Thursday's sale sold at first-named price.

One with another we may say prices are steady, but it is entirely due to the comparatively small proportion of the stocks which comes under the hammer that keeps them so; this is pretty well recognized throughout the trade, and any presumption on this apparent steadiness would not bring about the anticipated result.

GLASGOW.

The *Timber Trade Journal* of Sept. 13, says:—A sale of timber was held at Greenock on Sept. 1, particulars as below. The attendance was fair and about 400 logs were disposed of, also various lots of deals.

There has been a light import during the past week—at Greenock a small cargo of greenheart timber and at Glasgow two cargoes of spruce deals and sundry shipments of oak planks, staves, etc., per steam liners, also an arrival of Quebec deals per steamer.

The total import of deals to Clyde shows a considerable falling off this year compared with corresponding period of previous years, being in round numbers 640,000 pieces this year to date, which is more than 200,000 pieces under previous year, and about 150,000 pieces under 1882. The storage accommodation for deals at Forhill Wharf, Glasgow is, however, at present fully occupied, and indeed there are cargoes presently being yarded for which it was with difficulty room could be got, and the passage-ways have had to be encroached on. This to some extent arises from the space available being now more limited than formerly, part of the

ground being now taken up for another purpose. The dock authorities are also at present preparing a straight thoroughfare according to original plan, from Queen's Dock to Pointhouse, which cuts up a considerable part of the yard.

The masons' strike still prevents to a large extent the free onward flow of trade or the execution of such orders as are presently in hand. It was observed by one of the members of the school board here at their monthly meeting last week that they had work amounting to £50,000 on hand to be completed by next July, and as the demand for more room this year for scholars was unusually pressing, some means should be used to bring this dispute to a termination, so that the work which is now at a stand still may proceed. The Board school erection being only one item of our building operations going on, the settlement of this strike would no doubt improve the present sluggish position of the market.

AUCTION SALE.

|   |           |
|---|-----------|
| On 4th inst., at Greenock, Messrs. Singleton, Dunn & Co., brokers:— |           |
| Quebec waney boardwood (unreserved)—                                | p. c. ft. |
| 46 c. ft. avg. per log 1s. 8d.                                      |           |
| Quebec yellow pine (unreserved)—                                    |           |
| 50 c. ft. avg. per log 1s. 2½d.                                     |           |
| 40 " " 1s. 0½d.   |           |
| Quebec yellow pine (superior jointing)—                             |           |
| 35 & 40 c. ft. avg. per log 1s. 2½d.                                |           |
| Quebec Red pine—  |           |
| 40 c. ft. avg. per log 1s. 0½d.                                     |           |
| 35 " " 1s. 1½d.   |           |
| 30 to 40 " " 1½d. to 1s. 0½d.                                       |           |
| Quebec birch—   |           |
| 13½ c. ft. avg. per log 1s. 5d.                                     |           |
| One log poplar—   |           |
| 37 c. ft. avg. per log 10½d.  |           |
| Sawn pitch pine timber—   |           |
| 40 c. ft. avg. per log 1s. 2d.                                      |           |
| 35 " " 1s. 1½d.   |           |
| Pitch pine planks 3 to 6 in. thick—                                 |           |
| 10½d. to 10½d.  |           |
| Quebec 3rd pine deal ends—  |           |
| 8 ft. 11x3 11d.   |           |
| 7 " 11x3 10d.   |           |
| Quebec 4th pine planks—   |           |
| 14 to 16 ft. 7/20x2 8½d. & 6½d.                                     |           |
| Quebec 2nd spruce deals—  |           |
| 11 ft. 7/8x3 8½d.   |           |
| Quebec 3rd spruce deals—  |           |
| 12 ft. 7/11x3 9d.   |           |
| 13 to 18 ft. 7/11x3 8½d.  |           |
| 10 ft. 7/18x3 8½d.  |           |
| 9 & 11 ft. 7/18x3 8½d.  |           |
| Quebec 3rd spruce deal ends—  |           |
| 4 to 3 ft. 9/11x3 7½d.  |           |
| Bright spruce deals—  |           |
| 11 & 12 ft. 7/15x3 8½d.   |           |

AUSTRALIA.

The monthly circular of Lord & Hughes, timber brokers, dated Melbourne, July 26th, says:—

Business in timber and building materials continues in much the same state as in our last issue on the 30th ult., quietness being still the prevailing feature in almost all descriptions, which is usually the case at this period of the year.

Offering at auction have been below the usual monthly average. Sales publicly have been principally Oregon deals and timber, ex Howard D. Troop; Scotch flooring, ex Glentilt and Blairgowrie; American lumber, ex Lothair, Hoiden and Leading Wind; Kauri pine, ex Camillo and Naiad.

The trade report a falling off in the demand from the yards for consumption, as compared with the previous three months.

Stocks of most descriptions of timber are ample for the next six months at present rate of consumption, but as the banks have reduced the rate of interest on fixed deposits to 3, 4, and 5 per cent. for 3, 6, and 12 months respectively depositors will doubtless seek more profitable investments, and this may cause a more active demand for timber and building materials in the coming spring.

The arrivals have been Mathias, from Gothenburg, with red deals; Howard D. Troop, from Puget Sound, Minnie Carmichael, from Vancouver Island, with Oregon timber, laths and pickets; Lothair, from New York, Saml. Skolfield, from Boston, with clear pine, white pine shelving, T. and G. Coiling, spruce deals, spruce flooring, laths, pickets, plaster and slates; Tiverton, Loch Eck, Westmeath Romanoff, Port Darwin, Blairgowrie, Avonger, Fort George, Hala, Procida, Yarra Yarra, Loch

**J. S. MAYO**  
 IMPORTER AND MANUFACTURER OF  
**MACHINE OILS**  
 OF EVERY DESCRIPTION.  
 9 Common Street, Montreal.  
**AMERICAN LUBRICATING OILS A SPECIALTY.**  
 As I carry the **LARGEST** and **BEST** assorted Stock of **OILS** in the Dominion, I am prepared to fill all orders Promptly and at **LOWEST MARKET PRICES.**

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Vennachar, and Glenochil, from Great Britain, with flooring, deals, laths, slates, lead, galvanized iron and cement; Romus, from Antwerp, with cement; Camillo, from Kaipara, Naiad, from Mercury Bay, N. Z., with kauri pine; Choviot, Gabo, Nemesis, Konoowarra, Buninyong Wendoureo, Leura, Cahors, City of Adelaide, from Sydney, with cedar, galvanized iron and lead; Adelaide, from Adelaide, with red deals.

**RED DEALS.**—Imports: 10,942 pieces from the Baltic, 1,860 from the United Kingdom. The arrivals have been Mathias, from Gothenburg, Avenger, from London, and Adelaide, from Adelaide, the latter being transshipment from the Baltic. On 4th inst. the deals ex Leviathan, were offered at auction, but the trade showing no disposition to purchase they were withdrawn, with exception of a line of 9x3, F W T brand, which was sold at 4½d. to 4½d. The only other public sales have been parcel ex Adelaide, and small lines ex Java. We understand the cargo ex Mathias has been sold privately at a price not transpired.

**SPRUCE DEALS.**—Imports: 1,729 pieces. This parcel arrived in Saml. Skolfield, from Boston, and is advertised for sale on the 8th proximo. There have been no sales at auction during the past four weeks.

**OREGON TIMBER.**—Imports: 1,901,710 feet super. The arrivals have been, Howard D. Troop, from Puget Sound, and Minnie Carmichael, from Vancouver Island. The cargo ex Howard D. Troop was offered at auction on 18th inst., the greater portion being sold, prices ranging from £6 15s. to £6 5s. The balance of cargo is advertised for sale on the 29th inst. The Minnie Carmichael has just arrived.

**LUMBER.**—Imports: Clear pine, 145,870 feet super; white pine shelving, 302,872 feet super; T. and G. coiling, 51,511 feet super. The arrivals have been Lothair, from New York, and Saml. Skolfield, from Boston. Sales by auction have been, shipments ex Lothair, and several lines ex Hoiden, Leading Wind, W. H. Bosse, and Kylemore. The parcel ex Saml. Skolfield is advertised for sale on the 8th proximo.

**PITCH PINE.**—Imports: Nil.  
**REDWOOD.** Imports: Nil. The balance of cargo ex Kylemore was offered at auction on 4th inst., but only a portion of 2-inch was quoted at £10.

**FLOORING AND WEATHERBOARDS.**—Imports: 864,294 feet lineal from United Kingdom, 27,703 feet lineal from United States. Sales by auction have been of a limited character, being shipments ex Glentilt, Blairgowrie, and Avenger, and small line, ex Kamfjord. Prices realized were as follows:—Red, 6x1½, 11" to 10s. 3d.; 6x7, 8s. 6d. to 8s.; 6x7, 6s.; 6x7, 4s. 7d. to 4s. 6d.; 4-out weatherboards, 6s. 3d.; white, 6x7, 7s. 9d. to 7s. 6d.; 6x7, 1s. 8d. to 1s. 6d.; 4-out weatherboards, 6s. 3d. to 6s.

**KAURI PINE.**—Imports: 458,211 feet super. The arrivals have been Camillo, from Kaipara, and Naiad, from Mercury Bay. The cargo ex Camillo was sold on the 22nd instant, logs real-

izing 14s. 6d., and fitches 16s. 3d. per 100 feet super, and cargo ex Naiad was offered at auction on 25th instant, when the whole was sold with exception of about 20,000 feet ¾-inch shelving.

**CEDAR.**—Imports: 426,970 feet super. The arrivals have been heavy; a great portion of which is of indifferent quality, and logs small sized, consequently prices this month are lower. **DOORS.**—Imports: Nil.

**LATHS AND PICKETS.**—Imports: Laths, 9,890 bundles; pickets, 1,936 bundles. Sales at auction have been made of Oregon laths, 4½ ft., at 36s. 6d. to 34s. 6d.; Oregon pickets, 4½ ft., at £3 5s.; Spruce laths, 4½ ft., at 34s.; 4 ft., at 30s.; Baltic red laths, 6 ft., at 46s.; 4½ ft., at 35s.

**SLATES.**—Imports: 442,729 pieces. The only sale by auction has been shipment ex Lothair, of first American Blue Bangor slates, 24x12, realizing £14 2s. 6d.; 20x10, £9 15s.

**PLASTER.**—Imports: 200 barrels. This parcel of Albert Mill Plaster (large barrels) arrived in Saml. Skolfield, and was sold by auction on 18th instant, at 14s. per barrel. There have been no other sales by auction during the month.

**CEMENT.**—Imports: 11,940 barrels. There is no improvement in the market for cement this month, and the arrivals continue heavy. Knight, Bevan and Co.'s and Gostling's are quoted at 15s. 6d. to 15s. 3d. Jossen and Co.'s Portland cement has been sold privately at full rates.

**GALVANISED IRON.**—Imports: 1,765 tons. The market continues quiet, and we hear of no private sales of importance.

**PALINGS.**—Nil.  
**EXPLANATION.**—Red deals and spruce deals are sold at per foot of 9x3; T. and G. flooring at per 100 feet running; Oregon timber, redwood, clear pine, shelving, ceiling, per 1,000 feet super; kauri pine and cedar logs at per 100 feet super; laths, pickets and slates at per 1,000 pieces.

OUR TRADE WITH FRANCE.

The trade in Canadian woods, which are much appreciated in France, has until now been carried on through English middlemen, so much so that the English word "spruce" has become a recognized term of French carpentry. In some quarters it has been found singular that trade between two countries speaking the same language and united by so many ties should not be direct, the only appreciable use of the middlemen being to draw a percentage on the profits, and the classification of the lumber of commerce by Canadian inspectors being sufficient guarantee to the buyer. However, a new departure seems to have been taken, as during the months of July and August two Canadian barques, the Earl of Shaftesbury, 500 tons, and the St. Louis, 480 tons, have cleared Les Escoumains, with full cargoes of spruce planks, the first bound for La Seyne, near Toulon, and the second for Havre. Mr. T. J. Lamontagne is the consignee in both cases. Three other barques will shortly leave the same port with cargoes for the French market.—*Montreal Star.*

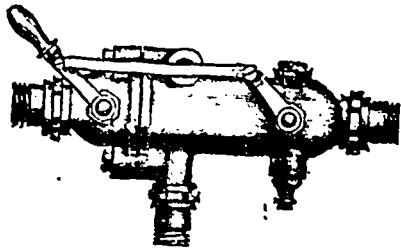


# ROBERT MITCHELL & CO.

Montreal Brass Works,  
St. Peter and Craig Streets, Montreal.

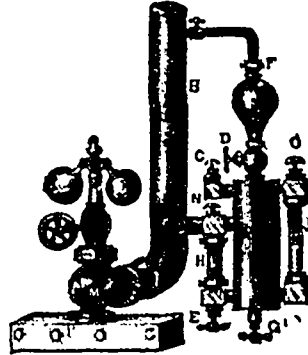
## THE KORTING INJECTOR

Acknowledged to be the Best Boiler Feeder in the World.



Will lift 20 feet, and take water at 150 degrees. Only one handle to start and stop. No valve to regulate. CHEAPER than any other injector in the market. Also, PATENT EJECTORS for conveying Water or Liquids. CIRCULARS ON APPLICATION

The Continuous Feed Lubricator  
Saves 50 per Cent in Oil.



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MANUFACTURER OF

KNIGHT'S PATENT "EXCELSIOR"

## SAW MILL DOGS

The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

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HUGH GIBSON, ESQ.—Your Patent Excelsior Mill Dogs give entire satisfaction, and is certainly up to your recommendation. They are the best Mill Dog in the market. I am very much pleased with them.

Yours Respectfully,

PETER McLAREN.

BERKLEY, April 20th, 1883.

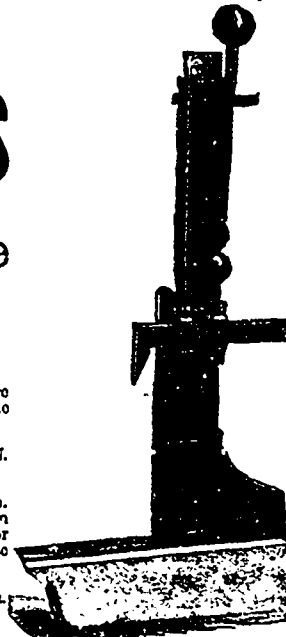
HUGH GIBSON, —Sir,—The Dogs I bought of you give satisfaction. They beat any Dog that I ever saw for ripping or edging lumber on carriages. They are just the thing for scantling. I would not take \$50 for them to-day and have to wait for another pair to come from you, because I believe they make two dollars a day for me.

Yours truly,

GEO. S. BROWN, JR.

Manufactured by HUGH GIBSON, CHATHAM.

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The Best Feeder known for Stationary, Marine or Locomotive Boilers.

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All Sizes lift water 25 feet. No adjustment required for varying Steam Pressures.

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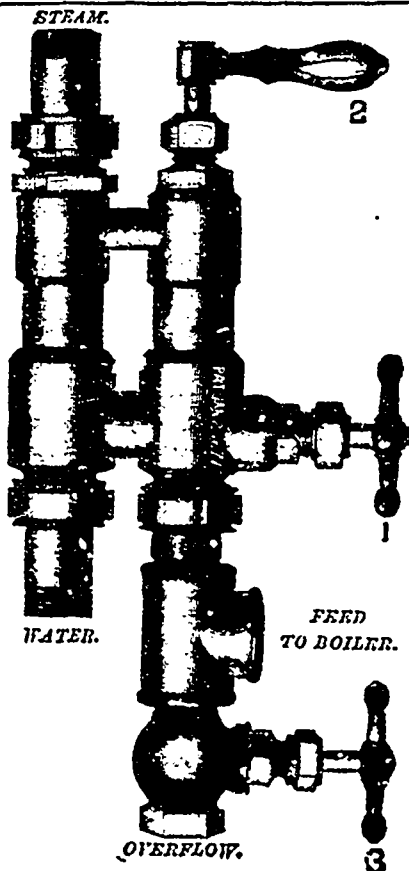
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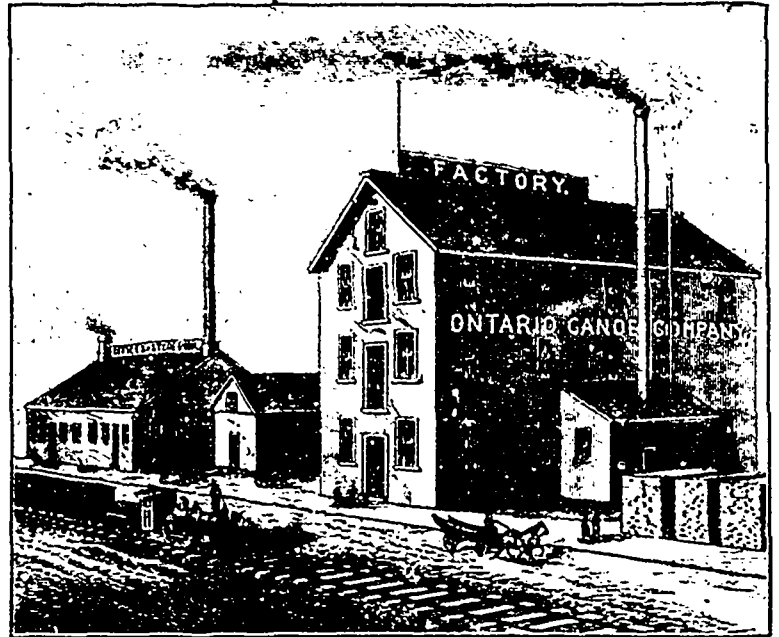
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Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

## CANOEES

Patent Cedar Rib Canoes, Patent Longitudinal Rib noes, Basswood Canoes, Folding Canoes, Paddles, Oars, Tents, and all Canoe Fittings.



Gold Medal, London Fisheries Exhibition, 1883.

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Send 3 cent Stamp for Illustrated Catalogue. President and Managing Director  
Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

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LEATHER BELTING

Fire-Engine  
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Send for Price Lists and Discounts to the Factory

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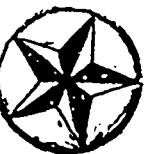
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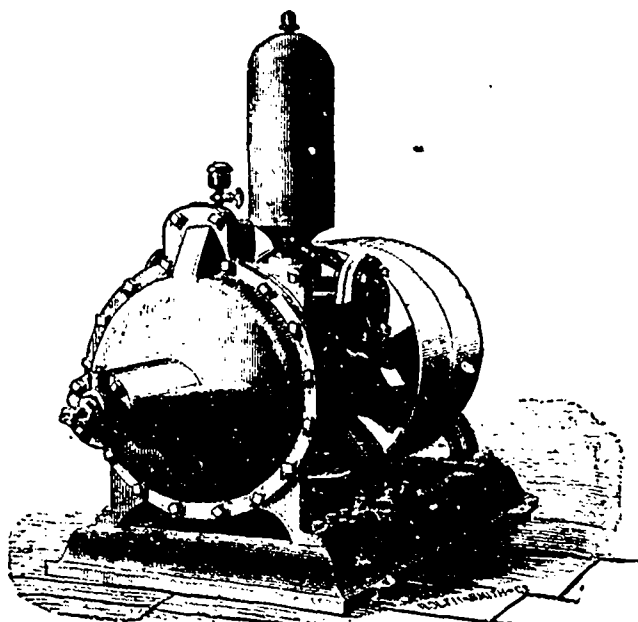


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An Improved Rotary Piston Force Pump.

| No. | Diameter of Pipes. |            | No. of Revolutions. | Capacity per minute at table speed. | Price. |
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|     | Suction.           | Discharge. |                     |                                     |        |
| 2   | 2½ in.             | 2 inch.    | 250                 | 125                                 | \$100  |
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# C A S T I N G S

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## Why do You Suffer when you May be Cured by Electricity?

Without loss of time or great expense. Ten or Twenty Dollars spent in ELECTRIC BELTS will do you more good than a hundred expended any other way.

**CRYING BABIES.**—Babies cry because they suffer. Their little gums are inflamed, and their bodies are more or less feverish. If you will tie around their necks one of NORMAN'S ELECTRIC TEETHING NECKLACES you will see a wonderful change for the better, their sufferings cease, and their general health improves. Ask for Norman's, and take no other, and you will be pleased. Price 50c.

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**RHEUMATISM** cannot remain long with any one who uses NORMAN'S ELECTRIC BELTS, and Neuralgia is driven away like smoke before the wind. Give one a trial. Every belt guaranteed.

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### TESTIMONIALS—A few Sample Testimonials that speak for Themselves.

Mr. A. NORMAN,  
DEAR SIR,—I am happy to inform you that the Appliances I got from your Chicago agent have had a most marvellous effect upon my patient who suffered from Sclatica. He could get very little relief from medicine. Shortly after he got your belts he was able to get out of bed, and is now on a visit to his Canadian friends. Send me some more circulars.  
Yours truly,  
WALLATA, D.T., December 17th, 1883.  
DR. D. McLACHLAN.

A. NORMAN, Esq.,  
DEAR SIR,—I have experienced considerable benefit from your Appliances. I feel stronger and better every way.  
Yours truly,  
OTTAWA, September 5th, 1883.  
H. F. HALLIBURTON.

Mr. NORMAN,  
DEAR SIR,—I have been wearing your Electric Insoles for about six months, and have been greatly benefited by them. I recommend them to all who suffer from Rheumatism.  
Yours truly,  
PERTH, Ont., June, 1883.  
MR. J. GUTHRIE.

A. NORMAN, Esq.,  
DEAR SIR,—Soon after I commenced to use your Electric Appliances they opened my bowels, cured my cough and cold, rolled my head, and considerably relieved my catarrh in consequence. The discharges from my head and chest are now easy, and I feel altogether better. My digestion has improved, my stomach is less sour and windy, and I am less troubled with lascivious and vivid dreams. I had previously tried almost all the advertised patent medicines without deriving any good.  
Yours truly,  
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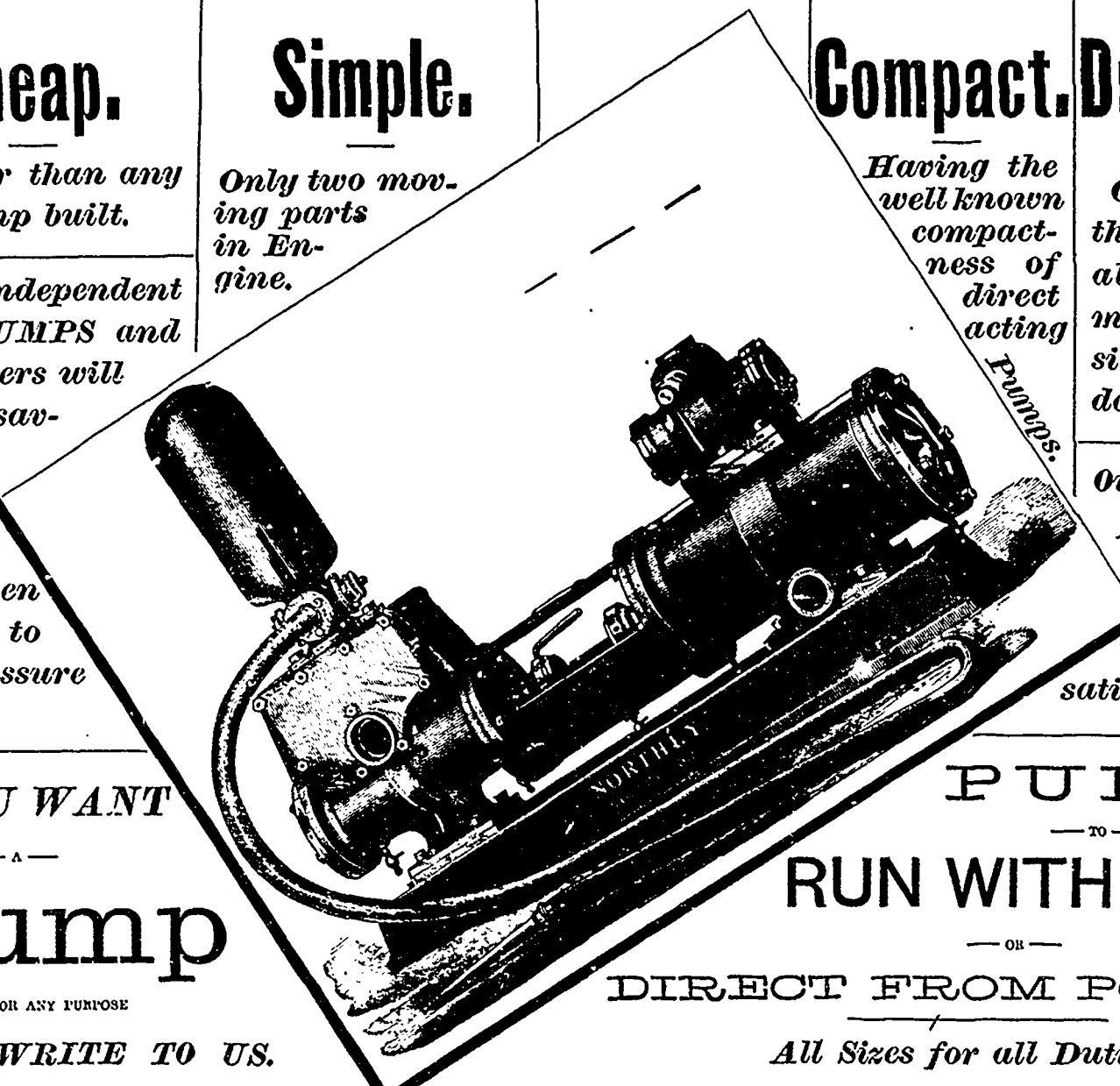
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*Pumps for Fire Protection a Specialty.*

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*Our Combined Boiler Feed and Fire Pumps are a NECESSITY IN EVERY WELL ORDERED STEAM MILL or FACTORY.*

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| <p><b>Cheap.</b></p> <p><i>Cheaper than any Pump built.</i></p> <hr/> <p><i>Our Independent AIR PUMPS and Condensers will effect a saving of 30 to 50 per cent. when applied to high pressure Engines.</i></p> | <p><b>Simple.</b></p> <p><i>Only two moving parts in Engine.</i></p> | <p><b>Compact.</b></p> <p><i>Having the well known compactness of direct acting Pumps.</i></p> | <p><b>Durable.</b></p> <p><i>Guaranteed the most durable Pump made; impossible to break down.</i></p> <hr/> <p><i>Our PUMPS for general water supply give the greatest satisfaction.</i></p> |
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IF YOU WANT

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**Pump**

FOR ANY PURPOSE

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— TO —

**RUN WITH BELT**

— OR —

**DIRECT FROM POWER**

*All Sizes for all Duties.*

*Our make of Pump is specially adapted to Mills in out of the way places, as they can be absolutely relied on, and occasion no vexatious stoppages for repairs.*

WE INVITE CORRESPONDENCE ON ANY POINT CONNECTED WITH PUMPS.

SEND FOR CIRCULAR AND STATE YOUR REQUIREMENTS.

# NORTHEY & COMPANY,

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# THE INTERNATIONAL TENT & AWNING CO.

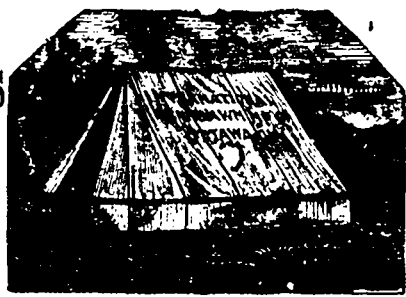
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Tents, Flags, Tarpaulins, Waterproof Goods,  
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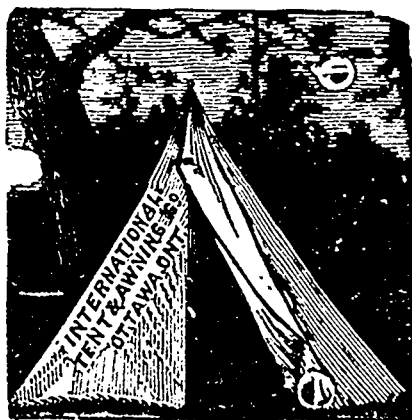
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PORTABLE CANVAS BOATS MADE TO ORDER

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We have secured the services of the best practical sail-maker in Canada. Orders in this line will receive prompt and satisfactory attention, as is usual with all orders entrusted to us.

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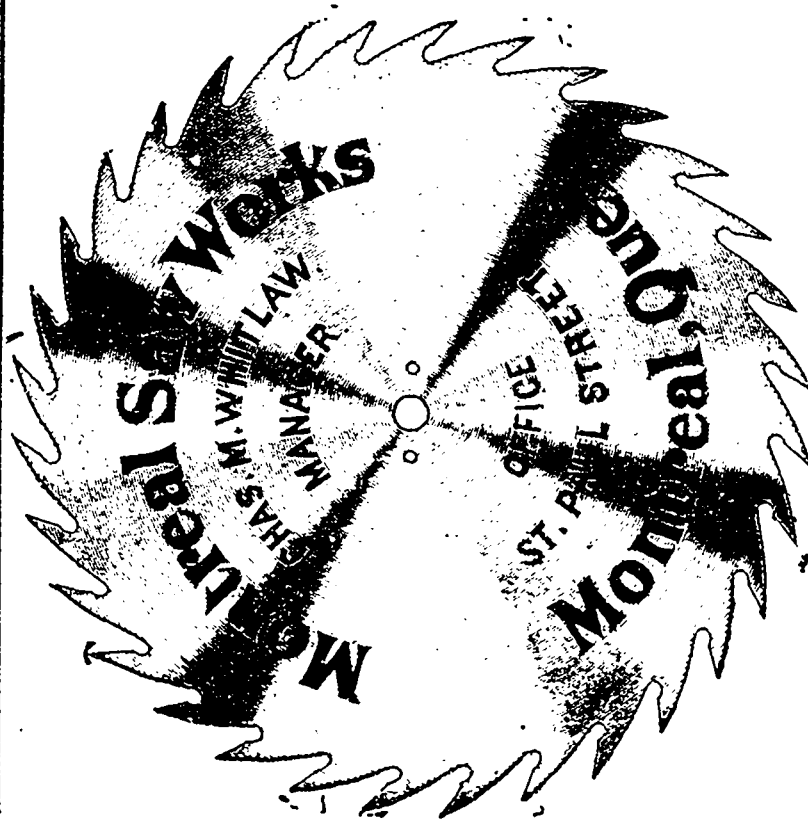
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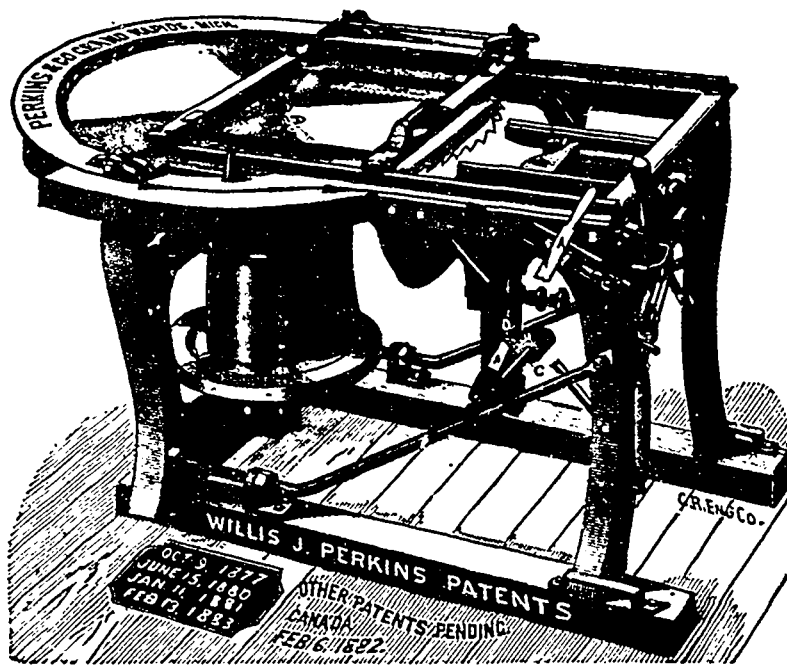
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We wish to call the attention of our Canadian Lumbermen to our First Class HEAVY SAW MILL MACHINERY for Circular Mills and Circular and Gang Mills of the most improved designs. We are prepared to submit Plans and Specifications, together with any information that our many years of close application to the Saw Mill Business may have suggested to us, also when required to enter into contract for building and supplying the machinery complete, superintending the starting of the same, and handing over the mill to its owner in first-class running order.

Besides the variety of Machines we build for the manufacture of lumber we have added to our list the

### PERKIN'S PATENT SHINGLE MACHINE.

aving obtained the sole right to manufacture and sell for the omunion. Also Drag Saws, Bolters, Sappers, Jointers and Packers.



GRAND TRIUMPH.

### Willis J. Perkins' Drop Tilt!

The only Horizontal Saw Machine on which a thick slab can be cut from the bolt.

**SECOND CUT ALWAYS A SHINGLE.**

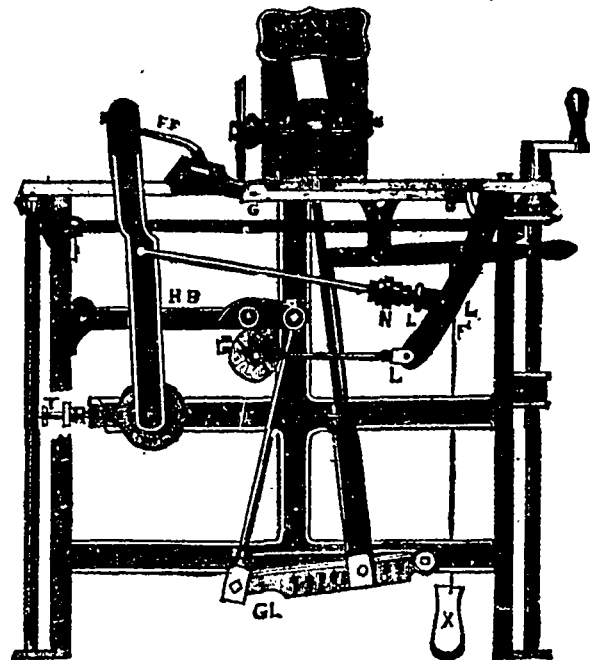
Knots, rots, hearts, bolt squared rift ways, and all irregularities cut off at one clip. This improvement will pay the price of the whole machine every season by increase of quality and quantity cut

**THE WILLIAM HAMILTON MANUFACTURING CO.**  
**PETERBOROUGH, ONTARIO.**

SOLE MANUFACTURERS AND AGENTS FOR THE DOMINION.

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### THE M. COVEL PATENT SAW SHARPENER.



The above Cut No. 1 shows some very important changes that have lately been made, which makes the machines far less complicated for new beginners to operate. Cut No. 2 shows this machine with a circular saw upon it ready for operation.

