

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Covers damaged/
Couverture endommagée

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Cover title missing/
Le titre de couverture manque

Coloured maps/
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Bound with other material/
Relié avec d'autres documents

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:
Commentaires supplémentaires:

Coloured pages/
Pages de couleur

Pages damaged/
Pages endommagées

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Pages detached/
Pages détachées

Showthrough/
Transparence

Quality of print varies/
Qualité inégale de l'impression

Continuous pagination/
Pagination continue

Includes index(es)/
Comprend un (des) index

Title on header taken from:/
Le titre de l'en-tête provient:

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12X	16X	20X	24X	28X	32X



PUBLISHED SEMI-MONTHLY. The only Newspaper devoted to the Lumber and Timber Industries published in Canada SUBSCRIPTION \$2.00 PER ANNUM

VOL. 4. PETERBOROUGH, ONT., SEPTEMBER 1, 1884. NO. 17.

FOREST DEVASTATION IN NORWAY.

We take the following from Dr. John Crombie Brown's "Forestry in Norway:"

"The reports of forest officials all ring the changes on the same topic, the rapid disappearance of the forests, especially those of fir. They report that the Government must do the work itself; nothing or little can be expected from private proprietors; only one of the latter is spoken of approvingly as making a movement in the right direction.

The rights of pasturage are reported to be a great obstacle, as the young trees must be fenced in order to protect them from sheep, which in Norway seem to be very agile in that particular part of the west coast, needing a higher fence than usual. The expense of fencing falls, of course, on the improving proprietor. One writer says Government should interfere on this point, for nothing will be done so long as sheep can roam at large. Another brings the same complaint against cattle.

It is recommended that the heath under the trees should be cut down when there is a good seed year, as it chokes the young plants. Another suggests that all woods attached to clerical or other offices should be resumed by Government; their extent is small, but the operations would give instructions to proprietors in the neighborhood. In some places land is cheap, and could be bought to advantage, in others it is very much subdivided, and difficult to obtain.

All write gloomily, and the only hope is in the Government buying and replanting large stretches, and limiting the rights of pasturage.

It is recommended further, that Government officials should be required to assist all who wish their help in making attempts at forest culture. In general the people only care for money, and are careless of the future, with, of course, cheering exceptions. One English company, it is reported, has been having down at a great rate.

Something similar may be said of the reports on the economical condition of the kingdom, made by the prefects of nineteen prefectures, and a report of the same to the king by the Department of the Interior, with copies of the administrative instructions, and forms of tabulated returns required, and copies of tabulated returns received in regard to agriculture and cattle, including meteorological observations, in regard to fishing and the chase, in regard to industrial occupations and products, in regard to commerce, navigation, and roads, and in regard to finance and financial conditions for the years 1861-1865; and there are given official reports on the economic conditions of the several prefectures for the years 1866-1870.

In the report on the forest condition of Lister and Mandal—a report made to the Department of the Interior by Forest-Assistant Aar, published in successive numbers of the *Christ-*

iansand Stiftavis in the latter months of 1870, the whole series is charged with most interesting minute local descriptions; but the burden of the whole is complaint of the disappearance of the forests. The first district mentioned, Vauso and Horred, is described as subject to inundations of drift sand; and the planting of the ground with trees, and the covering of the sand with sea-wood are suggested as remedial measures, the adoption of which is urgently called for. Of the Praesterfeld, or parish of Fjotland, the clergyman writes that "things are bad and every day becoming worse; as time goes on every stick growing will be converted into money, and then—?" From another district the clergyman writes that there is no hope unless the Government come forward and purchase the remaining forests. From a third district the clergyman, after pouring out a large Jeremiad of lamentations, winds up with a like suggestion as the only measure likely to prevent utter devastation; and from the Praesterfeld, or parish of Siredalens, the report is that the destruction of forests has been carried so far that even the interposition of the Government could effect nothing in preventing desolation, as some places must ere long be almost uninhabitable.

The report was furnished to me by the Government; it is in exact accordance with what I have seen of the results of reckless felling elsewhere.

THE AUSTRALIAN TRADE.

Some interesting statistics have been compiled with regard to the growing trade between Australia and the United States. In the year 1883 the United States exported to Australia \$352,000 worth of agricultural implements, \$225,000 carriages and carts, \$242,000 drugs and medicines, \$1,203,000 from manufactures, \$252,000 steel manufactures, \$111,000 leather and manufactures of leather, \$555,000 kerosene, \$370,000 fish, \$169,000 sewing machines, \$796,000 tobacco, \$224,000 lumber, \$229,000 household furniture, and \$231,000 manufactures of wood. The total export amounted to \$6,730,000, which is an insignificant sum compared with the total value of British exports to Australia, amounting last year to \$91,000,000. Although England is nearer to Australia than America, the latter yet hopes to do a large trade with our distant colonies, as there are many articles which could be produced and sent out at a greater advantage. The Australian export to the United States is at present very little, amounting only to \$2,088,000 in the aggregate for 1883. Some fears have recently been expressed with reference to wool-growing in Australia, the staple industry, but the Federal Australian does not share in the evil forebodings. At the same time it urges the desirability of seeking new outlets for Australian wools in countries like China and Japan and some of the European

centres. "We have done this," remarks the journal in question, "not because we labored under the jaundiced impression that the English market was likely to be glutted with American wools this year or next, and that the price of the Australian staple would fall 22 per cent. in consequence, or that our ideas of the present and following season's clip were so buoyant as to lead us to believe that the immense surplusage would create a panic in prices in the London market, but simply because we see that as the development of western Australia, the northern territory, and Queensland proceeds—and it has been going on rather rapidly of late—a large increase in the staple may be reckoned upon." In 1872 122,256,496 pounds of wool was imported into America. In 1882 the quantity imported was 55,964,236 pounds, while the population had increased from 38,500,000 to 50,000,000. This great falling off in imported wool would appear alarming and perplexing were it not for the fact that in 1870 the amount of the domestic-grown wool in the United States was only 100,102,387 pounds, while in 1880 it had increased to upward 200,000,000 pounds. Australia does not fear this increase, as the quality of wool grown in the States can not compete with that grown in the colonies. Owing to the nature of the soil in many of the American States it would not pay the farmers to turn their attention to wool growing instead of the cultivation of cereals. And, as a matter of fact, great as has been the increase in wool growing in America it bears no proportion to the enormous increase in the production of other articles. As Australia and America are nearly alike in superficial area, and as the territory of the latter is being rapidly utilized for cereal and cotton products, while the more distant continent—or such portion of it as is settled—is nothing but a huge sheepwalk, there is no danger for some time to come of Australia losing her supremacy in wool growing.—*London Times.*

LUMBER NOTES.

Under the head of "Logging Notes," a St. John paper, of August 2nd, states that Mr. Robert Connors does not agree with the opinion of Mr. Gilson, the lumber king, that there is as much spruce lumber in the Province of New Brunswick now as twenty years ago. He states that in many districts of the Province, where lumbering was formerly carried on heavily, log cutting has been totally abandoned of late years, as the difficulty of working in the woods becomes more and more difficult every year. The logs are becoming scarcer, smaller and more remote from the streams. It takes fully 100 years for the spruce tree to reach its growth, and when it grows on burnt land it never reaches its natural size. Mr. Connor believes, however, that with moderation in the annual output the spruce forests will be available for use for many years to come. A correspondent of

the *Northwestern Lumberman*, writing from Midland, Ont., last week, declares that bill stuff and coarse lumber are about 50 cents to \$1 lower than in the spring, but good lumber is steady at about last season's prices. Lath has been good, and up to last year, but now it is dropping. Shingles, 18-inch, have declined from 50 to 30 cents, and 16-inch about 25 cents. "There will not be nearly so much lumber made here this year as last. There are several mills idle that have not run any, and the Parry Harbour mill was burned lately, which shuts off about 15,000,000 there. There are about 10,000,000 feet of logs hung up on the Muskoka and Maganetawan that will not come out, and about 10,000,000 more in the Muskoka that will come out too late, if they come at all. There are also about 400,000 cubic feet of square timber hung up on the above rivers, intended for the Quebec market."—*Monday Times.*

FAILURES OF THE LAST SIX MONTHS.

Several large disastrous failures have been reported recently by the mercantile agencies. The reason of these failures has been the overstimulating of production, the drop in prices, inability to realize on stocks, and other purely trade causes. Looking over the list of failures for the past six months, it is seen that the majority are of traders doing business with a capital of \$5,000 to \$10,000. This class of traders suffer more than the larger ones, and their suffering is due to a great underlying cause, to which too little attention is given, viz.: that this is an age of centralization. Large concerns are eating up the little ones. We see the consequences of combination on every side. Thus, limited capital is less able to stand pressure than is large capital. Small traders will slowly disappear; in a few years, if this tendency continues, we shall see immense concerns in every department; immense farms made up of numerous small ones; immense factories built with the money that otherwise would have been expended in a multitude of small ones. *Southern Builder and Manufacturer.*

THE AU SABLE NAVIGABLE.

During all the years that lumbering has been conducted on the Au Sable river it had never yet entered the head of any person until the present season that that stream was navigable, but David Cameron has demonstrated the fact pretty satisfactorily that it is or can easily be made so. Mr. Cameron passed Miss recently on a flatboat, having 15 tons of provisions for the J. E. Potts Salt and Lumber company. This was an experiment to demonstrate that the Au Sable would be navigable for flat-bottomed steamers from Graylag down. It is also stated that Mr. Cameron has contracted to deliver the iron for the Potts railway, and that he will float it all down the river.

PINE PROBABILITIES.

Lathrop E. Reed, of the firm of Reed & Sherwood, has been interviewed by the representative of the St. Paul Pioneer Press, in regard to the decimation of the pine forests of Minnesota, and that gentleman has very little fear of an early pine famine; and although his statements lack any good argument to sustain his views we give them to our readers because of facts and figures contained, which have little bearing on the question which he pretends to discuss, but which of themselves are worthy of consideration. He says:—

"I can hardly understand what has occasioned the impression of a pine famine, but it is, perhaps, the immense consumption of pine lumber. Don't you know that in St. Paul alone last year 100,000,000 feet of pine lumber was used in building? In two cities, St. Paul and Minneapolis, about 150,000,000 feet will be worked up this year. However, even at this rate there is pine timber enough in Minnesota to supply the demand for 25 years yet, and may be much longer. Why, pine lumber is almost as cheap here now as it was in 1837, which don't look like a famine. You see, in cutting pine logs only the larger trees are taken—nothing that will square eight inches at the smaller end. Then in six or eight years the smaller trees have grown so that they will do to cut, and in eight or ten years yet a third cutting can be made. You must understand, however, that once all the small trees have grown up and been cut down, there is an end of your forest, the pines don't sprout from the roots as some other trees do.

It is a fact that the growth of the pine trees, so long as any are left to grow, more than pays the taxes on the land every year—almost the interest on the investment. In fact, extra pine land accessible to creeks is now worth from \$15 to \$20 per acre, and good can be bought at \$10 to \$15. Standing trees are worth \$3 to \$5 per thousand sold by 'stumpage,' and it costs from \$4 to \$5 per thousand to cut and drive, so the logs cost delivered here \$7 to \$10 per thousand. The 'stumpage' measurement involves some peculiarities. It is a computation of the number of feet of lumber in a tree by applying the rule across the stump, and this decision is final in all cases of dispute or trespass. Also, in case the actual trespassers are not financially responsible, the parties to whom they have sold logs or lumber are held for the obligation. From records preserved in the surveyor general's office it is easy to trace logs that have been cut three or four years, and wherever found they or their product can be seized by the original owner of the land without allowing anything for cutting, driving or sawing up. So you see it behooves dealers to buy of responsible parties. But, with the Rum and Mississippi rivers regularly bringing down two hundred to three hundred million feet of logs every year, to say nothing of other sources of supply, I think you may safely assure your readers that there is no danger of a pine famine for a good many years yet."

THE TIMBER TRADE OF AMERICA.

Prof. Rothrock, of the Pennsylvania University, in speaking of the danger of a timber famine, says that the area of the United States, including Alaska, is 2,306,560,000 acres. Of this, it is stated officially, 350,000,000 are in woodland chiefly belonging to private parties. In other words, taking our area as a whole, we have about sixteen-and-a-half per cent. remaining in forest growth. Of this, we must remember, that a large proportion represents lands which have been cut over, and are now covered with immature growth of good timber, or with trees of such kind as have no commercial value. It will, no doubt, be surprising to learn that as a whole, Europe has twenty-eight per cent. of its area remaining in forest. This, however, is very unevenly distributed, and, to be of further use as a point of comparison, we must examine into the timber statistics of each important district. The percentage taken in this are: Sweden and Norway, forty; Russia, thirty-nine; Austria-Hungary, twenty-three; Germany, twenty-three; Switzerland, nineteen; Italy, seventeen; France, sixteen; Belgium, twelve; Spain, eleven; Portugal, six; Great Britain and Ireland, about three. None of these countries

which have less timber land than above seventeen per cent. of their total area have sufficient wood to get along with. They have to import. Making, as far as I can, due allowance, and testing my results by various standards, I am now prepared to assert that we are in danger of a timber famine at any time our forests fall below fifteen per cent. of the entire area of the country. At this hour, so far as I can estimate, we have not more than 16.47 per cent. This gives 1.47 per cent. between ourselves and want, so far as our industries are concerned. Of all civilized countries driven to make the largest use of iron and to exercise the greatest economy in wood, Great Britain heads the list. Here then we might suppose there existed the greatest ability, to dispense with it. Her importations of wood were valued at \$77,063,399 a year from 1872 to 1876, or \$2.50 worth for each soul per annum.—Canadian Manufacturer.

NEW BRUNSWICK LUMBER.

The St. John Telegraph has the following:—
At present there are in port, loading deals for Alex. Gibson, ten vessels, four steam and six sail will clear for sea, carrying fully 2,500 standards of deals. The cargoes of the vessels still remaining will amount to 2,600 standard more. Up to date, including vessels now loading, it is estimated that Mr. Gibson's shipments amount to 62,000,000 feet of deals, carried in 68 vessels, 37 of which are steamers. On the first of August last year 66,000,000 feet of lumber had been shipped by him during the season to that date.

It is interesting in this connexion to note the extent to which the steamers have cut into the traffic formerly monopolized by sailing vessels. As regards the shipment of this large operator the following will illustrate the manner in which the steamers are superceding sailing vessels in the deal carrying trade:—

	Sail.	Steam.
1880	97	0
1881	83	11
1882	97	29
1883	94	23
1884 (estimated)	50	50

The figures for the present year are of course conjectural as to the future but are based on reliable estimate. As two steamers on the average carry as much lumber as five sailing vessels, the extent of the inroad upon the trade of the latter can easily be comprehended. Taking the estimate of Mr. Gibson's shipments for this year at 20,000,000 feet, the amount carried by each would be:—

	Feet.
Steamers	25,000,000
Sailing ships	25,000,000

In 1882, two steamers alone, the Missouri and the Kansas, carried away no less than 3,000,000 feet of deals.

Mr. Gibson is handling a stock this year that will approach very closely his heavy operations in 1877, 1882 and 1883.

The Nashwaak crop this season amounts to 20,000,000 feet of logs, of which 12,000,000 have reached St. John for shipment. From Randolph & Baker this spring he bought 10,000,000 feet; from George Barnhill 3,500,000 feet; from Geo. Eaton, Shulea, 4,000,000 feet; from W. H. Murray 4,000,000 feet, while F. Tufts & Co., his agents, have purchased about 15,000,000 feet from operators on both sides the bay. All the lumber which comes from St. John for Mr. G. is surveyed by Messrs. Sulis & Courtenay, who keep an accurate record of the operations for each year. These exhibit the following figures for the past nine years:—

	Sup. Feet.	Vessels.
1875	63,874,983	91
1876	93,503,549	139
1877	104,479,813	141
1878	71,807,790	87
1879 (estimated)	25,000,000	30
1880	70,926,008	97
1881	89,591,212	94
1882	110,162,527	120
1883	97,558,718	117

Ten years ago the Anchor Line steamers were occasionally chartered to carry deals, but the discriminating tariff of ship laborers made the expenses too heavy to leave any profit in the trade.

In former years, notably last season, nearly all the mills in St. John were employed on large

contracts of sawing for Mr. Gibson. This spring only two of them are sawing his logs; R. A. Gregory's mill, Carleton, and Cowan & Gaskin, above Indiantown. All the logs cut on the Nashwaak are sawed in the Marysville, Robinson and Morrison mills.

THE UNITED STATES BUSINESS OUTLOOK.

From a state of panic, a few weeks ago, the New York banks are now described as "the personification of health and strength." Recuperation is going on. The severe contraction of credit, if unpleasant in its operation, has had a good effect. The deposits in the savings banks are increasing. The yield of wheat is expected to be 500,000,000 bushels, against 400,000,000 last year; and the estimated surplus for exportation is 150,000,000 bushels. Farmers would better off if they received 80 cents this year than \$1 last year would have made them. The actual price is about twenty cents lower than last year; but then speculation had sent it up abnormally, whereas it is now at a figure which admits of exportation. Short time has improved the condition of the coal trade; a very doubtful improvement for the general public. Speculation is not now active, and future trouble from that source need not be dreaded. On the whole, things look fairly well far our neighbors.—Timber Trades Journal.

FACTS ABOUT LEAVES.

As is well known, a tree cannot grow without leaves. These are put forth every year, and are a contrivance for vastly increasing the surface. An oak tree of good size exposes several acres of surface to the air during the growing season. It has been estimated that the Washington elm at Cambridge, Mass., not a very large tree, exposes about five acres of foliage, if we include both sides of the leaves. Leaves are more nearly comparable to stomachs than lungs. A leaf is a laboratory for assimilating or manufacturing raw materials into plant fabric. The cellular structure of the leaves, wood and bark of a tree is a complicated subject to treat in a popular way. It requires a vast surface of leaves to do a little work. By counting the leaves on a seedling oak, and estimating the surface of both sides of each, we can see how many inches are needed to build up the roots and stems for the first year. After the first year the old stem of the oak bears no leaves. It is dependent on the leaves of the branches, or its children, for support. A tree is a sort of community, each part having its own duties to perform. The root hair takes up the most of the nourishment. The young roots take this to the larger ones, and they in turn, like the branches of a river, pour the flood of crude sap into the trunk, which conveys it to the leaves. The assimilated or digested sap passes from the leaves to all growing parts of the plant, and a deposit is made where most needed. If a branch is much exposed to the winds, the base of it has a certain support or certain amount of nourishment. So with the trunk of a tree. If the base of a branch or the main trunk is much exposed to the winds and storms, as much thicker deposit of food is made there. The winds give a tree exercise, which seems good to help make it strong. Our toughest wood comes from trees growing in exposed places. The limbs of a tree are all the time striving with each other to see which shall have the most room and the most sunshine. While some perish in the attempt, or meet with only very indifferent success, the strongest of the strong buds survive.

Michigan Forest Fires.

DETROIT, Aug. 23.—Harman City, Michigan, was destroyed by forest fires yesterday; two buildings escaped destruction. The dock was also burned. This property belongs to Harman & Crowe, of Cleveland. Harman City is in the new country of Arenic, just south of Tawas City, on the shore of Saginaw Bay. Four fires are still burning in the townships adjoining East Tawas, although a slight rain on Saturday partially stayed their progress. A two hours' heavy rain storm quenched the fires along the Port Austin division of the Port Huron and Northwestern Railway on Saturday morning, and all danger there is considered over.

LIST OF PATENTS.

- The following list of patents upon improvements in wood-working machinery, granted by the United States Patent office, Aug. 19, 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.:
- 303,787.—Wilhelm Arnold, New York City, insertable saw tooth.
 - 303,909.—Melow Bancroft, Whitestown, N. Y., clamping machine.
 - 303,621.—Lodyard Colburn, Derby, Conn., gearing.
 - 303,819.—John T. Cunningham, Wheeling, Va., boat wheel.
 - 303,925.—Wm. H. Doano, Cincinnati, Ohio, circular sawing machine.
 - 303,720.—Chas. W. Gago and A. S. Homoe, N. Y., saw.
 - 303,039.—Froeman Hanson, Bar Mills, assignor to H. W. Palmor, Hollis, Mo., Lathe for turning polygonal forms.
 - 303,642.—John H. Ingam, Ayers, Ala., water wheel.
 - 303,861.—Poder O. King, Valley City, Dak., combination tool for carpenters.
 - 303,938.—Jno. M. Lowry, Jonesborough, Ga., saah fastener.
 - 303,882.—Merritt W. Palmer, Holland, Mich., windmill.
 - 303,950.—Granville Rowell, assignor to Tubular Saw Co., Manchester, N. H., Tubular saw.
 - 303,677.—Bernard T. Setter, Utica, N. Y., match split clamp.
 - 303,781.—Thos. Wise, Framingham, Mass., Rotary steam motor.
 - 303,600.—Phillips Abbott, Brooklyn, N. Y., machine for covering boxes and covers.
 - 303,420.—Stephen Cox, Bridgeton, N. J., lubricator.
 - 303,425.—Henry Teigh, and J. L. Murphy, assignor to L. Powers & Co., Philadelphia, Pa., planing machine.
 - 303,281.—Ross J. Hoffman, Binghamton, N. Y., lubricator.
 - 303,283.—Albert D. Howe, Cosh ton, Ohio, axle lubricator.
 - 303,374.—Charles Hownid, Jackson, Mich., tool for turning round tenons.
 - 303,314.—Chas. E. Newart, Boston, Mass., machine for sharpening pencils.
 - 303,320.—Wm. J. Powell, Marsfield, miter box.
 - 303,463.—Vincent Seiler, Redding, Ohio, saw set.
 - 303,338.—John F. Taber, and W. F. Gibbs, Clarion, Iowa, bench plane.
 - 303,478.—Granville W. Wright, assignor to Sargent & Co., New Haven, Conn., tool handle.

Tree Planting in the Northwest.

One of the measures before the Northwest Council, now in session, is the introduction of an ordinance providing for the encouragement of those who will undertake the work of planting out trees on the prairies, both for the purpose of raising timber belts on such portions as are of little value for cultivation, and to create wind-breaks around homesteads and along the roadsides for shelter and shade. In either case it is most desirable that the encouragement to be given should be of a liberal nature. There is nothing, we believe, in either the climate or the soil to militate against success, except that the varieties of trees to be tried should be those best adapted to exposure. The experiment need not be a costly one, and a beginning might be made by planting out those sorts that are indigenous to the country or to localities with a winter climate equally as cold.—Calgary Herald.

American Forestry Congress.

A circular has been issued by Mr. B. E. Fernow, corresponding secretary, calling attention to the annual meeting of the American Forestry Congress, which will be held this year at Saratoga, N. Y., on 16th Sept. The denudation of the forests of the Adirondack region concerning which there was so much discussion in the New York newspapers last summer, will form the subject of several debates. Among the subjects of special interest to Canadians will be "Canada's Method of Lumbering."

LUMBER WASTES.

The following letter appears in the *Timber Trades Journal*:-

Having noticed several articles in the *Journal* calling the attention of millowners to the value of lumber wastes if properly manipulated, I think it possible that a statement of the results obtained after several years of labor in this direction may not be out of place. As has been heretofore stated, wood, whether in the form of logs, slabs, or sawdust, contains 75 per cent. of its weight of volatile matter, the remainder being carbon. If this be subjected to destructive distillation in closed vessels and the gases and vapors conducted through suitable pipes and cooled, the liquids condensed are found to be equal in weight to about 40 per cent of the wood and to be composed of a mixture of pyrolygous acid, tar and water, about 25 per cent being left in the retort in the form of charcoal, the balance of 35 per cent passing off as uncondensable gas. The composition of this gas, which is inflammable, will be hereafter noted. Before proceeding farther, I beg to differ with some of the writers in the *Journal* in regard to the salability of pyrolygous acid and the various products derived therefrom. On the contrary, my experience is that there is very little demand for the various acetates derived from pyrolygous acid. But if these volatile products be decomposed and converted into a fixed gas and mixed with the gas necessarily produced, we have a product composing 75 per cent of wood which supplies a constant want in every location, namely, light. In order to produce illuminating gas, wood in the form of sawdust is found to be better adapted than almost any other material, for reasons which will become obvious as we proceed. That wood can be used to produce illuminating gas will be seen by the following, taken from Ure's "Dictionary of Arts and Manufactures": "If pieces of wood be placed in a glass retort half filled with boiling quicksilver at a temperature of 600° F. (at which quicksilver boils), a black lustrous charcoal is left and the gas evolved is composed of:-

Carbonic acid	53.4	per cent.
Carbonic oxide	38.6	" "
Light carbonated hydrogen	7.0	" "
	100.0	

If, however, the vapors and gases produced above be heated to a considerable higher temperature, the volume of permanent gas is considerably augmented, while such an amount of hydrocarbons is produced as to render the gas actually richer in these constituents than coal gas. The illuminating value of the hydrocarbons was found to be one half greater than an equal volume of olefiant gas. These observations prove that wood gas is indubitably entitled to rank among illuminating agents. The following analysis shows the composition of wood gas made on a manufacturing scale; No. 1 being sample before purification at the works of the Munich Railway, No. 2, after purification at the town of Bayreuth:-

No. 1			
Hydrocarbons	6.91	equal to 0.74	olefiant gas.
Light carbonated hydrogen			
drossen	11.08	do do do do	
Hydrogen	15.07	do do do do	
Carbonic oxide	40.69	do do do do	
Carbonic acid	25.72	do do do do	
Nitrogen			
	99.35	do do do do	
No. 2			
Hydrocarbons	7.70	equal to 1.03	olefiant gas.
Light carbonated hydrogen			
drossen	9.46	do do do do	
Hydrogen	18.43	do do do do	
Carbonic oxide	61.79	do do do do	
Carbonic acid	2.21	do do do do	
Nitrogen	42	do do do do	
	100.00	do do do do	

"The gas is entirely free from all sulphur and ammonia compounds, and possesses, according to Liebig and Steinheil, an illuminating power greater than coal gas in proportion of 6 to 5."

While it is not now to produce illuminating gas from wood, the writer has been able to learn of but one other instance where advantage is taken of the finely divided state in which wood exists in the form of sawdust for manufacturing gas, and this seems to be of very recent date. Without discussing merits and demerits of this

process, we will proceed with a description of the apparatus and process which has been found to produce the maximum results at a minimum cost. The sawdust being fed into a hopper falls into a horizontal pipe provided with a piston working with an intermittent motion, which feeds the sawdust into a pan or retort set in a furnace. Into the interior of this retort are fitted rakes and scrapers attached to a shaft in the centre. As the sawdust is fed through the horizontal pipe, which is crowded full to prevent the escape of gas, it falls into the retort and is spread and stirred upon the red hot bottom in a very thin layer by the rakes, which instantly drives off all the volatile gases, and in the meantime the resultant charcoal is carried around to an opening in the bottom where it drops into a suitable cooling chamber. Simultaneous with this operation more sawdust is being fed and spread upon the bottom as before. The gases and vapors are taken off through ascension pipes and conducted through the superheating chamber, where any condensable vapors are converted into uncondensable gas. At this point a small amount of hydrocarbon vapor is injected, the whole being thoroughly mixed and converted into a fixed gas of high illuminating power. Oil at the rate of 2½ gallons per 1,000 cubic feet of wood gas was used and a sample of the commercial gas tested by Mr. G. A. Hyde, engineer of the Cleveland Gas Light and Coke Company, and pronounced to have an illuminating power equal to 24 candles. The average illuminating power of the gas produced by his company being about 18 candles. One machine will produce over 117,000 cubic feet of gas and 3,800 lbs. of charcoal from 19,176 lbs. of sawdust in 24 hours. To produce this amount of coal gas would require 45 ordinary coal-gas retorts using 27,000 lbs. of coal. Aside from the cheapness with which gas can be produced as compared with coal-gas, there are many other advantages which will not admit of discussion at this time.

The charcoal can be used in the manufacture of gunpowder and for many other purposes. The feeding and removing charcoal being accomplished automatically, the only labor required is that of firing, which can be accomplished by one man.

IS THERE THE DAWN OF A BETTER DAY FOR TRADE BEFORE US?

There is no better indication of an approaching improvement in the timber trade than an abatement of the scale of importation, and our reports from the provinces almost all notice that there is a palpable lessening in the quantities coming forward, and the Board of trade returns for July are expected in many quarters to show a reduction in comparison with July last year. Our Stockholm correspondent told us last week that "several of the sailing ships usually employed in the carrying of wood goods from the Bohlinian Gulf are preparing to lay up for the approaching autumn, premiums for insurance giving their owners no hope whatever of making ends meet in the present state of the freight market;" and from Quebec we learn that vessels are laying up there rather than make another voyage at the freights now ruling. This we consider doubtful at a leading port. Also at Greenock they say that comparatively few vessels will leave the Clyde for the fall voyage, on account of the low rate of freight, and that several of their spring cargoes are already laid up. Though bad for present trade these reports are likely to stimulate it for the future. Less is doing, but more is likely to be done. Last week the import in Hull appeared to be abating. West Hartpool announced "only a light importation" for the week, and our advices from the Tyne stated that the arrivals of the last seven days had been only "small and unimportant." Glasgow also participated in the subsidence of importation for the week preceding, only four cargoes, exclusive of small affairs, being mentioned with timber goods, but the market does not appear to have been much firmer on that account, as 2nd and 3rd Miramichi wide pine planks offered by Messrs. Hunter, Sheriff & Co., on the 30th ult., went no higher than 12½d. per foot cube, equal to £8 12s. per Petersburg standard, and other good sizes went below £8. If the slackness of importation should continue through the month of August,

it could not fail of being a favourable omen for the rest of the season. But these lulls are sometimes delusive, and at Cardiff they seem to anticipate more arrivals than the trade of that district and its ramifications eastward can tell what to do with. Cardiff has been competing with Gloucester for the timber trade of the Midland counties, but now it finds itself at a disadvantage by the lowering of the railway tolls on the east coast to the great manufacturing districts, and thus delivering east country goods cheaper than the west can contend with, and cargoes intended to go that way will now be superfluous in the Bristol Channel ports. Liverpool prices do not improve, and though pitch pine is still a good marketable article there, spruce is struggling against difficulties and can not be imported to leave a margin to the consignee. The best price obtainable at the public sale last week for St. John regulars, say 12 to 30 ft. long, 3x11, was £6 15s., and a cargo from Shediac only reached an average of £6 12s. per standard, mostly good lengths and sizes, than which we had nothing lower to chronicle in that market since 1879, five years ago. Last week we made some observations on the comparatively good prices which Norway finds fault with, wanting five or six pounds free on board for such goods as compete with American spruce in our markets.—*Timber Trades Journal.*

THE LUMBER TRADE IN ENGLAND.

Messrs. James Smith & Co.'s wood circular, dated Liverpool, Aug. 1, says:—The wood trade continues in the same restricted state, and values show no improvement, in consequence of the large import, and until a falling off in the supply is forthcoming confidence will not return. The demand has been stimulated more or less by the low prices, so that the tables show a large quantity has gone away, but not in proportion to the import, and the present stocks are ample for an ordinary demand. Local building operations are on an improved scale, but the general demand from the manufacturing districts keeps dull. Tonnage is plentiful and rates continue low. Mogy has seldom been so cheap, which is accounted for by the low level prices at which commodities are ruling, as well as restricted trade. The bank rate still continues at 2 per cent., there being little or no speculation in trade, a condition of affairs that should soon work its own cure.

COLONIAL WOODS.—Yellow pine: The import has been in excess of previous years, the demand has been fairly maintained, but stocks are heavy. The late sales have been of Quebec prime square at 2s. 6d. to 2s. 4d. per foot, and waney at 2s. 4d. to 2s. 6d. per foot. A cargo of very inferior Bay of Islands pine realized at auction an average of 8½d. per foot. Red Pine: No sales. Oak: A large parcel of mixed Quebec oak has been sold at about 2s. 8d. per foot, and prime at about 2s. 10d. per foot. Ash has been sold at 2s. per foot. Elm: No sales. Birch: A parcel of Quebec was offered at auction and withdrawn; 350 logs, ex-Hilda, from Pictou, realized 17d. to 22½d. per foot for 17 inch deep; remainder withdrawn. 280 logs, ex-Aspotogon, from St. John, averaged 16½d. per foot; 63 logs, ex-Flekkojford, from Bay of Islands, at 16½d. per foot; 200 logs, ex-Sif, from Miramichi, at 13d. to 14d. per foot; and by private, a parcel of Dalhousie at 16d. per foot. Birch planks at from 10d. to 13½d. per foot. Walnut: No sales. N. P. and N. S. Spruce Deals: The import, 19,000 standards, is too large, and prices have ruled by private; St. John at £6 per standard; Musquash at £5 15s.; Pugwash at £5 5s.; St. Margaret's Bay and Sheet Harbour at £5 15s.; Parrsboro at £5 15s. 3d.; Shediac at £5 12s. 6d.; Bay Verte at £5 7s. 6d. By auction, St. John, ex Aspotogon at £5; ex New City at £6, and Shediac at £5 12s. @ £5 13s.; Grand Pabos, 2 and 3 inch, at £5 7s. per standard. Boards and scantling at the usual reduction Quebec pine deals—1st quality, dry floated, 2 inch, at £17; 3rd quality, 3 inch, at £15 5s. @ £15 10s.; 3rd quality at £3 5s. @ £3 12s. 6d., the 4th quality at £7 @ £7 5s. per standard. Lower Port pine deals—By auction, 4th quality from Grand Pabos, have been sold at from £6 2s. 6d. @ £8 2s. 6d. per standard, averaging £6 15s. per standard. Red pine deals in the early part of the month were sold at £8, and latterly at £7 10s. per standard. Quebec

staves have been sold at £6 @ £70 per standard mill, and W. O. V. I. at £16 10s @ £18 per mille. Pallings and laths—The former realized 7½s. for inch thick, and laths at 16s. 6d. per mille.

THE SHUTTING DOWN POLICY.

The question that has been so rife in the great timber centres of the United States lately of shutting down the mills is evidently the outcome of an over supply, and a consequent lowering of everything connected with the lumber trade—logging, hauling, sawing, &c.—besides the price of the wood itself, which is declining to a very serious extent. We do not hear now as we used to of the best grades of Canadian pine being wanted for the American markets, and though as yet the price of choice wood still keeps its tone at the shipping ports, we hardly see how it can be maintained in the teeth of the surplusage of similar wood on the United States side. If first kinds are scarce yet while those of inferior class are overdone, unless the margin is greatly narrowed, consumers will learn to do without the higher priced goods till these latter eventually find their level in the market.

As yet there has been no actual closing of the mills in the wood sawing districts, but there is plenty of "big" talk going on, which we suppose will lead to something in the way proposed to curtail the production. Though the scheme has not met with the approval of the bulk of the American millowners, especially those who have orders in hand, that some plan of the kind will be adopted we fully expect, as the Americans do not believe in low prices; any reduction of wages particularly they will not admit without resorting to all kinds of devices to keep them up. It was not with the operatives here, those more especially who fondly imagined that they had become a necessity of the times, such as miners, operatives, &c., and puffed themselves up with the belief that the country could not dispense with their labor for a day without the whole machinery of commerce being thrown out of gear. But these men have long since learnt, by bitter experience, to bow to the inevitable laws of supply and demand, and have found that labor is, after all said and done, only a commodity that has to take its chance of the market, be it cheap or dear, as the case may be, just the same as anything else that is bought and paid for.

In this over-production now experienced by the United States we see the connecting link that binds the products of that immense territory with the markets here, and our inability to any longer bear the strain of the immense supplies that have been continuously pouring in for years has at length begun to be felt across the Atlantic. The imports from the States are of this unsatisfactory character, that they must all be paid for in hard cash, there being next to nothing taken in goods by way of exchange to preserve that balance between two great manufacturing empires, without which no healthy trade can long exist. We both make the same articles, and it is only with regard to timber and grain that we really have anything from America that we have not already in abundance, and these latter even we could spare without much hardship.

Coal and iron were at one time the exchange commodities upon which we depended to keep the balance square, but now these are hardly wanted by those countries we used to furnish so abundantly, and America in particular. So that the bulk of the imports from the States having, as stated, to be paid for in bullion, when an over-stock comes, beyond what this market can sustain, prices go down; and not only does our commerce receive a check, but we now see the American markets are also being overborne. This was not felt in the States for a long time, the vast grain resources of that country coming to the rescue; but with the markets for the latter also failing the first symptoms of a great collapse of trade are now apparent. How long it will be coming it is impossible even to hazard a conjecture, but many changes will doubtless be made that will stave off the evil day for a considerable time yet to come.—*Timber Trades Journal (Eng.)*

WOOD FLOUR.

An extract from a recent issue of the Chicago Times inclines one to the belief that American inventive genius, which has overcome many obstacles in reducing nature's forest growth to meet the requirements of the human race, has at last succeeded in utilizing these products for the very deceptive and discreditable purpose of adulterating the staff of life. The Times says the making of wood flour, which is similar to wood pulp, is the chief industry in the Catskill Mountains, New York, and it bids fair to demoralize the forests. It was first manufactured in the Catskills about nine years ago, and now over 20 mills are in full blast. Any soft wood tree—poplar is the favorite—is felled and drawn to the mill. The bark and boughs are removed and the trunk put in a machine. It is nothing but a lead-pencil sharpener on a larger scale, with four or more knives instead of one. On starting the machine the pencil-sharpener revolves with great swiftness, and in a few minutes converts the log into a hundred miles of fine, clean shaving. These are ground and bolted exactly as in a flour mill. The product is a fine, yellowish white flour, similar in appearance to a very well ground corn meal. It possesses a slight woody smell, and is almost tasteless. It is put in large bags, and then is dispatched, unmarked, to the buyer. The inclination to believe that this product is used for other purposes than paper making comes principally from reading the last sentence, which says it is dispatched "unmarked" to the buyer. If it is used only for legitimate purposes, why not brand it as every other product is branded. Sugar is adulterated with white clay, coffee also with the same material, and why not suspect that this product of the Catskills is used to mix with genuine flour as an adulteration. The Times should dispatch corps of reporters on an investigating tour to the Catskills with instructions to probe this matter to the bottom. Perhaps it may unearth the fact that one or more of the presidential candidates are stockholders in the gigantic scheme. Let no guilty man escape—*Lumberman's Gazette.*

THE NUTMEG TREE.

This is a native of the East Indies, but has been introduced and cultivated in the West Indies and in other warm countries; it forms a medium sized tree and is grown in orchards; a nutmeg plantation and a peach orchard closely resemble each other.

Nutmeg culture was at one time confined to the Banda Islands, and strong efforts were made to monopolize the production, a scheme which failed, it is stated, on account of birds carrying the seeds and dropping them beyond the assigned limits, and thus spreading the tree over the whole islands the Malayan Archipelago, from the Moluccas to New Guinea.

The tree is cultivated to a limited extent in Jamaica, where it succeeds best in a deep, rich, friable soil, which is drained. Undulating ground is preferred in order to assist the running off all superfluous water, as around its roots, although in order to thrive well it requires an atmosphere of the most humid kind. Young plants are readily raised from fresh seeds. The fruit requires nine months of tropical weather to mature.

The correspondent of the New York Sun has received a letter from Leonard Henkle, inventor and electrician, of Rochester, saying that although the action of the New York Legislature in favour of the National Park compels him to abandon Prospect Park and the American side of Niagara for electric lighting purposes, he has nevertheless negotiated for the purchase of land on the Canada side of the river and for power from the great Horseshoe Fall for carrying out his original plan. The plan contemplated the lighting of sixty-five American and Canadian cities, connected by means of underground cables with electric lights generated at Niagara. The plans are all drawn for ten hydraulic engines of 200,000 horse power each, and gigantic machinery. That Henkle himself means business is attested by the fact that he will soon open an office on the Canada side of the river, and endeavour to complete arrangements with capitalists, whom he expects to furnish \$22,000,000 for the undertaking.

A. & T. J. DARLING & Co.
TORONTO, ONT.
Specialties—"Darling" Axes, Saws, Cutlery, "Black Diamond" Files.
HARDWARE.

HENDERSON BROS.
LUMBER AND TIMBER.
Building & Bridge Timber Sawn to Order.
Pine, Spruce and Hemlock Lumber by the Cargo.
Steam Saw Mill, Box Factory and Yard—342 to 350 William St., and 130 St. Constant St., Montreal.
Steam Saw Mills, L. Assomption, P.Q.
P. O. Box 301. 1y121

PLANER KNIVES, Stave Cutter, Stave Jointing, Shingle do. Cheese Box, Veneer Cutting, Paper Cutting, Leather Splitting, Moulding and Tenoning Knives
Send for Circular Price List.
1y111

PETER HAY, Galt.

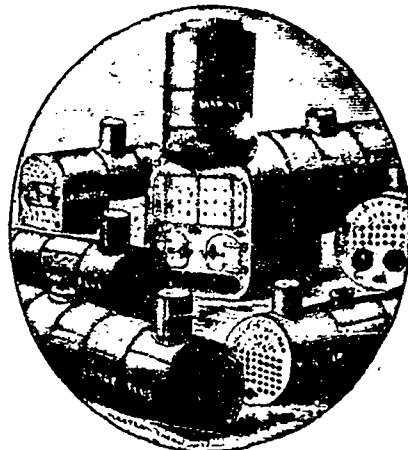


(ESTABLISHED 1852.)

CURRIE BOILER WORKS
MANUFACTURERS OF
Steam Boilers
NEW and SECOND HAND ENGINES
and other Machinery on hand and for Sale.

CURRIE, MARTIN & Co.
Esplanade, Foot of Frederick Street, TORONTO. 2y1y

JOHN MCGREGOR & SONS
Manufacturers of all kinds of STATIONARY, MARINE and LOCOMOTIVE



BOILERS
And SHEET IRON WORK.

SECOND-HAND MACHINERY Bought, Sold or taken in exchange for new work. REPAIRS PROMPTLY ATTENDED TO. All Boilers Tested by cold water pressure to 150 pounds to the square inch.

DOCK and WORKS:—

Sandwich Street, Windsor, Ont. 1y211

AGENTS wanted for The Lives of the Presidents of the U. S. The largest, handsomest, best book ever sold for less than twice our price. The fastest selling book in America. Immense profits to agents. All intelligent people want it. Any one can become a successful agent. Terms free. HALLITT BROS., Portland Maine.

WM. LATCH
Wholesale Dealer in All Kinds of
PINE and HARDWOOD LUMBER
SHINGLES AND LATH.
COMMISSIONS RECEIVED AND SOLD ON COMMISSION.
20 Adelaide St. East, TORONTO, ONT.

PRITCHARD & MINGARD
GENERAL ENGRAVERS.
Stencil Plates, Steel Stamps, Rubber Stamps, &c.,
OTTAWA, - ONTARIO. 1y23

Canada Lead & Saw Works,
JAMES ROBERTSON,
Metal Merchant and Manufacturer,
Office: 20 Wellington St., MONTREAL, P.O. Box 1500.
White Lead, Putty, Shot. Also, Gang, Circular, and Cross-Cut Saws of all kinds. Prices furnished on application.
BRANCHES: TORONTO, Jas. Robertson & Co. ST. JOHN, N.B., James Robertson. 1y18

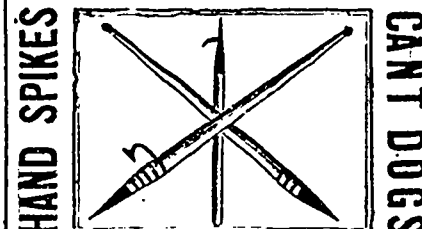
J. T. LAMBERT,
Lumber and Commission Agent.

ORDERS FOR DIMENSIONS AND ALL OTHER KINDS AND GRADES OF

American Lumber
PROMPTLY ATTENDED TO.

Timber Limits and the Square Timber Trade a Specialty.
Office, Wellington Street, OTTAWA. 1y11

WM. AHEARN
MANUFACTURER OF



Lumberman's Tools, etc.,

HIGHEST AWARDS IN CANADA and U.S.
CHAUDIERE, OTTAWA. 1y20-1

PATENTS
MUNN & CO., of the SCIENTIFIC AMERICAN, continue to act as Solicitors for Patents, Caveats, Trade Marks, Copyrights, for the United States, Canada, England, France, Germany, etc. Hand Book about Patents sent free. This is a seven years' experience. Patents obtained through MUNN & CO. are noticed in the SCIENTIFIC AMERICAN, the largest, best, and most widely circulated scientific paper, \$3.20 a year. Weekly. Splendid engravings and interesting information. Specimen copy of the Scientific American sent free. Address MUNN & CO. SCIENTIFIC AMERICAN Office, 231 Broadway, New York.

HILL'S
English Extract of
BUCHU,
One of the Best
KIDNEY
INVESTIGATORS IN USE.

It is a specific in the cure of all diseases of the Kidneys, Bladder, Prostatic Portion of the Urinary Organs, Irritation of the Neck of the Bladder, Burning Urine, Gleet, Gonorrhoea in all its stages, Mucous Discharges, Congestion of the Kidneys, Brick-dust Deposit, Diabetes, Inflammation of the Kidneys and Bladder, Dropsy of the Kidneys, Acid Urine, Bloody Urine, Pain in the Region of the Bladder PAIN IN THE BACK, Urinary Calculus, Renal Calculus, Renal Colic, Retention of Urine, Frequent Urination, Gravel in all its forms, Inability to retain the Urine, particularly in persons advanced in life. IT IS A KIDNEY INVESTIGATOR that restores the Urine to its natural color, removes the acid and burning, and the effect of the excessive use of intoxicating drink.

PRICE, 51¢ or 61¢ Bottles for \$5.
Send for Circular. Sold by all Druggists.
W. JOHNSTON & CO.,
251 Jefferson Ave., DETROIT, MICH.

E. S. VINDIN,
Commission, Shipping, Forwarding and General Agent.
LUMBER MERCHANT
Office, Tempest's Block, Port Hope. 1y1

J. K. POST & CO.
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y. 1y1

HILLOCK & KENT
Wholesale and Retail Dealer in
Pine and Hardwood Lumber, Lath, Shingles, Veneers, Wave Mouldings & Fancy Woods.
103 Albert Street, TORONTO. 2y122

The American Hotel,
BARRIE, ONT.
Collier St., Adjoining Market.
RATES REASONABLE, CENTRAL LOCATION, FREE BUS TO AND FROM ALL TRAINS.
Every accommodation for Commercial and LUMBERMEN.
W. D. McDONALD, Proprietor. 1y11

VULCAN IRON WORKS
(ESTABLISHED 1842.)

STEWART & FLECK, Jr.,
Manufacturers of every Description of
Saw and Grist Mill Machinery,
Water Wheels, Steam Engines, Derricks, Rollers, Steam Pumps, Mining Machinery.
201 REPAIRS PROMPTLY EXECUTED. 1y
Wellington Street, OTTAWA, Ont.

GRATEFUL-COMFORTING.
EPPS'S COCOA
BREAKFAST.
"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which will save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—Civil Service Gazette.
Made simply with boiling water or milk. Sold only in packets by Grocers, labelled thus:
JAMES EPPS & Co., Homoeopathic Chemists,
1y121 London, England.

DO YOU WANT
A FARM
OR SELL
Examine the list of
"FARMS FOR SALE" and "FARMS WANTED" in the
DAILY and WEEKLY MAIL
This Mail has become
The Recognized Medium for Farm Advertisements
And contains more of them than all other Canadian papers combined. It has years' records of the right class ADVERTISEMENTS of Farms for Sale and Farms Wanted. Stock or Seed for Sale and Wanted inserted in THE WEEKLY MAIL. Five cents per word each insertion, or twenty cents per word for the insertion of THE DAILY MAIL at five and a half cents per word each insertion.
Address—THE MAIL Toronto, Canada.



DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE Peterborough Review Printing and Publishing Company (Limited), Peterborough, Ont.

Terms of subscription:

One copy, one year, in advance..... \$2 00
One copy, six months, in advance..... 1 00

Advertising Rates:

Per line, for one year..... \$0 90
Per line, for six months..... 50
Per line, for three months..... 30
Per line, for first insertion..... 10
Per line, for each subsequent insertion to 3 mo's..... 05
Cards not occupying more than 12 lines (1 inch) per annum..... 8 00
Cards not occupying more than 12 lines (1 inch) for six months..... 5 00
Cards not occupying more than 6 lines per annum..... 5 00
Cards not occupying more than 6 lines, for 6 mo's..... 3 00

Special rates will be made for page, half page and column advertisements.

Advertisements intended for insertion in any particular issue should reach the office of publication at least four clear days before the day of publication, to insure insertion.

All communications, orders and remittances should be addressed and made payable to THE PETERBOROUGH REVIEW PRINTING AND PUBLISHING COMPANY (LIMITED), Peterborough, Ont.

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., 164 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., SEPT. 1, 1884.

CONVENTION OF LUMBERMEN.

The Convention of the lumber manufacturers of the northwest was opened at the Grand Pacific Hotel, Chicago, on Aug. 20th. About 60 prominent lumber merchants from all parts of the northwest were present. A. G. Van Shaick, of Chicago, presided over the deliberations. The principal business to be considered is to devise means by which the present depression in the trade may be overcome. It is complained that the supply is much larger than the demand, and it is hoped before the convention adjourns something may be done to remedy this state of affairs.

J. G. Thorpe, of Eau Claire, Wis., being called on, said that lumbering in the Chippewa valley had been only fairly prosperous this season. A large amount of logs are hung up for lack of water. Prices are low and sales dull.

A. A. Carpenter, of Chicago, gave it as his opinion that there was entirely too much lumber in the country. He thought it would be a good thing to stop the mills, but did not think it could be done, on account of lack of concerted action on the part of mill owners; but if some means of relief are not devised it will result in firms having to carry immense stocks at a fearful loss. He thought that the amount of logs taken from the woods should be curtailed. This might not regulate things in one season but it would eventually.

Fred Weirhauser, of Moline, was in favor of shutting down the mills there as soon as possible.

Maj. Camp, of Minneapolis, was satisfied that there is enough manufactured lumber now in the northwest to supply this section with enough to last this and next year. He did not think any agreement between manufacturers not to cut logs would stand. Minneapolis tried faithfully to reduce the cut agreed on last year. Of the logs on hand there this spring 160,000,000 feet have been manufactured. In the river there to-day were 190,000,000 feet of logs which, if they are not manufactured, are liable to be swept away in the ice freshet. The mills above Minneapolis are reducing the cut. At that place 140,000,000 feet of this and last year's cut will have to be carried over. Minneapolis, while manufacturing as little as possible, still

has too much on hand, and the firms there, not being rich, cannot afford to carry it, and Major Camp warned the Chicago firms that they would sell it, even at a loss, and would compete with them in the southwest.

Thaddeus Doan, of Chicago, rather objected to airing his views, but had to yield to the call for him. He was inclined to endorse the remarks of Maj. Camp. Mr. Doan did not believe much in combinations of men who would bull their goods and make others suffer. The men at this convention virtually owned the pine forests of the country and their actions at this time were momentous. He suggested that instead of spending money in sending delegations to try and influence congress they should stay at home and not interfere with the natural course of legislation. He was not scared at the amount of lumber in Chicago and thought that there was not too much.

J. H. Swan, of Muskegon, thought the mills should run on less time to overcome the surplusage now existing. The mills now run about twelve hours a day; they should run only ten hours. If this was done there would be 10 per cent less produced. He did not think this convention could do anything to meet the exigencies of this year. His mill would close next Saturday after making only 9,000,000 feet, instead of 20,000,000 as usual. They shut down because they could not afford to make a great stock and then sell at a loss. Manufacturers should cut off the amount produced 30 to 40 per cent. The only way to overcome the depression is to shut down.

A. A. Carpenter took exceptions to Mr. Doan's remarks about influencing legislation, and denied the allegation. Continuing, Mr. Carpenter reviewed the state of things on the Menominee river. An agreement had been entered into by the firms there by which the number of logs to be cut was reduced 10 per cent.

Mr. Farnsworth, of Oconto, thought the reduction of 10 per cent at Menominee did not amount to much.

The President explained the matter further, demonstrating that the 10 per cent reduction in the number of logs amounted to a reduction of 20 per cent in lumber.

Mr. Swan, of Muskegon, said that the timber tributary to the eighty-eight mills at Muskegon was in the hands of about ten men. At present there was an immense number of logs there, but he did not think this state of things would occur another year. No mills had been built during the past year at Muskegon, and he was sorry to say only one had burned down, and it was heavily insured.

Maj. Camp, of Minneapolis, said that a number of new mills would be started soon in Minnesota.

Col. Durand, of Stillwater, Minn., was impressed with the gravity of the work before the convention. He thought there was not a single mill owner who would be willing to shut down his mill and throw out of employment from one hundred to one thousand men for all winter. He did not think that an Oconto mill owner could judge of what was best for a mill in Minnesota. The price of crops was low, and this made it impossible to get high prices for lumber. This convention might result in a good social time, but he did not think they could agree on any time when they should shut down. The only anchor to hold on to now was the fact that for two years the country had been prosperous. The lumber interests had passed through two crises, but no one could tell whether it could stand another.

D. C. Cranage, of Bay City, was called on. At his place they were cutting off the timber very rapidly and he did not think the mill owners would consent to stop, as there were local interests there which would not allow it. He would be glad to know of some plan by which the production of lumber in the Saginaw Valley could be stopped, but there was none.

A committee of five was appointed, who were given charge of the subjects brought before the meeting. These are:

1. Has the production of pine lumber in the northwestern states overtaken and exceeded the annual demand?
2. Is the supply of logs and lumber now held

by manufacturers in excess of their ability to protect, and how do stocks of lumber at distributing markets compare with other years?

3. During the present financial condition of the country, and considering the current price of agricultural products, can lumbermen expect an increased demand for lumber or higher prices?

4. Would it not be desirable to produce 6,000,000,000 feet of lumber in 1885, in the northwest, as compared to 7,500,000,000 and save the 1,500,000,000 feet of standing timber and the whole cost of marketing it as a profit?

5. In what manner can curtailment be made if deemed advisable?

This committee is: J. G. Thorpe, Eau Claire, Wis.; F. Moyerhauser, of Moline, Ill.; W. J. Young, Clinton, Iowa; Thomas Cranage, of Stillwater, Minn.; E. Croppin, of White Lake, Mich.

The present officers of the association were then re-elected for the ensuing year. They are: A. G. Van Shaick, president; O. C. Merriman, vice-president; A. A. Bigelow, treasurer; E. S. Hotchkiss, secretary; Directors: E. E. Croppin, White Lake, Mich.; A. T. Lay, Traverse City, Mich.; E. W. Durant, Stillwater, Minn.; O. H. Ingram, Eau Claire, Wis.; R. G. Peters, Manistee, Mich.; W. C. Goodman, Menominee, Mich.; J. H. Swan, Muskegon, Mich.; P. M. Musser, Muscatine, Iowa; W. J. Young, Clinton, Iowa; G. S. Shaw, Davenport, Iowa; C. L. Coleman, LaCrosse, Wis.; J. M. Gould, Moline, Ill.; G. W. Roby, Lundington, Mich.; S. W. Farnham, Minneapolis; C. M. White, Montrose, Iowa.—Chicago Evening News.

AFTERNOON SESSION.

We summarize from the Northwestern Lumberman the business done at the afternoon session. At 2:40 p. m. the President called the convention to order.

The reports of the Treasurer and the Secretary were read.

Mr. Thorp read the report of the committee on business as follows:

Your committee, to whom the questions in the President's address, were referred, reports as follows:

1. Has the production of pine lumber in the Northwestern States overtaken and exceeded the demand?

We answer, Yes.

2. Is the supply of logs and lumber now held by manufacturers in excess of their ability to protect, and how do stocks of lumber at distributing markets compare with former years?

We divide this question, and answer to the part of it that individually we think the manufacturers cannot control or protect prices, but unitedly and with combined effort we believe they can.

Your committee, not having sufficient statistics at hand, cannot answer the second part of this question in a satisfactory manner.

3. Having hope and belief that the financial crisis is passing over, and in view of the now assured large crop of the country and the low price of lumber that corresponds with prices of agricultural products, we have good reason to expect an increased demand for lumber at present or higher prices, provided the manufacturers will hold it steady and without endeavor to crowd it upon the market.

4. We agree with its suggestion that if a reduction of 25 per cent in the quantity of lumber to be manufactured in 1885 can be made, that an amount equal to 1,500,000,000 feet of standing timber and the cost of marketing it would be saved to the owners as a profit.

5. The curtailment can be made by the sawing of less lumber, by shutting down the mills for a month this coming fall, or reducing the cut of the mills next season.

The report was taken up article by article, and after a debate the different sections were adopted.

Mr. Thorpe—It is suggested to me by a member of the committee to amend the report in this way: "Your committee not having sufficient statistics at hand cannot answer the second part of this question satisfactorily." I will ask the unanimous consent of this Convention as chairman of that committee to thus amend it.

The President—If the Convention makes no objection it will be so amended.

It was moved and seconded that the report as amended be adopted, which was agreed to.

Mr. Pierson—I would like to offer this resolution:

Resolved, That there are logs now in sight in the rivers, and with the lumber crop on hand, to supply the market for the balance of this year, and for the next.

Considerable debate followed. Mr. Bassett offered an amendment, which was afterwards withdrawn, and the motion was put and lost.

Mr. Pierson offered the following resolution, which, as amended after discussion, was unanimously adopted:—

Resolved, That, in the judgment of this Convention, in view of the amount of logs and lumber now on hand, we recommend to the manufacturers of lumber that they get out not to exceed 60 per cent of the amount of logs cut in 1883, the coming winter, and that they cease operating their mills this fall as early as possible, and not later than Nov. 1.

Mr. Camp—I move that our semi-annual Convention be held at Eau Claire next spring, at a date to be fixed by the President.

This motion was adopted.

Mr. Thorpe—I was requested by a party, and agree with him, that it may be well to offer a resolution something in this form:

Resolved, That from the facts and statistics gathered and learned at this meeting, and in view of the assured large crop of the Northwest, the probable demand for lumber and the further consideration of the large number of men employed at the several mills who would be thrown out of work, that is not deemed wise nor expedient to close down the mills before Nov. 1 next, leaving it optional with any to close earlier if deemed necessary or best.

In answer to a question the chairman stated the effect of the resolution so be simply recommendatory, leaving each member free to act his own judgment in carrying out its provisions.

The resolution, being seconded by Mr. Norton, was carried.

After passing votes of thanks to the President and Secretary, to the proprietor of the hotel for the use of rooms and to the press of the city, the convention adjourned.

RAFTS ARRIVED.

The Quebec Chronicle has the following list of rafts arrived:
Aug. 8.—D. D. Calvin & Co., oak and pine, sundry coves.

Aug. 11.—P. & W. Murray, waney and square white pine, St. Michael's cove.

Collins' Bay Co's, sundry drams, sundry coves.

D. & J. Magure, boards, Cap Rouge.

Aug. 12.—John S. Murphy, staves, Indian Cove West.

Aug. 13.—Wm. Mackenzie, red and white pine Hadlow cove.

J. R. Booth (2), red and white pine, Cap Rouge.

Collins Bay Co., spars, New London cove.

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

R. Dollacs, waney white pine, St. Michael's cove.

Aug. 14.—John Ross, deals, Woodfield cove.

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..	1,315,104	1,092,952	1,471,010
White Pine.....	5,328,670	8,813,964	1,887,056
Red Pine.....	591,949	306,300	249,663
Oak.....	754,840	1,354,544	546,792
Elm.....	495,522	243,761	637,893
Ash.....	196,395	196,356	376,361
Basswood.....	815	2,145	3,992
Butternut.....	2,223	959	1,121
Tamarac.....	4,533	4,010	18,633
Birch & Maple.....	202,417	137,240	185,111
Masts & Bowsprits..	33 pcs	— pcs	— pcs
Spars.....	51 pcs	— pcs	41 pcs
Std. Staves.....	273,4120	461,1025	351,1225
W. I. Staves.....	835,0210	466,436	78,0026
Brl. Staves.....	10,0215	87,1127	0,0213

Quebec, Aug. 22. JAMES PATTON, Supervisor of Cullers

—IT WILL PAY YOU— TO SUBSCRIBE

FOR THE

Canada Lumberman

AUSTRALIAN TIMBER.

A board appointed to inquire into and experiment on the best kind of timber grown in the Australian colonies, and adapted for the construction of railway vehicles, has sent in its report. Among woods which the commissioners mention as suitable are blackwood, mountain ash, bluegum, and Gippsland mahogany. Under test the blackwood presented results which were superior to any other timber. The mountain ash was second to the blackwood for railway purposes. It should be felled, the commissioners think, during the winter months, when it has attained maturity, and is between four feet and five feet in diameter, and it might remain felled for six months before being broken down into planks for seasoning. Bluegum should be treated in the same manner. Going somewhat beyond its reference, the board deals with the question of timber licenses, and recommends that getters be compelled to pay for the timber felled, and to confine their operations to a given area, or otherwise that selected lots of trees be sold by tender. It is also strongly recommended that a forest board should be called into existence.

A COMPETITOR.

The Thunder Bay *Sentinel* says:—We are glad to notice that the Winnipeg and other papers have taken up the question proposed by us in connection with the establishment of Port Arthur as the great lumber handling centre for the western market in opposition to St. Paul. As is well known the material furnished from the pineries of Northern Wisconsin and Southern Minnesota cannot be beaten in point of quality in the States, and as its price at Ashland is lower than at St. Paul and the cost of shipping it to Winnipeg and the Canadian Northwest considerably lower than by the St. P. M. & M. line, the advantages we have over St. Paul, the present distributing point, must be apparent. Besides, our own railway would get a 428 mile haul instead of the run of 68 miles from Emerson to Winnipeg as now. We hope shippers are taking note of these facts and that the question is being laid before the C. P. E. authorities.

AN AWFUL FATE.

OTTAWA, Aug. 26.—A terrible story comes from Shrewsbury, Province of Quebec, which will long be remembered in that village. A short distance from Shrewsbury there resides a farmer named Leblance, a French Canadian. On leaving home a few mornings ago to work in the woods, he told his wife to send their daughter, who was 12 years old, with his dinner at noon. After waiting until 3 o'clock in the afternoon he concluded to go home, as no dinner had arrived. He shouldered his gun and started, but before he had gone far he noticed an immense bear apparently eating something. He watched it for a moment and fired, missing his mark. While reloading he could see that it was a human being the bear was devouring. He then rushed up to within easy gunshot, discharging his rifle into the bear, which rolled over, to reveal the body of his little daughter, disfigured and almost beyond recognition. The flesh had been torn off her legs and face, while she still held in her little hand the tin can containing her father's dinner.

The Crushing Capacity of Brick

Rather a soft brick will crush under a weight of about thirty or forty tons per square foot, while a first-rate machine pressed brick will require from 300 to 400 tons per square foot; this last is about the crushing limit of the best sandstones, or two-thirds as much as the best granites or roofing slates. But masses of brickwork will crush under much smaller loads than single bricks, thus, small doubled masses only nine inches each side, laid in cement, crushed under twenty-seven to forty tons per square foot; others, with piers nine inches square and two feet four inches high, in cement, only two days after being built, required forty-four to sixty-two tons per square foot to crush them, cracking and splitting usually under about one half the crushing loads.—*Industrial World.*

The Congo Country.

LIBBON, AUG. 29.—The King of the Congo district, on June 16th, made a formal protest against the treaties entered into by the Falls Bolla Princes with the African International Association. They had, says he, no right to cede territory to the Association.

DULUTH ON FIRE.

DULUTH, Minn., Aug. 23.—About 6:30 this evening the large saw mill of Little & Peck caught fire and was totally destroyed. Then the large lumber yards caught and were consumed, and at this hour (10:30 p. m.) the fire is in the mill of G. W. Peck & Son, which will be destroyed. Other property is in danger, and it looks now as though the fire could not be stopped till it has swept away the Barner Lumber Company's mill, and a large quantity of lumber in addition to what is consumed. The origin is not known at this hour. The loss is already estimated at over \$100,000.

Keeping Wood in Moist Ground.

A Brooklyn, N. Y., carpenter writes us that, in 1864, he laid down some old painted half inch door panels as a flooring for a coal bin at the rear of his yard, and that, on taking them up seven years afterward, they were just as sound as if they had been but recently cut from a thrifty living tree, although so pliable with moisture that he could have bent one of them around a six inch stove pipe. Our correspondent suggests that the painting of railroad ties, or coating them with white lead and oil, would be very efficacious for their preservation.

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.

\$66 a week at home. \$5.00 outst free. Payab solutely sure. No risk. Capital not required. Reader, if you want business at which persons of either sex, young or old, can make great pay all the time they work, with absolute certainty, write for particulars to J. H. HALLIST & Co., For 12nd, Maine. 6m145-17w



MILITIA.

SEALED TENDERS, marked on the left hand corner of envelope "Tenders for Militia Clothing and General Store Supplies," and addressed to the Honorable the Minister of Militia and Defence, will be received up till noon of Monday, 11th August, 1894.

Printed forms of tenders, containing full particulars, may be obtained from the Department at Ottawa and at the following Militia Stores, where also sealed patterns of all articles may be seen, viz:—The offices of the Superintendent of Stores at London, Toronto, Kingston, Montreal, Quebec, and St. John, N. B.

Tenders not in relation with sealed patterns of the Department or accompanied by special patterns will not be received.

No tender will be received unless made on printed forms furnished by the Department.

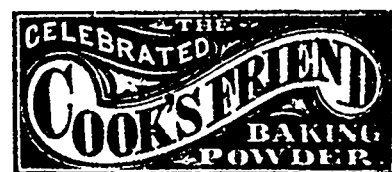
The material of all articles will require to be of Canadian manufacture and Canadian workmanship.

Each tender must be accompanied by an accepted Canadian bank cheque, for an amount equal to ten per cent. of the total value of the articles tendered for, which will be forfeited if the party making the tender declines to sign the contract when called upon to do so, or if he fails to complete the service contracted for. If the tender be not accepted the cheque will be returned.

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

C. EUG. PANET,

Deputy of the Minister of Militia and Defence
Ottawa 4th July, 1894.



Is the Best and Most Economical article in use for making all kinds of Biscuit, Rolls, Pancakes, Johnny Cakes, &c. It is made from the BEST MATERIALS MONEY CAN BUY, and is perfectly pure and wholesome. Laid ready for the table can be prepared by its means in TWENTY MINUTES after waiting the flour. Next to salt it is the most useful adjunct to camp supplies.

McLaren's Cook's Friend

IS THE ONLY GENUINE, BE SURE YOU PURCHASE NO OTHER. 171.16

FORESTAL EXPERIMENT STATIONS.

The following is a paper by Adolph Leue, Secretary of the Ohio State Forestry Association, read by him at the Columbus meeting of the Ohio State Forestry Association:—

Through the unwearied labor of a few men, scientists as well as political economists, and through the influence of the press, it has been shown and is now fully understood that the prosperity of a country is to a very great extent dependent upon the proper condition and distribution of its forests. In view of this significant fact, it is indeed very strange that we, as a people, devote so little attention to forestry—that in many of our State Governments have even not recognized forestry as a subject worthy of any consideration, and that but in a few States laws have been enacted to promote this great interest. The cause of such profound indifference on the part of our fellow citizens lies in their want of knowledge of the true condition of our forests, and of the constantly increasing demand upon forest products, and the consequent rapid decrease of the forest area. In support of this assertion, I need not refer you to the enormous destruction of the forests in Wisconsin and Michigan, nor need I point to the South, where the saw mills are now making great havoc among the forests, and to the deplorable condition in which the denuded regions are left. Our own beautiful State of Ohio, once among the richest and excellent timber forests, has for years been unable to supply its own wants. Some of the most valuable timber trees have almost entirely disappeared in some counties, and are rapidly dying in others on account of the harsh treatment they receive. Since 1853 there has been a constant decrease in the forest area of almost every county of Ohio, and this decrease has been more rapid during the years between 1870 and 1881 than during the years between 1853 and 1870. A glance at the remains of our woodlands reveals that the most valuable and even the most ordinary kind of timber has been gathered from them. When the rest shall have been cut, or shall have perished by age, or maltreatment, the forests will disappear; for, owing to the pernicious practice of utilizing woodlands for pastures, the rejuvenescence of forests was made impossible. The ruin of the prosperity of our fair State is unavoidable, unless effective measures be taken to supply the future demands upon timber and other forest products, by carefully husbanding of what we have and by planting new forests. Here our difficulties commence. We may indeed sooner expect a spendthrift to instantly cease all rivalry and become a careful and economic manager of a nearly squandered fortune, and by personal effort amass another, than to expect a people, whose relation to forests has, we may say, by necessity been hostile for several generations to most economically husband an existing forest, and to plant, cultivate, and manage a new plantation. The late Dr. John A. Warder, whom future generations will call the father of American forestry, was right, when he emphatically declared that we neither know *where*, *what* nor *how* to plant. Now, there is no other alternative; we must learn this, and the sooner we commence, the better for us, for our fellowmen, for our children, and for our country.

We may learn this in two different ways, namely, deductively and inductively, by the more rapid and more reliable way of experimenting.

By way of illustrating which of the two methods is preferable, I beg leave to briefly call your attention to the history of the development of agriculture. From the earliest time up to the beginning of the nineteenth century it was a mere empirical act, resting, as it were, solely upon the traditional maxims of experience, without any signs of progress. But when, in the first part of the present century, Liebig and others subjected these ancient maxims of experience to a series of scientific investigations, a new era began to dawn upon the most important occupation of mankind. Since then, such investigations have been carried on in schools of agriculture, which have been established in all civilized countries, and have reached the highest point of perfection in the agricultural experiment stations. The result is most gratifying, for by means of these investigations and systematic experiments agriculture

has been elevated to the dignity of an exact science.

This hasty glance at the history of the development of agriculture plainly indicates the course to be pursued in the attempt to raise forestry, the younger sister of agriculture, to the same dignity. A very successful beginning has been made in Germany, where the idea of establishing forestal experiment stations originated. One or more chief stations, with an appropriate number of subordinate stations, have been established in nearly every State of Germany. The great importance which the governments of the States in which they are established attach to these stations may be seen from the fact that in Germany about \$30,000 are expended annually for the maintenance of the same; and their number is steadily increasing. Austria, Switzerland, Italy, Spain, and even Russia, are following the example of Germany.

If those nations whose attainments in forestry are truly great, deem it advisable, and even necessary, to submit the maxims of long experience to a series of scientific investigations and systematic experiments, how much more should we, on this side of the Atlantic, ignorant as we are of almost everything pertaining to a reasonable system of forestry, make an effort to base that system, for which we are longing and which we greatly need, upon scientific principles.

The need of forestal experiment stations in the United States and in Canada has long been felt, and the desire for the speedy establishment of the same has been expressed in various ways and at different times. But this has been to no effect, because of the want of a suitable plan of organizing the same. Our climate, the nature of our forest trees, the want of State forests and of trained foresters, render the adoption of the German plan inexpedient, and require a plan that shall be adapted to our peculiar circumstances, and at the same time meet the demands which can reasonably be made upon such an institution.

Convinced of the necessity of speedy action in this matter, I laid before the American Forestry Congress, at its meeting held in St. Paul, Minn., August, 1883, the following plan of organization with special reference to Ohio:

I.

The object of the forestal experiment station in Ohio is the development of a rational system of forestry adapted to the wants of Ohio.

II.

The station shall consist of a *centre* and an unlimited number of *primary* and *secondary* stations.

III.

The centre of this station shall be the Agricultural College at Columbus, and shall be under the management of a director, whose sole duty shall be—

1. To preside over all the meetings of the committee on forestal experiment stations (see § VI.)
2. To ascertain the condition of the forests of Ohio, and the wants of forestry in this State, and to institute the necessary experiments and investigations.
3. To prepare plans of experimentation and to devise suitable formulae for recording the work performed at the primary stations (see § VI.)
4. To attend to all the correspondence connected with the station.
5. To represent the Forestal Assembly of the State of Ohio at home and abroad.
6. To report to the General Assembly of the State of Ohio, on or before the second Tuesday of January of each year, the work performed at the station, and to render an account of the money expended in experiment and investigation, and of all other expenditures of the station.
7. To submit an estimate of the probable expenses of the station for the ensuing year.

IV.

The *primary* stations shall consist of at least three acres of ground, each, which shall be devoted to experimenting; and the experiments performed on the same shall be after a definite plan agreed upon by the Committee on Forestal Experiment Stations (see § VI.)

V.

The *secondary* stations shall be devoted to general investigations, such as analysis of soil, study of Forest Botany and Forest Zoology,

testing the vitality of seeds of forest trees, determining the comparative value of forest products and testing the adaptability of the various kinds of woods for mechanical and technical purposes.

VI.

The directors of the forestal experiment station and the principles of primary and secondary stations shall constitute the Committee on Forestal Experiment Stations.

VII.

Each primary and each secondary station that may be adapted for making forestal meteorological observations, shall, at the desire of the principal of such station, be provided with the instruments necessary for such purpose.

The Forestry Congress not only endorsed this plan, but, by a resolution, appointed a committee to recommend the adoption of the same to the several States of the Union and to the Provinces of the Dominion of Canada. [H. W. Morgan, of Amherstburg, Ont., is one of the Committee.]

To effect an organization, based upon the above plan, the first step to be taken is the appointment of a director, who, having ascertained the needs of forestry in Ohio, should proceed at once to organize both primary and secondary stations. In this, however, proper care should be taken in locating the primary stations as well as in selecting the parties for conducting the experiments and for making the special investigations; ignorant and unreliable persons should be rigidly excluded.

As the State of Ohio still owns certain tracts of land adapted for forest culture, it would not only be proper, but even advisable, to utilize the same for experiment stations and model forest plantations. But the immediate future of our forests, depends, and will depend, chiefly upon the farmers, who almost exclusively constitute the owners of property that is available for forest culture. They are, therefore, the first to reap the benefit of a rational system of forestry, and thus directly interested in forestal experiments, and will, it may be confidently expected, assist in making the enterprise a success. But there is another and more direct inducement for farmers to participate in this great noble work. The experimentation is, to him who undertakes it, an excellent school of forestry, which not only charges no tuition, but rewards him with at least the nucleus of a forest, which will greatly enhance the value of his farm.

The readiness with which several very intelligent farmers of this Commonwealth have consented to perform on their own lands, and at their own expense, such experiments as the committee on forestal experiment stations may suggest, guarantees the success of the enterprise.

It is, however, not only the farmer who will be benefited by such forestal experiments; almost all of those engaged in the mechanic arts are more or less interested; while, for example, the builders, the cabinet-makers, the coopers, the carriage and wagon-makers, the manufacturers of matches, spools, bungs, lead-pencils, tool handles, and other like articles, depend entirely upon the forest for the material used in their respective arts, there is scarcely any other industry which does not, in one form or another, draw upon the products of the forest. The great railroad and telegraph companies, which consume vast quantities of wood in construction of their roads and lines, are greatly interested in this question. An abundance of forests, and a cheap method of raising them, will have a material effect upon the prices of the raw forest products, upon which the existence of such industries depends.

But the object of forestal experiment stations is not limited to forest culture. To test the relative value of forest implements, to devise new methods of obtaining forest products, to find new uses for the same, and to discover new forest products for certain purposes, are very significant features of the secondary stations. While the primary stations aim to furnish the means by which to increase the wealth of the owners of forests, the secondary stations will call into existence new industries and promote those now in existence. It will therefore be to their own advantage, if these several industries foster this great enterprise by making direct researches, or

by giving such information as will from time to time be asked of them, or by rendering pecuniary aid which will be needed for such investigation.

The scientific department of the station is of exceedingly great importance, and its development should have the immediate and most scrupulous attention of the director. Although this department should ever be considered a distinct feature of the forestal experiment station, it should never be isolated, but be conjoined with every experiment and investigation. The scientists and the practical forester must go hand in hand, else the object of the institution will not be attained.

Unfortunately, the various branches of science which find application in forestry, have not been studied very extensively in this peculiar relation in this country; the terms Forest Botany, Forest Zoology, Forest Geodesy, etc., are almost unknown; whence only such specialists as are perfectly reliable and capable of making original investigations should be intrusted with the scientific work of a secondary station.

An experiment station organized according to this plan will, I believe, meet all the demands that can be made upon such an institution. It places the practical work, where it belongs, in the hands of those who are best qualified for it, and who are the recipients of the benefits resulting from the same. The State, by appointing a director, serves merely as an instrument to effect the organization, to collect the results, and to make them known through appropriate reports, which will become the solid foundation of a *system of forestry adapted to the wants and conditions of Ohio.*

It may be interesting to add that the American Forestry Congress passed at its session in Cincinnati, in 1882, the following resolution:—

Resolved, That it is the unanimous sentiment of this Forestry Congress now assembled at Cincinnati, Ohio, that the Congress of the United States should at a very early day take such proper steps and enact such further laws as will increase the forestry interest in this country, and to that end establish at the several agricultural institutions, both State and National, experimental forestry stations, to be constructed on the same general principles as those in Germany.

The above resolution was introduced by Senator Horace Wilson, of Columbus, upon hearing my paper on *Forestal Experiment Stations*, read before the Congress on the day previous.

On the 10th of February, 1883, the late Dr. John A. Warder offered, at a meeting of the Ohio State Forestry Association, the following resolutions, which were adapted unanimously:—

Resolved, That we beg of all the agricultural colleges established under the land grant of Congress, that they shall lose no time in planting State arboreta and establishing forest experiment stations, where all species adapted to the soil and climate shall be tested, and whence surplus seeds and plants may be distributed. Annual reports of these establishments to be made to the Governors or State boards of agriculture.

Resolved, That Congress be asked to establish one or more Experimental Forest Stations upon the public Domain, where the propagation and testing of useful trees shall be the leading object, with the collection of seeds and plants to be distributed by or under the direction of the United States Agricultural Department, to which bureau these stations shall make annual reports.

In April, 1883, I advocated before the O. S. F. A., in a paper, "Our next Problem," the speedy establishment of Forest Experiment Stations, and at a subsequent meeting submitted a plan of organizing such stations.

The *St. Paul Daily Globe*, of August 9, 1883, had the following in reference to the plan mentioned in Section VII., submitted by the writer:—

"Prof. N. H. Egleston, of Washington, and Mr. Memier, of Illinois, endorsed the paper very heartily, as a simple, practical plan that, if carried to them, would recommend itself to general favor.

"Judge Higley, of Cincinnati, briefly ex

plained how the plan came to be adopted by the Ohio Association, detailing the efforts of the society to get State aid for forest culture, under the head of a State Forester, from the failure of which came the plan outlined in this paper, and which, he said, was meeting with much better success than was anticipated.

"Dr Hough, of Lowell, thought such a plan should have a strong claim upon the leading educational institutions of a State, which could most profitably conduct the experiments mapped out.

"Dr. G. B. Loring had no doubt that the stations provided for would prove a success in the great States of Ohio, but he thought these stations should be as closely allied with our colleges as possible. Time was, when the mention of a college in connection with agriculture or forestry met with ridicule. But that time has passed, and as a rule, legislators, backed by public sentiment, stand ready to grant all reasonable aid to such institutions, and he argued that the true road to final success in agricultural and forestal developments was these institutions; and as necessary means, he urged that the best of talent and highest cultivation be secured to conduct them, thus placing them upon that elevated plane which their importance demanded, giving them their proper position in the scientific teachings of the day."

Prof. N. H. Egleston, now Chief of the Forestry Division at Washington, wrote to me under June 29, 1883:—

"I am very glad to know that you have moved in this matter of establishing in Ohio forestal experiment stations, and so far as I understand your plan, it seems to me a good one. I have long thought the establishment of such stations one of the most important and first things to be done. I hope that you will be able to carry out your plan. The example of such a great central State will encourage others to follow the same direction."

Robt. Douglass, the well known Arboriculturist, of Waukegan, Ill., writes me under September 11, 1883, in reference to the experiments proposed:—

"Experiments of this sort will teach us more, even if planted on a small scale, than the past 20 years have taught us in all the theorizing at horticultural and forestry conventions."

(4) That committee consists of Prof. N. H. Egleston, of Washington, D. C.; H. W. Morgan, of Amherstburg, Ont., with A.olph Leuc, of Cincinnati, as Chairman. Owing to the great distance at which the members of that committee reside, no meeting was effected, and no action has been taken.

AN ELECTRIC MOTOR.

An electric motor was tried on a Cleveland street railroad, last Saturday. The experiment was so successful that the company expect to change their entire system, comprising over 70 miles into electric roads. The system used was a combination of the Brush and Knight and Bentley systems, and the current was carried on underground conductors laid in conduits, like the use of cable roads. The cars were started and stopped and reversed with the greatest ease. Any number of cars up to fifteen can be run at one time on a single circuit and from one machine, which is a result not attained by any of the European systems now in operation. The success of the new road has made a great sensation in both street railroad and electrical circles, and is expected to greatly extend the field of electric development, as well as enhance the value of street railroad properties.

Lumber Prospects.

Notwithstanding the numerous failures of the past few months which were apt to affect the general line of trade, there is a firm feeling that the crisis has been tided over and the legitimate channels of business left undisturbed, and that after the accustomed dullness through the summer months business will assume a perfectly satisfactory condition. The approaching presidential election may possibly have a tendency to subvert ventures in business till the question of election is settled, though the hopeful remarks we hear on all hands do not warrant a statement of that nature.—*Lumber Trades Journal.*

Chips.

JOHN DE GRAW & SONS, lumber dealers, of St. Paul, made an assignment on Friday. Lumbermen for some time past have exhibited great freedom from financial difficulties, and it is hoped the trouble with this firm will be only temporary.

WHEN property and labor and building material is low is the time for the capitalist to invest his surplus funds. By so doing, he will assist in restoring confidence, furnishing employment to wage workers, set the wheels of commerce again in motion, and thereby enhance values, and by so doing make positively certain quick and remunerative returns for his investment.

ALTHOUGH there may be no boom in the lumber market, and possibly there is a wide difference in the views of buyers and sellers generally as to prices, yet there is undoubtedly a large quantity of lumber changing hands. We know of one commission dealer who has sold 6,000,000 feet in the last three weeks, 2,000,000 of which exchanged owners at \$9, \$18 and \$38. This does not look as though the prices on good lumber were suffering any very material decline.—*Lumberman's Gazette.*

PINE trees, it appears, are no more safe from the ravages of the pest known as the "borer" or "sawyer" than is any other timber. Word comes from North Carolina that large numbers of excellent pine trees are being destroyed by these pests. Of course, free traders will still insist that the \$2 tax should be removed from Canadian lumber in order to "save" this timber. Of all the nonsensical arguments ever advanced in support of any theory, this one of removing the tax from Canadian lumber in order to "save" American timber is the worst. More timber is destroyed annually by forest fires and borers than the importation of Canadian lumber amounts to, large as it is.—*Lumberman's Gazette.*

"THE keenness of the competition at the present time, says the *Timber Trade Journal*, "has the effect of bringing the shipper and the consumer closer together each succeeding season, the small margin obtainable not allowing of the usual commission to the middle man, who eventually, if things go on as they have been going, will be dispensed with altogether." The conditions existing in England and the United States, in the lumber trade, according to the above, are not altogether dissimilar. The manufacturer and consumer are being drawn together in this country also, mainly from the same cause as noted above,—exceedingly close competition. Rail shipments at the great producing centres are rapidly on the increase, and no better evidence of this "drawing together" can be found than in this fact.—*Lumberman's Gazette.*

MUSKEGON lumbermen don't appear to take any stock in the coming Chicago convention of lumbermen to inaugurate the shutting down movement. The *News* of that city says that it is not probable that Muskegon will send any delegation to the lumberman's convention at Chicago, Aug. 20th. They don't take much stock in these Chicago conventions, as they are too much of the turkey and buzzard kind. A concert of action in shutting down the mills is impracticable, and should the convention decide upon something, most of the mill men will go home and do as they please. As a Muskegon mill man told the *News* the other day, "the fellows who are at the bottom of these conventions never intend to stick if they can only induce others to. They want to get some advantage on the other fellows." The above extract embraces a large part of the meat in the cocoanut which will defeat the proposed movement for an early shut-down of the mills of the northwest—a lack of faith in the honesty of the movement. But aside from this, we have no faith that no movement can be made general. The conflicting interests seem to be so numerous presented already that we can see no reason to expect anything else than failure. Other business, however, may be transacted which will be of importance to the trade, and every lumber manufacturing centre should be well represented.—*Lumberman's Gazette.*

H. WILLIAMS, SLATE & GRAVEL ROOFER

MANUFACTURER OF AND DEALER IN Tarred Felt, Roofing Pitch, Sheathing and Building Papers, Carpet and Rosined Waterproof Paper, Ready Roofing, &c. All orders promptly attended to at LOW PRICES.

H. WILLIAMS, 4 Adelaide Street East, Toronto

JUST PUBLISHED.

STANDARD CUSTOMS TARIFF REVISED TO DATE.

Also contains List of Ports, Banks, Postal Rates, Interest Tables, Parcel Rates to England, Money Tables, &c., to be had from the Principal Booksellers and from the Publishers,

RAE & WATSON, 22 Church Street, TORONTO.

PRICE 36 CENTS. WITH BULLETIN 50 CENTS.

EAGLE FOUNDRY!

GEORGE BRUSH

14 to 34 King and Queen Sts, MONTREAL,

MAKER OF

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

CIRCULAR SAW MILLS, BARK MILLS, SHINGLE MILLS,

Water Wheels, Mill Gearing, Shafting, Hangers and Pullies, Hand and Power Hoists for Warehouses &c., &c.

Also, Sole Manufacturer of BLAKE'S CHALLENGE STONE BREAKER.

AND AGENT FOR

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

THE **Hancock Inspirator**

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

THE INJECTOR PERFECTED!

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

Over 50,000 Now in Use.

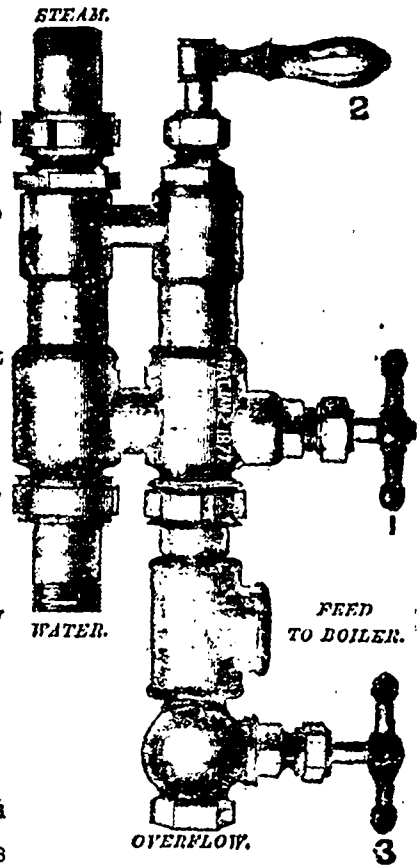
MANUFACTURED BY THE

Hancock Inspirator Co'y

5 CUSTOM HOUSE SQUARE,

MONTREAL, P.Q., CANADA.

Manufacturers of Inspirators, Ejectors, and General Jet Apparatus.



WHEREAS, on the night of the 15th instant, the Post Office at Peterborough, Ontario, was entered by burglars, and money and postage stamps stolen therefrom, and moreover a number of valuable letters opened and robbed of the contents; notice is hereby given that a reward of TWO HUNDRED AND FIFTY DOLLARS will be paid for such evidence as may lead to the arrest and conviction of the thief or thieves.

JOHN CARLING, Postmaster General.

Post Office Department, Ottawa, 51st July, 1884.

3433ood343

GOLD for the working class. Send 10 cents for postage, and we will mail you free, a royal, valuable box of sample goods that will put you in the way of making more money in a few days than you ever thought possible at any business. Capital not required. We will start you. You can work all the time or in spare time only. The work is universally adapted to both sexes, young and old. You can easily earn from 20 cents to \$5 every evening. That all who want work may test the business, we make this unparalleled offer, to all who are not well satisfied we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Fortunes will be made by those who give their whole time to the work. Great success absolutely sure. Don't delay. Start now. Address Stronson & Co., Augusta, Maine.

Market Reports.

TORONTO.

From Our Own Correspondent

Aug. 25.—Since my last letter to the LUMBERMAN trade has somewhat revived, and although dealers have not all they could do, yet they are far from being idle. When we take into account the fact that Muskoka alone yields yearly 100,000,000 feet of common lumber, most of which finds its way to this city, and but little of the coarser grades finds a foreign market, it is surprising that so little lumber is now held in stock as compared with the total production. On visiting some of the mills north I found that some had to cease producing until a market for their stock on hand had been found, and before I returned from that district some sales had been effected so that the mills could go on cutting as usual. The prices obtained, however, were low as compared with former sales, but the want of room to pile the balance of the season's cut proved an important factor in favor of the purchaser, and, strange to say, in spite of all the surplus stock on hand it is difficult to obtain bills of dimension stuff in any reasonable time. Extremely few of the mill men can be brought to see the importance of time to a contractor, who may have a contract to perform in a specified and often very limited period. A good school for a man intending to become a producer of bill stuff to be used on contracts, would be to serve for a time as contractor. He would then get an idea of the value of time to such men as would prove useful to him and of immense benefit to those who might purchase from him in the future. Then the time consumed by the railroad companies in bringing lumber to market is another serious trouble both to dealers and consumers alike. I will venture to assert without fear of truthful contradiction that many consignments of grain are made from Chicago which reach Liverpool in less time than some shipments of lumber reach Toronto from Midland, but as the G. T. R. has now reached that point of huge monopoly which brooks no interference it is useless to complain, grin and bear it is the only comfort left.

Over our docks trade is quiet, only a few cargoes left since my last letter, and no inducements to increase shipments.

There is no appreciable alterations in prices, merely slight fluctuations in quoting on desirable bills or undesirable as the case may be.

Mill cull boards and scantling	10 00
Shipping cull boards, promiscuous widths	12 00
boards	14 00
Stocks	13 50
Scantling and joist, up to 16 ft.	14 50
" " " 18 ft.	15 50
" " " 20 ft.	16 50
" " " 22 ft.	17 00
" " " 24 ft.	18 00
" " " 26 ft.	19 00
" " " 28 ft.	20 00
" " " 30 ft.	21 00
" " " 32 ft.	22 00
" " " 34 ft.	23 00
" " " 36 ft.	24 00
" " " 38 ft.	25 00
" " " 40 to 44 ft.	30 00
Cutting up planks to dry boards	24 00
boards	20 00
Sound dressing stocks	18 00
Picks Am. Inspection	23 00
Three uppers, Am. Inspection	35 00

1 1/2 inch flooring, dressed	30 00
1 " " " rough	10 00
1 " " " dressed	25 00
1 1/2 " " " dressed	15 00
1 " " " dressed	22 00
1 " " " undressed	16 00
1 1/2 Boarded Sheeting, dressed	22 50
Clapboarding, dressed	14 00
XXX sawn shingles, 1/2 M.	2 25
Sawn Lath.	2 75

ST. JOHN.

The St. John Globe of last week says: The stock on hand last Aug., of St. John pine, was 22,000 feet, against 3,000 in 1883 and 3,000 in 1882. Of N. B. and N. S. spruce deals the stock on hand at the first of the month was 21,573 standards, in the same period in 1883, 10,869 standards, and in 1882, 9,682. In N. B. and N. S. pine deals, the present stock 1,260 standards. The sales during the past month have been as follows:—Birch—By auction, St. John, 14 1/2 inches average, at 6 1/2d. per foot; Dalhousie, at 1 1/2d. per foot; Miramichi, at from 13d. to 14d. per foot. Spruce deals.—St. John, at from 10 to 10 1/2d. per standard. Scantling.—At from 10 1/2d. to 15 1/2d. per standard.

WINNIPEG.

The Winnipeg Commercial, of Aug. 19, says: The activity noted in this line in our last issue still continues to improve. Building in the city and country is much better this season than dealers had anticipated. We are still in the dark regarding quotations, as dealers do not seem inclined to name prices only to actual purchasers.

MONTREAL.

From Our Own Correspondent.

Aug. 23.—We cannot report any improvement or much change in this lumber market. Business is quite hopeless, and buyers do not seem inclined to give even present prices, some of which, it will be observed, are lower than last quoted. Dealers are still disinclined to add to their stocks, but some are sanguine of rather better times as soon as the exhibition is over. We quote as follows:

Pine, 1st quality, 1/2 M.	35 00
Pine, 2nd	22 00
Pine, shipping culls, 1/2 M.	14 00
Pine, 4th quality deals, 1/2 M.	10 00
Pine, mill culls, 1/2 M.	7 00
Spruce, 1/2 M.	10 00
Hemlock, 1/2 M.	9 00
Lath, run of log culls cut, 1/2 M.	15 00
Lath, 1/2 M.	15 00
Oak, 1/2 M.	20 00
Walnut 1/2 M.	20 00
Cherry 1/2 M.	20 00
Birch 1/2 M.	20 00
Hard Maple 1/2 M.	25 00
Lath, 1/2 M.	1 75
Shingles, 1st, 1/2 M.	3 00
Shingles, 2nd, 1/2 M.	2 50

SHIPPING.

As will be seen from the following exports of lumber recorded at the Custom House shipments to South America have been pretty active for the past two weeks. The demand for tonnage is rather slack for that destination and we only hear of vessels being taken for the N. K., viz., brig Hannah, for the Bristol channel at 52s. 6d.; SS. Rosshire, from Three Rivers to Liverpool, at 50s. and SS. Glen Isla, to Liverpool, at 50s. Shipments have been as follows: Bk. Lea, for Buenos Ayres, 87,407 per lumber, Bk. Stella Maria, for Buenos Ayres, 470,748 feet lumber; SS. Desale, for Glasgow, 1,967 pcs. deals; SS. Somerset, for Bristol, 6,815 pcs. boards; SS. Craighton, for Liverpool, 8,441 pcs. deals, 1,842 ends and 9,874 boards; bk. Premier McKenzie, 338,816 ft. white pine boards, Bk. Jas. Kitchen, 431,397 ft. white pine boards, both for Buenos Ayres; Ship Comet, for London, 14,730 pcs. deals and 24,811 battens; SS. Vancouver, for Liverpool, 1,290 pcs. deals; SS. Scotland, for London, 4,140 pcs. deals and 5,168 ditto; SS. Texas, for Liverpool, 7,530 pcs. deals, 828 pcs. white oak and 144 pcs. ash; P. Aurora, for Monte Video, 518,737 ft. white pine lumber; Bk. Wawalench, for Buenos Ayres, 23,764 white pine boards, 43,463 ditto pickets and 4,731 pcs. white pine lumber; Bk. Cupid, for Buenos Ayres, 528,584 ft. white pine boards; SS. Brooklyn, for Liverpool, 6,454 boards, 672 pcs. 2 inch deals, 4,095 3 inch deals, 1,757 pcs. deals and 665 bals. elm lumber; Bk. Salisbury, for Buenos Ayres, 22,601 pcs. white pine boards and 16,223 pickets.

LIVERPOOL MARKET.

Our mail advices report that the imports for last month were very heavy and that the consumption was also of an unusually large character so that the stocks held are not much in excess of those held a month previous. Private sales of spruce deals from St. John, N. B., were at 10 per standard ex quay. Auction sales of the same averaged from 10 1/2d. to 15 1/2d. per standard. Birch from St. John, N. B., averaged at auction 16d. per foot for 14 inches, 16 1/2d. for 15 inches.

QUEBEC.

The Quebec Chronicle, of Aug. 22, says:—As far as we can learn there has been very little done, and the demand for square timber has been nil. Wares appears to be in better demand, and some St. Lawrence wood has been placed at 33c for about 19 inch. Hardwoods—we hear of nothing doing.

CHICAGO.

The Northwestern Lumberman of Aug. 23rd says:—The arrivals at the docks have been but moderate during the week. From 6 to 12 cargoes have been offered each day, and have been sold under the influence of a fair demand. The wind has been contrary all the week, and for

three days blew a gale from the southwest, so that it was difficult for any craft but steam barges to get into port. Now that the wind has changed it may be expected that the Monday fleet will be a big one.

The demand for piece stuff is declared to be good by the commission men. The effect of limited arrivals and an improved shipping demand at the yards has been to make the inquiry for piece stuff more urgent and harden prices. Sales have, as a consequence, been effected with less trouble than two or three weeks ago. The commission men say that it is not as hard work to dispose of desirable stock as it was a short time since. While they do not quote higher prices, they say that there is more firmness and quicker sales at outside prices. There is less insisting on concessions; mere lumber sells at \$8.50 than last week, and there is less effort on the part of buyers to force the price below \$8 25. It is probable that the critical period has passed as regards dimension lumber, and that hereafter holders will have but little difficulty in realizing the present range of prices. This must be said, however, that much of the stuff to come forward hereafter is likely to be partly or wholly dry, and that yard dealers can afford to pay more for it than for the green lumber that came directly from the saws in June.

The larger portion of late arrivals has been No. 2 inch lumber, which continues to sell at \$9 to \$11. This week three cargoes of Lake Huron and several from Lake Superior have put in an appearance. This lumber has sold straight in most instances and on private terms. The Lake Superior stock was some of Tom Nester's Baraga output, sawed thick, and running largely to better than common.

Shingles have been coming rather more liberally during the past week or ten days. Prices maintain our quoted range. The market continues to absorb all that are offered, though it would require but little more to cause an overload.

Quotations are as follows:—

Piece stuff, green	\$ 82 1/2 @ 9 50
Long timber, green	10 00 @ 10 50
Coarse common	9 00 @ 9 50
Boards and strips—No. 2, green	9 50 @ 11 00
Board and strips—Medium, green	9 50 @ 13 00
Boards No. 1, green	15 00 @ 18 00
High grade	18 00 @ 24 00
Shingles, standard	1 32 @ 1 1/2
Shingles, choice	1 75 @ 2 00
Shingles, extra	1 00 @ 2 50
Shingles, clear	1 50 @ 2 00
Shingles, cedar	1 25 @ 2 40
Lath	1 00 @ 1 40

LAKE FREIGHTS.

Grand Haven	\$ 1 00
Muskegon	1 00
Whitehall	1 37 1/2
Ludington	1 50
Manistee	1 50
Menominee	1 50
Oconto	1 50
Cheboygan	1 50
Alpena	1 75
Bay City	2 00
Tawas	0 00
Frankfort	1 00

AT THE YARDS.

At last the report can be given, without mistake, that shipments from the yards are on the increase. Symptoms of revival have been manifest for two or three weeks past. Last week it was noticed that individual yards were sending out longer daily trains than a short time previous. Now the new life is visible in nearly every yard, and all over the district. The fall trade seems to have actually begun. Judging from appearances, there is as much lumber now being shipped as there usually is at this time in August. One yard reports 60 cars behind on orders, and it should be noticed that cars are now readily obtained, which is the opposite of experience during past years. And it should be noticed also that it is only from a week to a fortnight since the revival began, so that the existing busy condition of the yards has come all at once, as it were. Should the brisk movement continue uninterruptedly for two or three weeks there would be considerable getting behind with orders in spite of every effort to clear them off.

In shingles the trade of this city has a great advantage this year. A large stock has been put in at low figures, so that Chicago can now beat the world selling shingles. They are going all over the Northwest, considerable quantities finding their way even to northern Dakota. The yards that bought freely of shingles during the season of heavy arrivals and cheap prices will be apt to make a fair profit of their investment.

The rising demand for lumber at the yards should have a tendency to so steady prices and mitigate the vicious habit of cutting when there is no particular need of it.

Stocks in the yards are now in good condition. All sorts are in supply somewhere in the district. It is alleged that B inch selects are always procurable between yards. Anything that is wanted in the line of lumber can be procured of the merchants here. Stocks are fairly dry in sufficient quantity to meet the demand. Receipts of lumber, shingles, etc. for the week ending Aug. 21, as reported by the Lumberman's Exchange:—

RECEIPTS.	
Lumber	Shingles.
1884.....	48,907,000 22,765,000
1883.....	65,205,000 37,465,000
FROM JANUARY 1, 1884, TO AUG. 21, 1884, INCLUSIVE.	
RECEIPTS.	
Lumber	Shingles.
1884.....	1,056,410,000 532,314,000
1883.....	1,047,003,000 605,356,000
Increase.....	9,312,000
Decrease.....	163,045,000

LAKE RECEIPTS FROM JAN. 1 TO AUG. 20.

Lumber	263,181,000
Shingles	609,347,000
Lath	39,524,000
Posts	2,523,396
Railroad ties	665,024
Wood, cords	16,004
Bark, cords	16,263
Slabs, cords	25,431
Telegraph poles	109,320
Spar	12
Piles	250

STOCK ON HAND AUG. 1.

1884.		1883.	
Lumber & timber	555,403,975	510,709,847	511,903,574
Shingles	321,872,364	323,037,215	244,221,650
Lath	61,832,465	62,109,958	80,839,837
Pickets	1,034,780	1,802,011	1,717,165
Cedar posts	377,628	499,070	37,253

ALBANY.

Quotations at the yards are as follows:—

Pine, clear, 1/2 M.	53 00
Pine, fourths	50 00
Pine, selects	45 00
Pine, good box	32 00
Pine, common box	13 00
Pine, 10-in. plank, each	00 42
Pine, 10-in. plank, culls, each	00 23
Pine boards, 10-in.	00 23
Pine, 10-in. boards, culls	00 16
Pine, 10-in. boards, 10 ft., 1/2 M.	23 00
Pine, 12-in. boards, 10 ft.	23 00
Pine, 12-in. boards, 12 ft.	23 00
Pine, 1 1/2 in. siding, select	40 00
Pine, 1 1/2 in. siding, common	20 00
Pine, 1 in. siding, select	42 00
Pine, 1 in. siding, common	15 00
Spruce, boards, each	00 00
Spruce, plank, 1 1/2-in., each	00 00
Spruce plank, 2-in., each	00 00
Spruce, wall strips, each	00 12
Hemlock, boards, each	00 00
Hemlock, joist, 4x6, each	00 00
Hemlock, joist, 2x4, each	00 00
Hemlock, wall strips, 2x4, each	00 00
Black walnut, good, 1/2 M.	10 00
Black walnut, 1 inch	00 00
Black walnut, 1 1/2 inch	30 00
Scaymore, 1-inch	22 00
Scaymore, 1 1/2-inch	33 00
White wood, 1-inch & 1 1/2 thicker	30 00
White wood, 1 1/2-inch	40 00
Ash, good, 1/2 M.	25 00
Ash, second quality, 1/2 M.	00 00
Cherry, good, 1/2 M.	00 00
Cherry, common, 1/2 M.	00 00
Oak, good, 1/2 M.	20 00
Oak, second quality, 1/2 M.	25 00
Hickory, 1/2 M.	40 00
Maple, Canada, 1/2 M.	28 00
Maple, American, per M.	20 00
Chestnut, 1/2 M.	28 00
Shingles, shaved, pine, 1/2 M.	0 00
" 2nd quality	0 00
" extra, sawed, pine	4 50
" clear	0 00
" cedar, mixed	0 00
" cedar, XXX	0 00
" hemlock	0 00
Lath, hemlock, 1/2 M.	0 00
Lath, spruce	0 00

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers	842 00
Common	14 00
Culls	11 00

BOSTON.

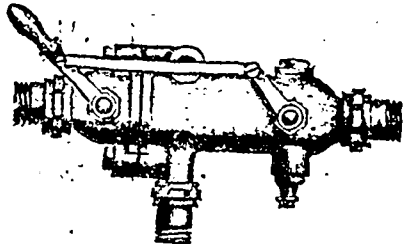
The Cotton, Wool and Iron of Aug. 23 says: The general lumber trade remains quiet, in sympathy with the tone in other branches of business, but there is a fair demand for the season, with moderately encouraging outlook for fall. Building operations in the suburbs and elsewhere in the shape of moderate cost dwellings continue quite good. The arrivals of eastern lumber are moderate. There is a fair call for spruce of regular yard sizes, although prices cannot be called strong. Hemlock is in moderate request. Pine boards are dull. Western lumber shows little change to note. Pine keeps along about steady. Black-walnut holds its own. Choice cherry is little

ROBERT MITCHELL & CO.

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

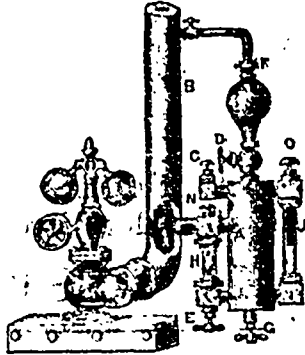
THE KORTING INJECTOR

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 INJECTORS for conveying Water or Liquids. CIRCULARS ON APPLICATION

The Continuous Feed Lubricator
Saves 50 per Cent in Oil.



HUGH GIBSON,

MANUFACTURER OF

KNIGHT'S PATENT "EXCELSIOR"

SAW MILL DOGS

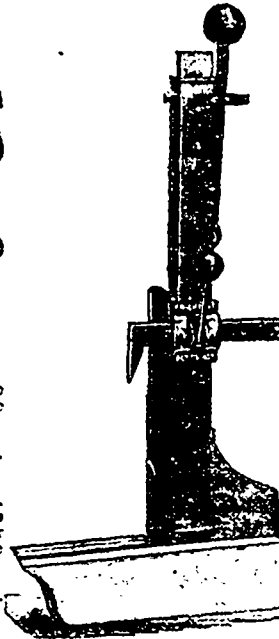
The Sawyer's Favorite

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

MISSISSIPPI, June 7th, 1883.
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 scuttling. I would not take \$50 for them to-day and have to wait for another lot 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. EXCELSIOR DOG.



MACHINERY.

STEAM ENGINES, STEAM PUMPS, STEAM
BOILERS, SAW MILL MACHINERY,
Of Every Description.

RUBBER BELTING,
LEATHER BELTING,
MILL SUPPLIES.

SHAFTING, HANGERS, PULLEYS, &c.

MACHINERY SUPPLY ASSOCIATION

Corner Bleury & Craig Streets, MONTREAL.

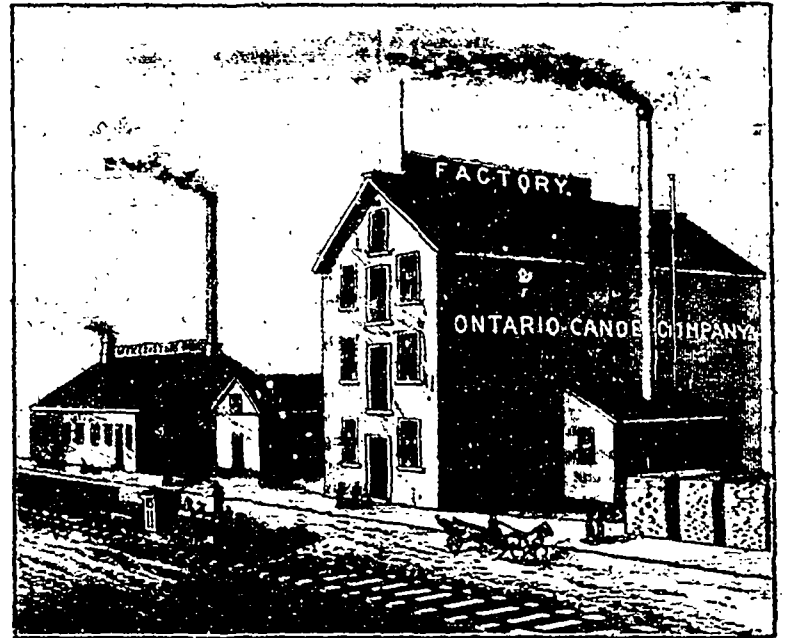
The Ontario Canoe Co., Limited

PETERBOROUGH, ONTARIO,

Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

CANOEES

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



Gold Medal, London Fisheries Exhibition, 1883.

J. Z. ROGERS,

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.

ROBIN & SADLER

Have been awarded Three Years in
succession at the Provincial
and Dominion Exhibitions in
Montreal, First Prizes

for
LEATHER
BELTING

Fire-
Engine
Hose, &c.

Send for Price Lists
and Discounts to the Factory

594, 596, 598, St. Joseph Street,

MONTREAL.

Something New in Leather Belting
To Mill Owners, Lumbermen, Manufacturers
USE ONLY

Dixon's Patent Lap Joint Star Rivet Leather Belting

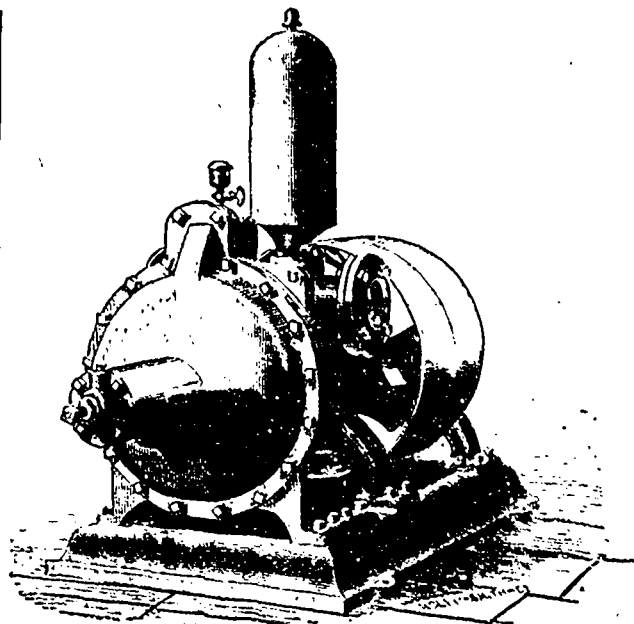
To be had only from
F. E. DIXON & Co., 70 King Street East, Toronto
Send for Circulars and Price Lists.

Central Iron Works

SIMCOE STREET,

PETERBOROUGH, Ontario.

WM. H. LAW, PROP'R.



PROTECTION FROM FIRE

An Improved Rotary Piston Force Pump.

No.	Diameter of Pipes.		No. of Revolutions.	Capacity per minute at table speed.	Price.
	Suction.	Discharge.			
2	2½ in.	2 inch.	250	125	\$100
3	4 "	3 "	250	250	150
4	5 "	4 "	250	400	225

SEND FOR CIRCULAR.

MANUFACTURER OF

Engines, Boilers, Pumps, Saw Mill Machinery

STEAMBOAT PROPELLERS AND ENGINES.

CASTINGS

For Architectural Works &c.

IRON ROOFING AND BRIDGES,

AND ENGINEERING WORK IN GENERAL.

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.

FEVER AND AGUE.—Do not throw away money on worthless remedies, when NORMAN'S ELECTRIC BELTS will cure you. Use one and you will find immediate benefit. Every one is guaranteed.

LUMBAGO.—Those who suffer from this disease will find a friend in NORMAN'S ELECTRIC BELTS when all other remedies fail. Ask your druggist for it, and take no other. Guaranteed.

CONSTIPATION AND BILIOUSNESS and all disorders of the Stomach and Liver are corrected by using NORMAN'S ELECTRIC BELTS. Try one and be convinced. Guaranteed.

FEMALE TROUBLES.—Ladies are benefited more by NORMAN'S ELECTRIC BELTS than by all the science of medicine. They are comfortable and durable. Guaranteed.

WEAKNESS and Lassitude yield to the influence of NORMAN'S ELECTRIC BELTS when all other remedies fail. Try one and you will suffer no longer. Every belt guaranteed.

NERVOUS DEBILITY.—This dreaded and miserable disease is immediately relieved by the use of NORMAN'S ELECTRIC BELTS. Ask for them, take no other. Every belt guaranteed.

INDIGESTION AND SLEEPLESSNESS.—This seven headed monster is more easily overcome by the use of NORMAN'S ELECTRIC BELTS than any other remedy, and it possibly cannot do any injury. Guaranteed.

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.

NERVOUSNESS may be entirely cured in a short time by using one of NORMAN'S ELECTRIC BELTS, without any fear of injury. Try one and be convinced. Guaranteed.

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 Sciatica. 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,
DR. D. McLACHLAN.

WALLATA, D.T., December 17th, 1883.

A. NORMAN, Esq.,
DEAR SIR,—I have experienced considerable benefit from your Appliances. I feel stronger and better every way.
Yours truly,
R. E. HALIBURTON.

OTTAWA, September 2nd, 1883.

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,
MRS. J. GUTHRIE.

PETERB., ONT., June, 1883.

A. NORMAN, Esq.,
DEAR SIR,—Soon after I commenced to use your Electric Appliances they opened my bowels, cured my cough and cold, relieved 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 lassitudes and vivid dreams. I had previously tried almost all the advertised patent medicines without deriving any good.
Yours truly,
J. GREEN.

PETERBOROUGH, October 12th, 1884.

CURATIVE BATHS: Electric, Vapor, Sulphur, and Hot and Cold Baths.

Baths have been admitted in all ages by every school of medicine, to be one of the best means of curing ailments, maladies and diseases. The Electric Bath is the latest and best discovery in this line. Come and try them. Consultation free. Circular on application.

A. NORMAN, Proprietor, 4 Queen Street East, Toronto.

NORTHEY & CO'S STEAM PUMPS, TORONTO, ONT.

Pumps for Fire Protection a Specialty.

SAVE INSURANCE.

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

Cheap.

Cheaper than any Pump built.

Our Independent AIR PUMPS and Condensers will effect a saving of 30 to 50 per cent. when applied to high pressure Engines.

Simple.

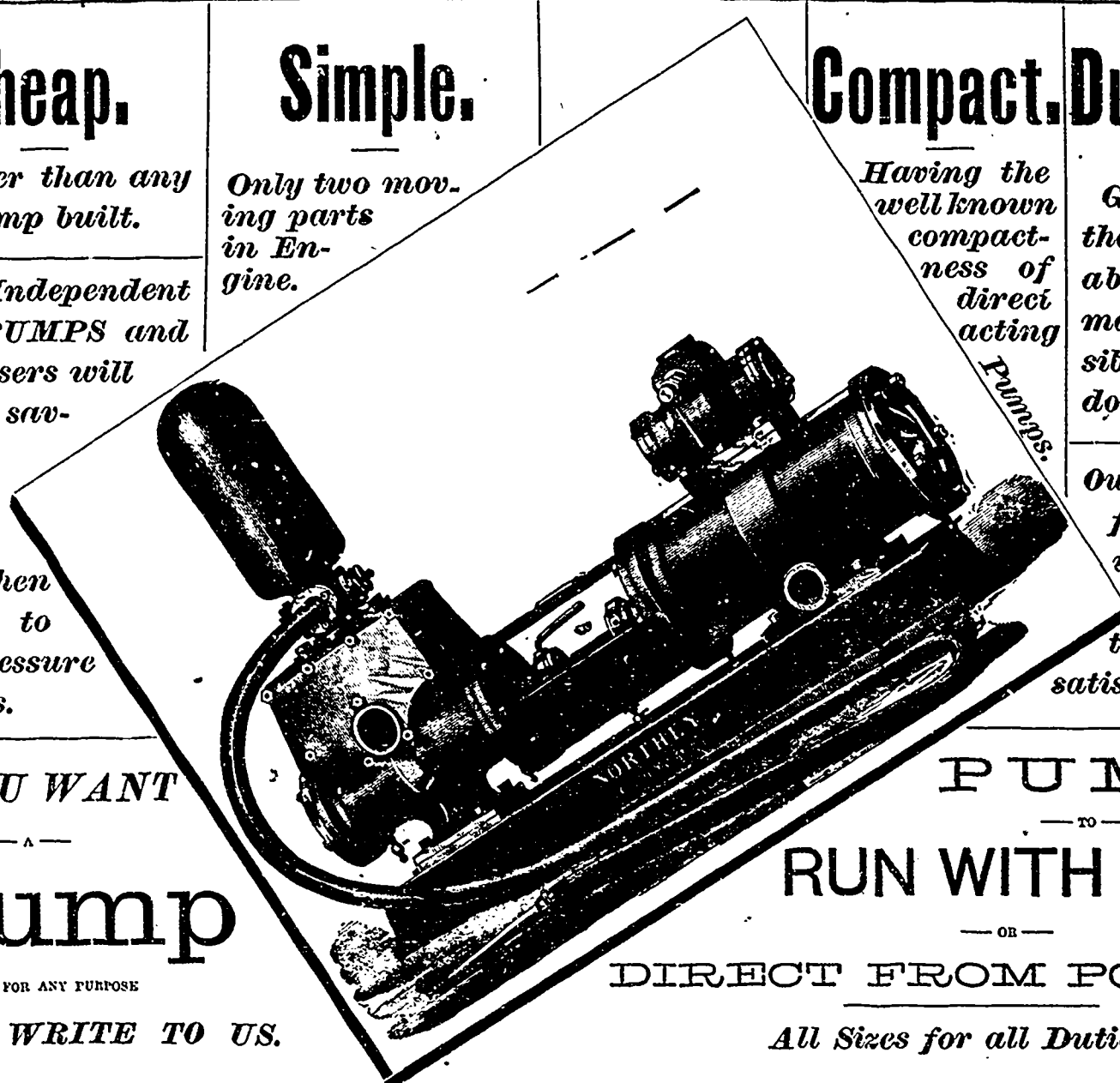
Only two moving parts in Engine.

Compact. Durable.

Having the well known compactness of direct acting Pumps.

Guaranteed the most durable Pump made; impossible to break down.

Our PUMPS for general water supply give the greatest satisfaction.



IF YOU WANT

Pump

FOR ANY PURPOSE

WRITE TO US.

PUMPS

— 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,

Corner FRONT & PARLIAMENT STS.,

TORONTO, ONT.

THE INTERNATIONAL TENT & AWNING CO.

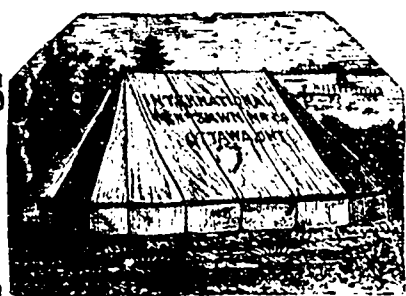
184 Sparks Street, Ottawa.

MANUFACTURERS OF

LUMBERMEN'S TENTS

The Cheapest and Best in the Market!

32
First Prizes
AND
6
MEDALS.



AT
HALIFAX
AND
TORONTO,
1883.

Tents, Flags, Tarpaulins, Waterproof Goods,
Camp Furniture, etc., etc.

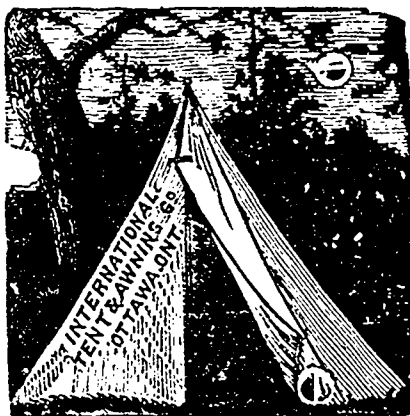
*Estimates for Circus Tents, Range Marquees, Hand-made
Sails, etc., furnished on application. Liberal Discount
to Large Buyers.*

PORTABLE CANVAS BOATS MADE TO ORDER

Send for CATALOGUE

AND

PRICE LIST.



Camp Furniture!

SEE

OUR NOVELTIES

At Toronto, Ont., and St. John, N.B., we made the best Display of Tents ever shown in Canada—and we never substitute an article inferior to sample in filling orders.

We control "THE LATOUR PAT." for Camp Furniture, the best on earth. The only Gold Medal ever given for this class of goods was awarded to the Latour Camp Furniture at Toronto in 1882.

SAIL-MAKING.

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.

Agency for the WILDERMUTH BED SPRING, the best in the Market.

A. G. FORGIE, MANAGER,

International Tent & Awning Co.,

184 SPARKS STREET, OTTAWA.

MONTREAL SAW WORKS

CHAS. M. WHITLAW,
Manager.

OFFICE: 452 St. Paul Street. P. O. Box, 1167.

— MANUFACTURERS OF —

CIRCULAR, GANG, SHINGLE, CONCAVE GROOVING,

TOP, DRAG, CROSS-CUT AND BILLET WEB, PIT,

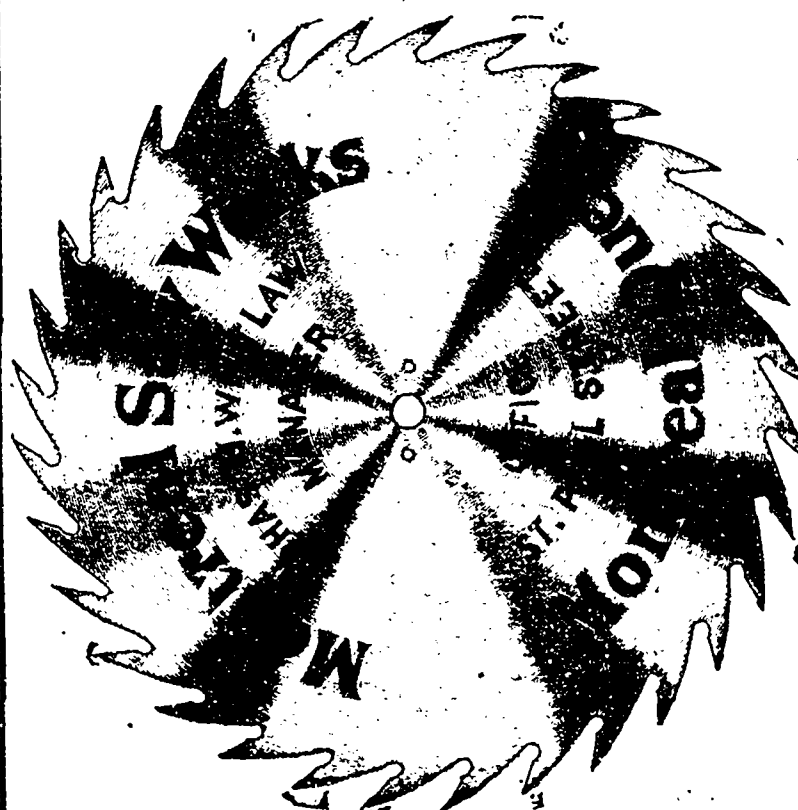
ICE, AND ONE MAN CROSS-CUT SAWS,

— AND DEALERS IN —

BAND SAWS, BARREL AND HEADING SAWS, EMERY

WHEELS, GUMMERS AND CUTTERS FILES,

RUBBER & LEATHER BELTING, SWAGES, SAW SETS.



Catalogues and Price Lists furnished on application.

The William Hamilton Manufacturing Company, Limited

MANUFACTURERS OF

SAW MILL & GENERAL MACHINERY

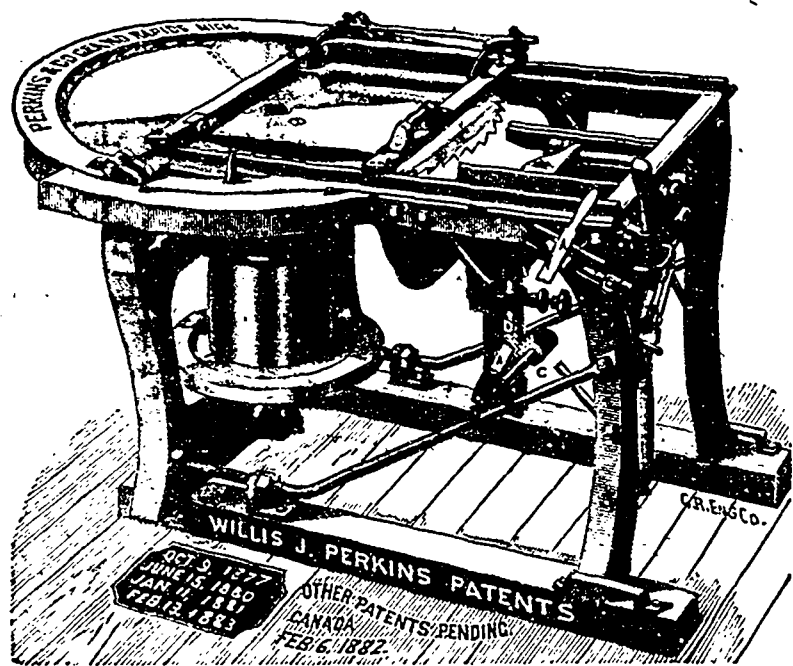
OUR SAW MILL ENGINES are made Strong, Neat and Durable, knowing well the ever varying Strain they are subjected to in driving a Saw Mill.

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.

Having obtained the sole right to manufacture and sell for the Dominion. 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, rot, 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.

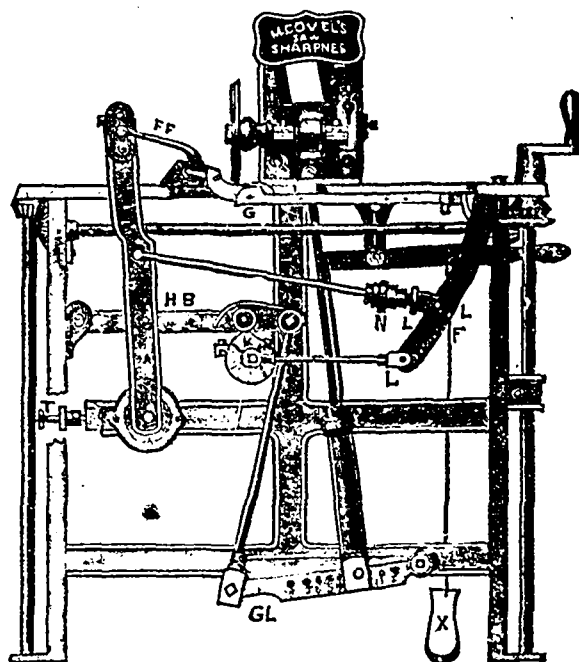
THE WILLIAM HAMILTON MANUFACTURING CO.

PETERBOROUGH, ONTARIO.

SOLE MANUFACTURERS AND AGENTS FOR THE DOMINION.

Send for Price List and Circular.

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.

