



PUBLISHED
SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada.

SUBSCRIPTION
\$2.00 PER ANNUM.

VOL. 2.

PETERBOROUGH, ONT., JANUARY 16, 1882.

NO. 2.

HEMLOCK.

Of this wood, Mr. E. Jack, of Fredericton, says: "We are beginning in New Brunswick to pay a little more attention to the subject of hemlock than ever before, although the lumbermen of St. Stephens have been fully alive to its value for some time past. One of them informed me that last season he had received \$5,000 stumpage for the bark on two million feet board measure, of hemlock logs."

One of the principal builders in Fredericton, Mr. Mitchell, says of this wood: "For common kitchen furniture, I believe that the best of hemlock might be used very advantageously, indeed, I think it is the best soft wood which we have for such purposes, pine, of course, excepted. It does not warp nor shrink so much as spruce, and is easier worked. I have never made any other furniture from it as yet, but I am sure that it might be used to a considerable extent for such purposes. For building material it might be used much more than it is. In 1851 I built a brick house in Fredericton, and put in hemlock for all the flooring joists, and I think that there are no better floors in Fredericton today. Hemlock is superior to spruce for rough boarding or for board fencing, as the board can be got wider than spruce, and do not require so many nails, and are not so liable to warp as are those made of spruce. It dries very fast and does not shrink quite as much as either spruce or pine. Hemlock might also be used for the inside finishing of houses, and is a very pretty wood when well oiled and varnished."

A GOOD EXAMPLE.

From advance sheets of the Report of the Department of Agriculture of the United States just received, we notice our go-a-head neighbors are taking the bull by the horns with regard to forestry. Finding the vast and increasing importance of this branch of the service has outgrown its limits, and requires so much care and attention, the Commissioner of Agriculture formed it into a distinct division, to be devoted entirely to the investigation of such subjects as will lead to the fullest development of the resources of the country in this respect.

This new office will have in view the best means of checking the wasting away of the large timber areas, the maintenance of the forest lands, by protection, replanting, and by the dissemination of such information as will assist as far as possible all the various interests involved in this industry.

In furtherance of this design, an agent of the Department has been sent on a mission to Europe to investigate the organizing and working of experimental forest stations, schools of forestry, private tree-planting, and the aid afforded by the government to the business of forestry.

It is perhaps unfortunate that at the time of confederation the timber interests of Canada

were handed over to individual provinces, instead of being retained under one head. A more united action and supervision could then have been had over this vast source of Canadian wealth. It is well known that Britain and the United States are large buyers of timber from this country, and the North West is also destined to require an almost unlimited supply. Already houses have been shipped from the Ottawa mills by rail to Winnipeg, ready for putting together when they reach their destination. With these considerations in view, it is impossible to foresee the result should our pine forests give out before they can be renewed. The large advances over former years given for timber berths at the sales this autumn already indicate that timber is getting scarce. Surely the approaching Ontario session will not pass over without something being done in the shape of protecting our pine lands from pillage and from bush fires, and in taking into consideration some method, or devising some means for replanting our lands already stripped of their forest wealth.

Mr. Burko's able prize paper on forestry, which we printed at the time, has already treated on these subjects, and we only wish to call attention in this issue as to what the Americans are doing, so that Canada may not be left behind hand in the preservation of her woods and forests.

TREE CULTURE.

The return of Prof. F. B. Hough from Europe is announced, and to the majority of readers the announcement conveyed their first knowledge that the Agricultural bureau has a division of forestry, of which he is the head. For seven months he has been studying the schools of forestry in various continental countries of Europe, and, having brought back a large collection of material, he proposes to make recommendations to congress for planting, preserving, and maintaining forests on the prairie and desert lands of the west. Some progress has already been made in tree culture in this country. A few states, by exemption from taxes and otherwise, have sought to arouse an interest in the subject, but for the most part local and voluntary organizations have done all the work. In 1876, B. G. Northrop, secretary of the Connecticut board of education, distributed a circular among the schools of that state suggesting, as a good centennial movement—not to end soon but to be continued—an annual tree-planting on the highways. He said then, in a pamphlet reviewing the various educational topics, that George B. Emerson, author of the work on "The Trees and Shrubs of Massachusetts," had, during that year, imported and planted more than 30,000 European larches of two years' growth from the seed. That tree, long one of the chief timber trees of Europe, was pronounced by the Boston and Albany railroad,

after 15 years' trial of it in ties, as durable as red cedar, and the Illinois Central road ordered to carry the European larch gratuitously to any point on its line, provided the trees were to be planted near the line. Many millions of these trees and of the Scotch pine (said to be the best tree for poor soils) are growing in the west, and (said this pamphlet) "in the new arboretum belonging to Harvard college, situated in Brookline, and including over 130 acres, are now growing over 200,000 small trees started from the seed, including 93 varieties of evergreens, 450 of deciduous trees and shrubs, and 34 of oaks." Connecticut, in 1877, passed a law exempting from all taxation whatever, for a term of ten years after an average of six feet in height had been attained, any plantation of any eight trees named, provided that the lands so used had not heretofore been woodland; that it was not actually worth more than \$15 per acre at the time of planting, and that the trees numbered at least 1,200 to the acre. In Massachusetts a draft of a bill is ready for the legislature, which provides that whenever any town devotes, by proper legal form, any part of its area to tree culture, and whenever the appropriation for buying this tract, plus donations, equals the assessed value of the real estate included, the tract shall become a public domain, the title to vest in the commonwealth, but the tract to be perpetually held for the benefit of the town, subject to some restrictions unnecessary to quote; the act shall not apply to any tract of less than 500 acres, unless adjoining some other tract which will make that area of continuous public domain. A state board of forestry is also provided for.

The foregoing only shows the drift of feeling, and is by no means a complete sketch of the organized movement which has resorted to statutes and to work through fair and similar associations. The best work, because the speediest and most contagious, is probably that of the village improvement society. Thus, an item we have previously quoted from the Springfield Republican, a year or two old, reads that "the Williamstown Improvement Society finished last week its tree-planting, and there is now a continuous row of 450 elms for three miles from the village to the North Adams line. It asks North Adams people to continue the row to their village." It is natural for North Adams to do so, and for other villages to imitate the example set. Here is probably the most effective plan, needing only that some public spirited person in every village should start about and make the start. But, as we have already remarked, the tree lines should not stop where the village ends; they should be continued until all the highways become leafy lanes. The work is no very arduous one, requiring only co-operation and concerted action. "Tree planting day" may be made one of the most delightful in the year. That the mud will

not dry so quickly on a shaded road is true, but it is an error to assume the necessity of having the mud there. The trees will naturally beget a desire for good roads, which do not include mud and sand, and the farmer who has intelligence to value a tree except to fell it will not be long in discovering the economic value of good roads, even when they cost something.

Do trees pay? In part an answer may be had to this if we suppose wood capable of being mined, fruit and nuts growing on vines, and the earth to become treeless. Where trees are wanting is desert, where they will grow other vegetation will, and their cultivation is able to remove sterility in many places. Civilization makes a mistake in viewing the forest as an enemy merely because it had the soil first, and counts too much on the axe and faeces as a symbol of progress; trees are closely linked with high civilization, comfort, prosperity and education, and the rule should everywhere be that trees should be wherever the soil is not needed otherwise—this would allow all the room wanted by cultivation, while retaining forest and shade. The close connection between rain-fall, drought and trees is becoming seen, their intrinsic value is second only to that of minerals, and no improvement yields so well, for their first cost is unappreciable. Not is it necessary to base their culture solely on regard for posterity, which has never done anything for us, because a decade or so will make them useful to their planters. Hard and slow work as it is to start public movements which do not appeal especially to private interests—for example, in the matter of the Niagara Falls international park and the Adirondack reservation in this state—there is gratifying progress in tree culture. An evidence of it is the enlightened selfishness which has led some railroad companies to erect tasteful station buildings and to beautify them cheaply by little flower beds as well as to discover the practical utility as well as pleasanter appearance of a grassy road-bed. Trees are a good part of the original plan of the world, and it is sensible to discover that their destruction and repression are no improvement upon it.—*N. Y. Times.*

QUEBEC TIMBER VESSELS.

The following is a comparative statement of sailing vessels cleared at the Port of Quebec, for sea, (lumber laden,) in 1874, 1875, 1876, 1877, 1878, 1879, 1880 and 1881, from the opening to close of navigation, compiled by Mr. F. Johnston, Quebec Exchange:—

1874.....	854 Vessels.	.....	638,672 tons.
1875.....	642 "	.....	478,441 "
1876.....	780 "	.....	624,110 "
1877.....	796 "	.....	670,627 "
1878.....	476 "	.....	399,833 "
1879.....	483 "	.....	364,628 "
1880.....	634 "	.....	555,451 "
1881.....	460 "	.....	380,196 "

THE FINER MANIPULATION OF LUMBER.

To what extent is it profitable to work up lumber at the saw-mill, is a problem which has puzzled the wisest brains of a proverbially wise class of men. From the increased cost of logs which the past few years has developed, it has been no less a problem with manufacturers to throw the least possible quantity into the saw-dust heap and slab pile, than to make the most of the manufactured product, and to utilize to the most advantageous extent the inevitable dross. The question of planing at the saw-mill, of making box shooks, sash, door and blinds, has been well considered and thoroughly experimented with, and while many of the experimenters are still striving to make their earlier ideas upon the subject not only practicable but profitable, by far the greater number have abandoned the project, and sold or thrown away their machinery. The fact has become patent to all, that no profit can be derived from any manipulation of forest products at a point, when, by reason of heavy freights and expenses attaching to its transportation to competing points, the same articles can be produced at those points from lumber transported thither in the rough, at lower rates. For this reason the endeavors to make box shooks, at the saw-mills of the main producing localities, has almost always, if not invariably, proved a failure, and the enterprise abandoned. The profitable dressing or surfacing of lumber at the saw-mill depends largely upon the same question of transportation and competition. It is safe to say that any endeavors to prepare lumber for immediate use, at a majority of the saw-mills of Michigan, would prove unprofitable, because of the many handlings to which the lumber must be subjected before reaching the consumer, who would be loth to purchase a lot of dressed lumber, the edges or surface of which were either broken, indented or bruised, if his choice was extended to such as by reason of but one handling to and from the cars to the yard of the retailer, was nearly or quite in as good condition as when it left the machine. This objection would not apply with equal force to the manufacturer on the Mississippi river and in Wisconsin, who cultivates a trade with the retailer upon the prairies, and can ship the manipulated product to his yard. Neither does it apply to such other localities as cultivate a trade almost directly with the consumer by way of rail transportation, and those who are thus favourably suited find profit in the closest preparation of their stock. To these it is a measure of the greatest profit to work their lumber into flooring, ceiling, siding and moulding; but it is then a question of great doubt, if in a majority of cases it would pay them to enter into competition with the extensive preparations for box-making, which in many large cities, especially manufacturing ones, work up the coarser grades of lumber most profitably, and by reason of personal activity in seeking for and retaining customers among the actual consumers of boxes, are enabled to turn out vast quantities at so small a profit on each, as effectually to cut off all chance for profit on the part of a manufacturer who has transportation to pay, even though his stock be accounted as costing him nothing.

That the waste of a saw-mill is immense, no one can doubt, and it was a realization of this fact which originally led to the abrogation of board lathing, in favor of the piece lath which, fully as good if not better, could be made from a class of timber otherwise fit for the furnace. This also led to the manufacture of four feet pickets, and as well to square pickets, which could be profitably made from slabs, when previously they had been manufactured from lumber. These are all now exclusively made from an otherwise waste material, and while we have seldom or never known a successful experiment in finishing them ready for use at the point of manufacture, except when the mill enjoyed railroad facilities, they have in the rough, usually proved a handsome requisite in connection with the manufacture of lumber.

White and Norway pine do not present the same adaptability to general use, in the smaller manufactures, as do basswood, oak, beech, maple, hickory, black walnut, and other varieties of hardwood, including whitewood and poplar. Basswood can be made into some kinds of

light handles, on account of its toughness, where pine would prove a failure, but no one would make from pine anything which required greater strength than a curtain roller, and it would not require the debris of many mills to fully supply the demands of the market. Board ends and the thicker slabs are, to a large extent, now made available for the manufacture of shingles by means of Spalt shingle machines, and while it will pay any mill of any great extent, to run one of these machines in the utilization of its waste, such as broad ends, thick and meaty slabs, and in saving the sound end of the core which comes from hollow butts, we would not advise anyone whose mill is not convenient to a dense population to depend upon making a profit from working slabs into shingles. On this point it must be admitted that location cuts the principal figure. The consumer on the prairie in many cases wants a cheap shingle, and does not scrutinize sap. The dealers of the West make no difference between a bastard shingle and those cut "rift." With them, a moderate amount of sap on a "A" shingle, does not injure the grade. The eastern market on the other hand is more fastidious.

The Michigan mill man who would send saw or bastard shingles to the eastern market, would probably never repeat the experiment. Many mills have endeavored to work up their debris in the manufacture of pails and tubs, but we think it has been an almost universal experience, that it was not found profitable, and when the works have been continued in operation, it has been through recourse to timber in the log, perhaps after being prepared in cants by the saw mill, but to the utter neglect of the slab pile.

The theory of finer manipulation of the debris at the saw mill is a very good one, but the practice must inevitably depend upon the location of the mill and its facilities for transportation, direct to the consumer, with few or no intermediate handlings. A case in point will be recognized by every manufacturer of sash, doors, blinds, etc., whose manufactory is situated in the midst of heavy saw mill operations, where slabs can be obtained for little or nothing, and pick them at that. The pieces of lumber which enter into the manufacture of blinds and windows are very small, and to the novice it would appear, could easily and cheaply be taken from the large slabs which form the debris of the mills. If, however, there is a manufacturer of sash and blinds, who does not find more profit in buying suitably manufactured lumber for the use of the factory, than he can realize from working up the best of slabs, we have no knowledge of his whereabouts. The item of labor overbalances the cheapness of the stock. Hardwood mills can, to a great extent, work up their slabs into something in connection with the furniture trade, if there is a factory near them, but it is a fact that black walnut ends and strips, of a foot long, and one to two inches wide, are burned by the cord every day, under the boilers of some of the largest furniture manufactories in this city, where black walnut is worth all the way from \$75 to \$200 per thousand feet. It would seem that in such a city as Chicago, with its widely diversified industries, and especially in the furniture and carriage departments, where small pieces are used in large quantities, that it would be good policy to work up every scrap of debris, large enough to make a chair rung or a buggy seat spindle. That such is not the case, is owing to the fact that the labor of making them, and the expense of handling the small debris overcomes the profit, and it is far better and more economical to burn it at once, and cut full sized lumber into the required shape. That a finer manipulation of lumber at the mills would be profitable there can be no doubt, but profit must be sought in making less sawdust, and no slabs. That this is, comparatively speaking, practicable, the practice which exists at many mills, notably those on the lower Mississippi, is abundant evidence.

A Michigan manufacturer visiting a mill at any of the towns on the lower Mississippi, looks in vain for such piles of slabs as he is accustomed to at home. The logs are simply "skinned" to a face, and the first board is sawed, some of it to no more than three inches wide. The butt slabs are worked into pickets or lath

and the resultant debris is simply an edging, fit only for firewood, but some of these are saved, tied up with a piece of marlin into bundles and sold. It is in this closer manufacture, rather than in the utilization of the waste into smaller articles, that the finer manipulation question is to find its practical solution.—*Northwestern Lumberman.*

ST. JOHN, N.B., EXPORTS.

The *Daily Telegraph* gives the following list of clearances of lumber laden ships from St. John, N.B., during December, 1881:—

Date, 1881.	Vessel.	Tons.	Shippers.	Destination.	Deals.	Pine.	Birch.
Dec. 2	H. N. Hart	1,460	Alex. Gibson	London	1,186		274
" 3	Maori	656	"	London	586		70
" 5	Avonmore	1,386	"	London	1,212		174
" 6	John Campbell	728	"	"	610		118
" 8	Andrew Johnson	2,005	W. M. Mackay	"	1,480		525
" 9	Bertie Bigelow	1,142	S. Schofield	"	107		1,035
" 14	Frank Stafford	1,109	Alex. Gibson	"	980		129
" 19	Annie Stafford	1,296	"	"	1,150		146
" 23	Livingstone	640	R. A. & J. Stewart	London	525		115
" 23	Rialto	1,481	Guy, Bevan & Co.	Marseilles	1,470		11
" 24	Arabella	1,116	Alex. Gibson	Liverpool	905		211
" 27	Magdala	575	Alex. Gibson	London	249		326
" 28	Autwerp	573	Carvill, McKean & Co.	Bristol Channel	467		106
		13,913		Dublin	10,746		3,167

SHIPPERS.

The following is a statement of the individual shipments from St. John in 1881:—

Shippers.	No. of Vessels.	Deals, etc.	Pine.	Birch.
Alex. Gibson	92	80,234,000		
R. A. & J. Stewart	70	49,764,000		
Carvill, McKean & Co.	60	23,891,000		
W. M. Mackay	21	19,738,000	485	2,574
Guy, Bevan & Co.	34	19,722,000		188
S. Schofield	10	3,498,000	1,062	1,512
McLachlan & Wilson	3	671,000		852
Sundry parties	2	716,000		
Totals	282	203,232,000	1,547	5,126

The following is a summary of the destination of shipments from St. John during the year 1881:—

Destination.	Deals, etc.	Pine.	Birch.
Liverpool	69,109,000	1,485	3,906
London	24,686,000		
Bristol Channel	27,011,000	25	6
Clyde	7,763,000		
Ireland	42,251,000	37	19
Other ports in the U. K.	8,023,000		1,008
Continent, etc.	24,399,000		188
Total	203,232,000	1,548	5,126

UNITED STATES TIMBER LANDS.

Of the twenty-six states east of the Rocky Mountains only four—Maine, Michigan, Minnesota and Wisconsin—are now able to furnish supplies beyond what they themselves need. It is a remarkable fact, however, that nearly every state in the Union exports timber. Maine is so far denuded of what once were thought inexhaustible supplies, and the mills are being stocked to a large extent with logs cut from saplings of only six and eight inches in diameter. Much of the timber so recklessly destroyed is used, not to supply its own needs, but to ship into neighboring states and abroad. Ohio forests of walnut have almost all disappeared. There have now been cleared upwards of 10,000,000 acres of this valuable timber, which it would take half a century to restore. Fire, insects and the axe have almost entirely denuded New York of its timber. The northern sections of Michigan and Wisconsin are well supplied with pine, better perhaps than any other states in the Union, but it is thought that the timber will not last eight years longer.

Lumbermen have now to seek the head waters of the tributaries. No reliance can be placed on Canadian supplies. From the Province of Manitoba to the Gulf of St. Lawrence there is not as much spruce, pine, hemlock, ash, oak, elm and other commercial woods as would supply the present consumption of the United States for three years.

All the accessible pineries have been run over for salable timber, and some of the Canadian lumberers have trespassed upon our northwestern territories in their efforts to secure board wood timber to supply the English demand. The value of the annual product of our forests is said to be near \$1,000,000,000. A very large proportion of this is obtained in a legitimate way, but millions—billions, in fact—of feet of splendid timber are annually stolen. The trade in this stolen timber in Northwestern Florida is immense, and gives employment to thousands of men. Timber stealing is not confined to Southern States. In the north and west some of these timber thieves buy government land at settlers' rates, and after they have cut and sold the timber allow it to go back to the government in default of taxes; thus not only swindling and robbing the government, but preventing actual settlers from getting possession of the land. Others evade the law by getting the Indians to cut the timber from government lands, and have them haul it to safe places beyond the jurisdiction of the government, when they buy it, paying only the price of cutting it. Probably not less than 30,000,000 people in the United States are warmed by wood fuel, consuming annually about 100,000,000 cords. In 1871 Chicago alone consumed the wood taken from 10,000 acres of forest land. Steamboats, railroads, etc., consume in the same way about 35,000,000 cords. The railroads consume an enormous amount of wood for ties, bridges, fences, etc. The amount of wood consumed by mechanical industries is very large. People may realize to some extent how large the amount must be by simply taking a look at the objects before their eyes in their houses, when they will observe how very few are the articles that are not wholly or in part constructed of wood.—*Ex.*

PROMOTING FOREST CULTURE.

A committee consisting of citizens of Medford, Stoneham, Winchester, Maldon and Melrose, Mass., has been formed for the purpose of taking executive action to promote timber in the old commonwealth. It is assumed that areas in the state, like Middlesex Falls, are more than for anything else fit for growing forests, and that such areas, consisting of land, ponds and marshes, can, and should be devoted to this purpose. Such tracts should be converted into public domains for the reproduction of forests. In furtherance of the plan the committee recommends that the state legislature be petitioned to pass an act for the reproduction of forests. The first section of the proposed act has been drawn by the committee, and reads as follows:—

"Where any town, by a vote in a legally called town meeting, or any city, by its mayor, aldermen and common council, shall resolve that any portion of the territory of said town or city ought to be devoted to the preservation, reproduction and culture of forest trees, for the sake of timber, or for the preservation of the water supply, and its appropriation for the purchase of the same, together with donations for that purpose, shall equal the assessed value of all the real estate included in it, said tract shall become a public domain, subject to the regulations hereinafter proscribed."

It will be seen that the preservation of ponds and water courses by overshadowing timber is a part of the committee's plan.

The *London Timber Trades Journal* of Dec. 24th, says that the steamers now are mostly in, and when they come to be summarized will be found to exceed in tonnage and size any that have previously entered the docks timber laden. Amongst the biggest were the *Wheatfield*, *Barcelona*, and *Ariona*, from Quebec; and the *Win. Dickenson*, from St. John. This latter was the largest by some 300 tons, and turned out over 700 standards of spruce deals.

F. E. DIXON & CO.

MANUFACTURERS OF PURE BARK TANNED

LEATHER BELTING



First Prize, Provincial Exhibition.....Ottawa, 1875
 First Prize, Provincial Exhibition..... Hamilton, 1876
 First Prize, Provincial Exhibition.....London, 1877
 First Prize, Industrial Exhibition.....Toronto, 1879
 First Prize, Industrial Exhibition.....Toronto, 1880
 International Medal, Centennial Ex.....Philadelphia, 1876



None genuine unless with a STAR on the head of rivets. Send for Price Lists and Discounts.
 1121

81 Colborne Street, Toronto

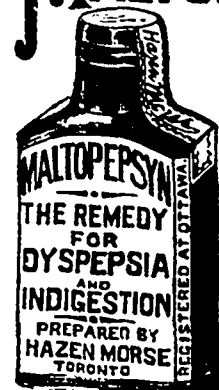
Rapid Tree Growths.

According to a report of the Horticultural Society of Madras two trees in the Botanical Garden there display the marvellous rapidity of tree-growths in tropical countries. The rain-tree (*Pitheco obium saman*) in the gardens, the measurements of which were given in the proceedings of the society 7th of August, 1878, and then believed to be under six years from the seed, continues, in spite of its having been necessary to amputate some of the largest limbs to grow enormously. Measured on the 30th of July last it gave in girth nine feet four inches at the ground, six feet three inches at three feet high, and five feet nine inches at five feet high; in spread about eighty-five feet from north to south, and a total height of about 46 feet. A reference to the former measurements shows that the girth at three feet from the ground has increased in the last five years two feet two inches. The age of the tree is, if anything, over estimated; but searches is being made for traces of the receipt of the seed, which it is believed came from Ceylon about 1872. A casuarina tree, standing alongside, which was the specimen of its order when that part of the ground was laid out at the Botanical Garden, and is therefore known to be about ten years old, now measures at five feet from the ground, only two feet eight and a half inches, though it is about eighty-two feet high.

By Rothschild & Co.'s monthly circular, it is shown that the value of lumber shipped to foreign ports, from Puget Sound during the month of November, 1881, was \$33,135. The lumber went to Melbourne, Australia; Levaka, Fiji Islands; Maubani; Hong Kong, China, and Chili, South America.

The stock of American black walnut in Liverpool, England, is stated to be exceedingly small in good logs, and any that might be offered would find a ready and satisfactory sale.

MALTOPEPSYN



Artificial Gastric Juice.

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

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

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

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

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

Send for Pamphlet, 24 pages, giving full treatment of Dyspepsia with the rules of Diet, etc., mailed free upon application by HAZEN MORSE, TORONTO.

Price per bottle, with dose measure attached, 50 cents, contains 48 doses or about one cent per dose.

JOHN DOTY

Esplanade Street, Toronto.



MANUFACTURER OF
 MARINE ENGINES,
 MARINE BOILERS,
 Propeller Wheels and Steam Yachts

ROBERT SMALLWOOD

MANUFACTURER OF

The Patent Lever Feed Shingle,
 Box Board & Heading Machine

(Always takes First Prize.)

Rotary Saw Mills

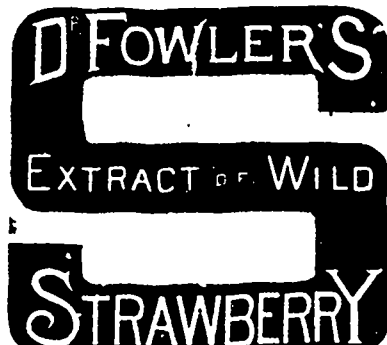
IN FOUR SIZES, and other

MACHINERY for SAW and
 GRIST MILLS.

SEND FOR CIRCULAR.

CHARLOTTETOWN,

1129 PRINCE EDWARD ISLAND.



Cures Cholera, Cholera Morbus, Dysentery, Cramps, Colic, Sea Sickness and Summer Complaint; also Cholera Infantum, and all Complaints peculiar to children teething, and will be found equally beneficial for adults or children.

FOR SALE BY ALL DRUGGISTS.

T. MILBURN & CO.,

Proprietors, Toronto.

MONTREAL SAW WORKS

MONTREAL,

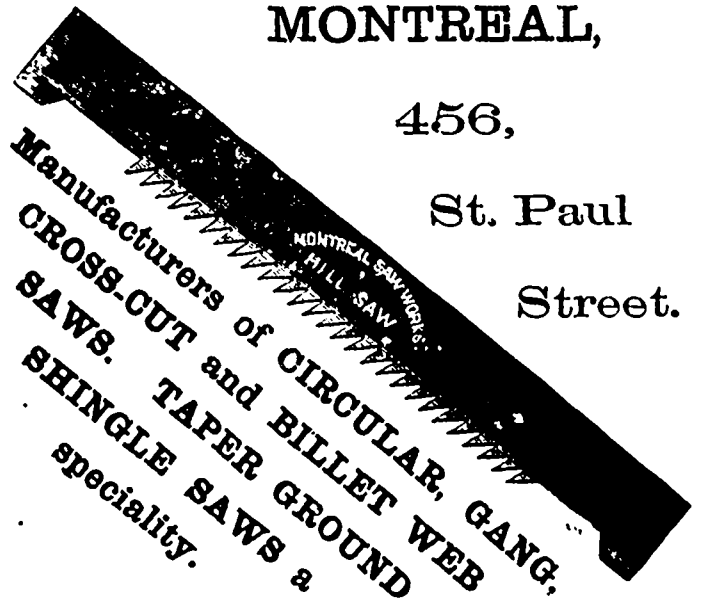
456,

St. Paul

Street.

General Mill Supplies always on hand.

General Mill Supplies always on hand.



All correspondence address to Chas. M. WHITLAW, Sec. 1123

Drake Brothers' Box Mill,

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

SPRUCE, PINE & HEMLOCK SHINGLES

F. H. DRAKE.

1117

N. H. DRAKE.

WILLIAM CAMPBELL

(Late CAMPBELL & FOWLER.)

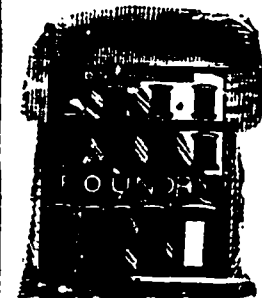
MANUFACTURER OF

Edge Tools, Axles, Springs,

&C., OF EVERY DESCRIPTION.

Robertson Place, Smythe Street - ST. JOHN, N.B. 1119

ONTARIO ELECTROTYPE AND STEREOTYPE FOUNDRY.



Having added the Latest Machinery to my Foundry, and secured the services of a MOST EFFICIENT STAFF OF AMERICAN SKILLED WORKMEN, I am prepared to execute all orders with Promptness. Satisfaction guaranteed.

The Work Produced at my Foundry is acknowledged to be equal to any in the United States, and Superior to any in Canada.

Orders from the Country Promptly attended to.

Please address all Orders to

R. SMITH, 26 & 28 Colborne Street, Toronto. 1123



J. F. LAWTON

Alexandria Saw Works

SAINT JOHN, N.B.

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

EVERY SAW WARRANTED.

SAWS REPAIRED in the best manner and on Short Notice.

Send Address for Price List, Terms, &c.

1117

J. F. LAWTON.

SAGINAW MEN IN ONTARIO.

The *Lumberman's Gazette*, of Bay City, Mich., in an article on the recent sale at Toronto of timber limits in the Muskoka and Parry Sound districts, says:—"A significant feature of this sale was the presence of Saginaw lumbermen. There has been an active demand for pine lands in Michigan during the past season, and some large transactions have been reported, in fact, about all the available pine in the state have been picked up by syndicates and capitalists, while prices have largely appreciated. The fact that Saginaw river lumbermen are going into Canada after lumber, however, is something of an innovation, and can be accounted for on the theory that pine timber on this side is getting scarce and that the future of prices warrants investment in Canada lands. Possibly some of the lumbermen are also looking ahead at the bare probability that the discussion of free trade may result in the lifting of the duty on lumber. The Saginaw parties who purchased berths at this sale were Mayor Hill, C. W. Wells, A. T. and L. W. Bliss. Their purchase included about 88 square miles, and it is heavily timbered."

CHICAGO DOING.

We make the following extracts from the *Tribune's* exhaustive review of the year's trade:—"The third interest in Chicago's great commercial trinity, the lumber trade, has made wonderful progress during the year just closed. True to its reputation of former years, it has continued to spread until very few portions of the country west of the Alleghenies where railroad communication is had with Chicago can be found where the products of the Michigan forests are not in greater or less measure utilized for the manifold purposes to which lumber is applied. The old trade barrier which has in the shape of an imaginary line divided the working field of the Chicago lumber merchants from that claimed by the lumbermen of the Mississippi Valley has been swept away during the active season of 1881, and thousands of car loads of pine lumber billed by Chicago merchants have invaded the Upper Mississippi country. This strong trade wind has made itself felt strongest, perhaps, in the South and Southwest. All through the season builders and railroad contractors in Missouri, Kansas, Texas, New Mexico, and even Mexico have checked their extra baggage through to Chicago when they have started out for lumber, coming through St. Louis as if unconscious that that burg was the headquarters of the Upper Mississippi lumber trade, and on landing here finding what they wanted without the least trouble, seen one of the greatest feats of commercial enterprise, as shown by Chicago's resurrection from the ashes, and gone home completely satisfied."

Chicago lumber during the year just closed has traversed the entire breadth of the country from Maine to Oregon, several consignments having been made to the former region, where the pine supply is becoming exhausted and the spruce is not available for the needed purposes, and to the latter where, although the coarser pines abound, there is little of the finer sort, and no facilities at present for utilizing the native growth.

The Lumberman's Exchange, which in years before had been simply a small underground room hired by the Lumberman's Association, where ill-attended meetings were held occasionally, and where the accounts of the association were kept by the simplest sort of single entry, became last year a guide as well as a source of power to the lumber merchant, and he has now come to believe in the value of statistical completeness as exemplified by the work of the present Secretary, Mr. George W. Hotchkiss, who has so systematized the labors of his office as to grasp and record even the minutest item of interest to the colossal trade, which in 1856-7 was represented only by a standing committee of the Board of Trade, and which now boasts of \$60,000,000 capital.

As compared with the receipts of 1880, the year of 1881 shows an excess in round numbers of 290,000,000 feet of lumber, and 136,000,000 shingles, together with a proportionate increase in lath, posts, and other coarser forest products.

The lumber interest of Chicago, which ten

years ago it was thought had reached its fullest proportions, has made an advance, so far as the bulk of trading is concerned, beyond any previous year of its history. Commencing on Jan. 1 last with a stock on hand of 497,840,673 feet of lumber and 188,720,000 shingles, receipts came in at an average of over 6,000,000 feet of lumber per day for the 300 working days of the year. During this entire time the receipts, enormous as they were, hardly kept pace with the demand, of which but a small proportion was for city use. During the entire season of navigation the average number of cars required daily for the filling of outside orders on the lumber market was over 600, and much delay and embarrassment was caused the greater part of the time during the summer on account of the inability of the railroads to meet the demands of this great interest.

Of the 1,853,040,000 feet received during the year, about 412,000,000 feet were absorbed by building operations in Chicago and its suburbs.

The current and gross value of forest products handled during the year may be stated as follows:—

	Bulk.	Value.
Lumber, ft.....	1,853,040,000	\$40,810,000
Shingles, No.....	785,400,000	1,600,000
Lath, No.....	104,000,000	208,000
Cedar Posts, No.....	3,000,000	450,000
Railroad ties, No.....	5,000,000	1,700,000
Cardboard, cts.....	40,000	280,000
Slabs, cts.....	25,000	100,000
Bankers, cts.....	30,000	300,000
Telegraph poles, No.....	00,000	000,000
Total.....		\$45,648,000

The total receipts by lake during the season of navigation were 1,622,783,000 ft lumber and 718,633,000 shingles.

The lumber output in the Upper Mississippi region for the year 1881 was, in round numbers, 1,400,000,000, while that of Michigan was 3,500,000,000 ft.

The year now closing probably gave larger profits for the dealers than any year since the great fire. During the boom in July and August, when ordinary piece-stuff was selling at \$11.75@12.00, the large lumber firms were straining every nerve to meet the unprecedented demand for shipment, and, as has before been said, failed to keep up with the urgent call, or to fill promptly orders that came even from the territory naturally belonging to the upper Mississippi region.

During the latter part of the summer and almost up to the close of navigation much trouble was experienced from lack of dock-room, or rather from the inability of yard-owners, to pile and classify their stock as fast as it arrived. This cause of itself had a depressing influence on the cargo market for the time being, and tended to delay shipments by rail to some extent. Several of the largest lumber firms with mills at Mouwince, Grand Haven, and elsewhere made preparations by the building of docks early in the season to pile largely at the mills during the summer, and thus save overcrowding at the yards in this city, and at the same time have a good assortment of lumber to draw from during the winter. This plan has hardly been carried out, for the reason that the demand for lumber throughout the season of navigation was so heavy and continuous that it could not be spared from the market. Several large firms owning mills across the lake had to buy largely of others near the close of navigation in order to keep up a well-assorted stock in their yards here.

One feature of the trade for several years past, the occasional shipments in deals, or three inch clear plank, for the English market, has been nursed the past season. This was accounted for by the extreme prices realized during the summer which would have rendered such shipments unprofitable, as lumber of that description commanded better prices in this market than was paid for it in Canada.

The following table shows the cargo prices of prominent descriptions of lumber at the periods named:—

	May 10.	July 31.	Nov. 30.
Piece stuff, ordinary length	\$ 9.50@10.00	\$11.75@12.00	\$12.00@12.50
Green.....			
Drv in. boards			
No. 2 logs.....	12.00@12.75	12.00@13.50	13.50@15.00
Boards & strips	12.00@12.00	14.00@15.00	14.00@14.50
Norway strips and boards	11.50@12.00	11.25@11.75	12.00@13.50
Shingles, A.....	2.60@ 2.65	2.80@ 2.95	2.70@ 2.85
Shingles, std.....	2.40@ 2.50	2.60@ 2.80	2.65@ 2.80

The yard trade through the winter was good,

and long before the opening of navigation many classes of lumber were exhausted, dealers being obliged to resort to reciprocal exchanges in order to meet the wants of their customers. At the full opening of navigation, May 6, the stock on hand in the yards was 223,556,664 feet of lumber and timber, and 73,098,575 shingles, against 238,483,874 feet of lumber and timber and 115,116,000 shingles at the same date the year previous. Of the former quantities, 21,263,000 feet of lumber and 26,200,000 shingles had been brought in by vessels that had managed to evade the heavy ice which hugged the south shore of Lake Michigan up to nearly the first of May. Trade from this point on was remarkably good. At a meeting of the trade called at the instigation of the "bears," May 21, for the purpose of reducing rates on some portions of the yard list, the movers were defeated, and at a subsequent meeting on the 27th of May the price list adopted early in the month was reaffirmed. The month closed with a firmer feeling on all classes of stock.

Following were the official yard prices at the dates named:—

	Jan. 21.	June 27.	Nov. 26.
Dimension.....	\$11.50@13.50	\$13.00@15.00	\$14.50@17.00
Fencing.....	11.50@13.50	12.00@14.00	13.00@15.00
Com. boards.....	13.50@16.00	14.00@16.00	15.00@17.50
No. 2 boards.....	11.50	12.00	13.00
Flooring B.....	32.00	33.00	35.00
Third Clear.....	33.00	35.00	43.00
First Clear.....	43.00	44.00	47.00
Lath.....	2.25	2.25	2.75
Shingles, A.....	2.90	3.15	3.50
Shingles, std.....	2.65	3.05	3.10

The following figures bear on the condition of the stocks at the close of the year:—

	Lumber.	Shingles.
Stock in yards Dec. 1.....	620,781,223	203,262,174
Excess of shipments during the month.....	120,593,000	41,310,000
Estimated stock Jan. 1.....	525,908,223	230,319,174
Stock Jan. 1, 1881.....	497,840,673	188,722,000

The bulk of our hardwood lumber is received from the forests of Michigan, Wisconsin, and Indiana, but the finer qualities, such as black walnut, come from North Carolina, Tennessee, and Kentucky, while the Southern pine is largely obtained from Alabama, or from Jefferson county in that State. Altogether the receipts of hardwood lumber have been over 250,000,000 feet, 60,000,000 feet of which has come from the South. The value of the Southern lumber received here footed up in the vicinity of \$3,000,000, while that from the more northern forests represented fully \$5,000,000. These latter receipts were made up of maple, ash, basswood, oak, etc., used for furniture and building purposes.

No data is known to exist by which a complete history of the receipts and shipments of lumber at Chicago can be traced to a date earlier than 1843, although it is stated by those engaged in the business that the trade had in 1843 acquired a volume not exceeding 12,000,000 feet, which was steadily increased until 1847, beginning with which year we may trace its increase to the present time, as follows:—

	Lumber.	Shingles.
1847.....	32,118,225	12,148,500
1850.....	109,364,770	65,423,750
1860.....	202,434,626	127,894,000
1870.....	1,018,038,085	652,091,000
1871.....	1,030,323,375	647,595,000
1872.....	1,193,059,280	616,924,420
1873.....	1,123,368,071	517,923,000
1874.....	1,000,083,700	619,278,030
1875.....	1,167,194,482	635,708,000
1876.....	1,039,785,265	568,978,000
1877.....	1,065,406,362	546,442,000
1878.....	2,179,094,710	692,644,750
1879.....	1,467,720,091	670,950,000
1880.....	1,504,533,113	650,922,600
1881.....	1,853,040,000	735,430,000

The usual flight of speculations regarding the forest outcome of next year has appeared more especially in journals devoted to the lumber interest. As to the reliability of these numerous predictions little can be said. The prospects, however, for next year may be summed up in the remarks of a prominent lumberman of this city, who asserts that the mills will probably increase their capacity, and will find material enough to keep them in operation throughout the working season.

An exchange, speaking of the destruction of our pine forests, says:—

It is asserted that during the season just closed more than six billions (6,279,950,000) of feet of lumber have been felled in Michigan, Wisconsin and Minnesota. The logging this summer will swell this amount to seven and a half billions (7,420,950,000) of feet. As the census agents report that the whole quantity of pine timber standing in those three States is but eighty-one

and a half billions (81,550,000,000) of feet, a simple sum in division will show that the supply will only last twelve years if the present rate of destruction is kept up, and there is no way of supplying the loss, since once the pine is cut off a growth of hard wood follows, which is not only slow of growth and of the scrub variety, but is practically useless for building purposes. The Maine pineries are also comparatively exhausted, lumbering operations now being confined to spruce. Michigan lumber has even been shipped to Bangor, indicating that the home supply there is giving out.

According to the journal of the Agricultural Society of France, the acreage of forest in Europe, north and south, is 100,000,000 to 150,000,000. These, however, especially outside of Germany, are rapidly thinning out. In Germany great pains are taken to foster the growth of forest trees, and the labors of that Government have thus far been well rewarded.

MOUNTAIN RAPIDS.

The following letter appears in the *Ottawa Citizen*:—

DEAR SIR,—Some time ago I saw by the papers that the Government had sent engineers to examine the Mountain Rapids above Mattawa with the view of building a dam at that place. I have not as yet seen their report, but hope they found the scheme feasible. If a dam was also built at the natural outlet of Kippawa Lake, but so arranged as not to interfere with the driving of timber and logs through Messrs. T. and C. Smith's improvements; both dams would, in my opinion, be a great benefit to the lumbermen and farmers along the Ottawa River. The two extremes of high and low water would, no doubt, be a thing of the past, as the dams could be so arranged as not to allow too much water to pass in the spring and keep a large portion of the water for the months of August and September, when the water is most wanted for the timber trade. Square timber would be almost certain to reach the Quebec market every year that it reached the Ottawa River, and saw logs could be driven all summer without any fear of being stuck and could be driven cheaper than at present. The Government are having dams built at the head of the Calumet Rapids and in the Rocher Pondeu Chenail, which, I think, may have the effect of drowning considerable land along the Calumet Chenail in the spring, and of course the proprietors of the land will look to the Government for damages, which they have a right to. Now, by building a dam at the Mountain, all trouble would be avoided with the land owners on the Calumet Chenail and environ. Sir Hector Langovin has always been favorable to improving the Ottawa River. I hope John Poupore, M.P., and Peter White, M.P., will see to this matter and urge and the Government on the necessity of building the dams. By giving this a place in the *Citizen* you will much oblige

AN OLD LUMBERMAN.

Umbrella and Pepper.

The umbrella trade grievously threatens the existence of the pimento plantations of Jamaica. An official estimate made in Kingston, last fall reckoned that more than half a million umbrella sticks were then awaiting export to England and the United States. These sticks were almost without exception pimento, and it is not surprising to be informed that owners and possessors of pimento walks are becoming alarmed at the growth of a trade which threatens to uproot, in a few years, all the young trees. The export returns for the past five years show an average of 2,000 bundles of sticks sent out of the island annually in the ordinary course of trade, and the returns for the first three-quarters of 1881 show an export of over 5,700 bundles, valued at \$15,000. When it is remembered that each bundle contains from five hundred sticks, each of which represents a young bearing pimento tree, the extent of the destruction may be realized.—*Scientific American*.

NO HOSPITAL NEEDED.—No palatial hospital needed for Hop Bitters patients, nor large salaried talented puffers to tell what Hop Bitters will do or cure, as they tell their own story by their certain and absolute cures at home.—*New York Independent*.

ELECTRIC LIGHTING.

The Trent Valley Advocate says that Messrs. Gilmour & Co., of Trenton, intended for some time to light their new mill by means of the electric light, which was done for the first time on the evening of Monday, the 12th of Dec. The apparatus was purchased from the celebrated Brush Electric Light Co., of Cleveland, Ohio, and consists of what is known as a six-light dynamo-magnetic machine, which generates the electricity necessary for producing the light. This has been placed in the small engine room at the machine shop, and is driven by a twenty-five horse-power engine kept especially for that purpose. The current of electricity generated by this machine is conveyed by two insulated copper wires to the large mill, where connection is made with the lamps, which are six in number—three in the lower storey and three in the upper storey. Each lamp consists of two pairs of carbon pencils, the points of one pair being brought within a very short distance of each other, and as soon as the current is turned on a light of intense brilliancy appears between the points, which burn away slowly under the great heat, but are kept at the same distance from one another by a peculiar action of the current upon a magnet. As soon as one pair of carbons is consumed (which takes about seventeen hours) the current is at once automatically diverted from them to the other pair, which then commences to burn, and when those are consumed two new pair have to be placed in the lamp. The entire apparatus cost the Company only about \$1,600, and the cost of carbon for the six lamps will not exceed ten cents per hour.

WASHINGTON TERRITORY SHIPMENTS.

From the Resources of Oregon and Washington, of Portland, Ore., some interesting facts are obtained regarding timber shipments from Puget Sound. The exports from the Sound of lumber, shingles, lath and pickets have not materially increased during the last eight years, but the value of spars exported has risen from \$17,745 in 1870 to \$245,588 in 1880, thus showing that the advantages of the Douglas fir as spar timber is coming to be appreciated. No official report whatever is made of the quantity of lumber sent from Puget Sound saw mills to California, but the following table shows the amount shipped by coasting vessels during the month of August, 1881:—

	Feet.
Fir.....	18,436,610
Spruce.....	2,637,457
Cedar.....	440,387
Piles, lineal ft.....	111,402
Spars, ".....	2,651
Number.	
Lath.....	8,395,400
Woolslats.....	30,000
Ship knees.....	67

This is equivalent to considerably over 20,000,000 feet, board measure, shipped from Puget Sound during one month, which can be considered an average, and for which Washington received no credit. On the contrary, if that lumber was re-shipped from San Francisco to foreign countries, as is undoubtedly the case with much of it, California would get the credit in the Government reports. Washington, with its grand resources and unexcelled climate, offers great inducements to those who wish to work unfettered by competition or limitation.

Exhausting the Timber Supplies.

The United States Economist says the now well known fact is that we are rapidly exhausting, largely by reckless and improvident waste, our supplies of timber in the Northern States. The demand for it increases at the rate of 30 per cent. a year, and even those who are interested in high prices and immediate sales of what is left of it admit that in twenty years or sooner building timber will be extremely scarce, and that in many parts of the country, yet supplied in part from their own soil, it will have entirely disappeared. It is stated on good authority that more than 65,000 establishments, employing 400,000 persons, and using material to the value of over \$350,000,000 a year, are engaged in the United States in manufacturing articles entirely from wood, in addition to 8,000,000 persons partly employed on wood, or using that material yearly, to the value of \$6,000,000. No country can be or ever has been despoiled of her timber and flourish.

NOVA SCOTIA.

From our own Correspondent.

Messrs. Miller & McKeen are preparing for a large lumbering business at Economy, N. S. Their new mill will be completed by the opening of the spring. They have over eighty men in the woods, logging and building reserve dams on the river. They are a new firm here, and, unlike some of their predecessors, they pay as they go. Their possession of a large and un-cultured area of good lumber land, and their energetic and systematic way of doing things, give promise of success, and have already won for them general respect.

B. Young has heavy forces of men and teams logging to his mills at River Hebert, Half Way River Lake, and Ship Harbor. He is an old hand at the business, and has a large stock of business energy and tact.

E. D. Davison & Sons, Bridgewater, shipped over fourteen million feet during the past year. They are preparing to put in about ten million feet this season, beside what they will buy.

There is very little snow here yet, and the swamps and ponds are entirely open, so that operations have to be entirely confined to yarding and making roads and bridges.

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

HAVE HOPE.—Before you despair of curing a troublesome cough just verging on consumption try Hagyard's Pectoral Balsam; it has cured others, why may it not cure you? All dealers sell it.

ALL OUR DRUGGISTS now heartily endorse the amazing success of Mack's Magnetic Medicine, and recommend it for both sexes in all cases of sexual weakness. See advertisement in another column.

RHEUMATIC REMEDY.—There is no better cure for Rheumatism than Hagyard's Yellow Oil used according to directions on the bottle. It also cures Burns, Scalds, Frost Bites, Bruises, lameness and all wounds of the flesh. All dealers sell it, price 25 cents.

A healthy man never thinks of his stomach. The dyspeptic thinks of nothing else. Indigestion is a constant reminder. The wise man who finds himself suffering will spend a few cents for a bottle of Zepesa, from Brazil, the new and remarkable compound for cleansing and toning the system, for assisting the digestive apparatus and the liver to properly perform their duties in assimilating the food. Get a ten cent sample of Zepesa, the new remedy, of your druggist. A few doses will surprise you.

WORTHY OF PRAISE.—As a rule we do not recommend Patent Medicines, but when we know of one that is really a public benefactor and does positively cure, then we consider it our duty to impart that information to all. Electric Bitters are truly a most valuable medicine, and will surely cure biliousness, Fever and ague, Stomach, Liver and kidney complaints, even where all other remedies fail. We know whereof we speak, and can freely recommend them to all.—Each.—Sold at fifty cents a bottle, by Taylor & Macdonald.—6.



CANADIAN PACIFIC RAILWAY.

Emory's Bar to Port Moody.

NOTICE TO CONTRACTORS.

Tender for Work in British Columbia.

SEALED TENDERS will be received by the undersigned up to NOON on WEDNESDAY, the 1st day of FEBRUARY next, in a lump sum, for the construction of that portion of the road between Port Moody and the West-end of Contract G, near Emory's Bar, a distance of about 85 miles.

Specifications, conditions of contract and forms of tender may be obtained on application at the Canadian Pacific Railway Office, in New Westminster, and at the Chief Engineer's Office at Ottawa, after 1st January next, at which time plans and profiles will be open for inspection at the latter office.

This timely notice is given with a view to giving Contractors an opportunity of visiting and examining the grounds during the fine season and before the winter sets in.

Mr. Marcus Smith, who is in charge at the office at New Westminster, is instructed to give Contractors all the information in his power.

No tender will be entertained unless on one of the printed forms, addressed to F. Braith, Esq., Sec. Dept. of Railways and Canals, and marked "Tender for C. P. R."

Dept. of Railways and Canals, Ottawa, Oct. 24th, 1881. F. BRAITH, Secretary. 12410 113

Caledonian Hotel,

GRAVENHURST.

JOHN SHARPE, Proprietor. This Hotel has been newly opened out, pleasantly situated on Main Street, within five minutes walk of Northern Railway station. Bar kept with best assorted Wines, Liquors and Cigars. Every attention paid to guests. Good Stabling. 1110

Simcoe House,

CORNER FRONT and SIMCOE STS. TORONTO, ONT.

Best accommodation in the City. TERMS \$1.50 and \$1.00 per day, according to Location of Rooms. 1121 WILLIAM HANCOCK, Proprietor.

The American Hotel,

BARRIE, ONT.

Collier Street, Adjoining the Market.

RATES REASONABLE, CENTRAL LOCATION, FREE BUS TO AND FROM ALL TRAINS.

Every accommodation for Commercial and LUMBERMEN. 1117 W. D. McDONALD, Proprietor.

J. DAVIES & Co.

46 Church Street, Toronto.

Sells all sort of Lumber on Commission. Advances on Consignments. Prices given on application. Whole Stocks disposed on very low Commission. 1111

E. S. VINDIN,

Commission, Shipping, Forwarding and General Agent.

LUMBER MERCHANT

Office, Tempest's Block, Port Hope. 1111

FRANCOIS MARCHAND,

Manufacturer of all Descriptions of

STEAM BOILERS, SHIPS WATER TANKS, Etc.

St. Roch Street, 117 QUEBEC, P. Q.

CANADA TRUSS FACTORY

(ESTABLISHED 1856.)

F. GROSS,

Manufacturer of SURGICAL and ORTHOPEDIC INSTRUMENTS. ARTIFICIAL LIMBS made to order. INDIA RUBBER GOODS of every description. 1114

688 and 690 Craig Street, Montreal.

P. PAYETT'S NEW IMPROVED

Adjustable Saw Guide!

Can be adjusted without danger. You can take your saw off without taking the guide off the frame.

All kinds of Brass & Iron Casting

PLAINING and TURNING done with Despatch. For particulars address:

CRAIG & CAMERON,

PENETANGUIHERNE. 1112

GRATEFUL—COMFORTING.

EPPS'S COCOA

BREAKFAST.

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

Made simply with boiling water or milk. Sold in packets and tins only (4-lb. and 1-lb.) labelled

JAMES EPPS & CO., Homeopathic Chemists, London England. 1114

HACYARD'S PECTORAL BALSAM.

Has no equal for the permanent cure of Coughs, Cold, Sore Throat, Asthma, Croup, Whooping Cough, Bronchitis, and all Lung Diseases.

Every bottle guaranteed to give satisfaction. T. MILBURN & CO., Proprietors Toronto.

Flexible Board Rules,

With Steel Head, either Cleveland or London make, at \$1.75 Each.

GEORGE STETHEM,

PETERBOROUGH, 111

J. G. EDWARDS

HARDWARE MERCHANT,

LINDSAY.

BELTING, FILES, BABBIT METAL,

CHAINS, ROPE, and 1112

LUMBERING SUPPLIES.

THOS. GRAHAM

(Established 1874),

MANUFACTURER OF

New Files Old Files

HAND CUT and made from the BEST refined English CAST STEEL. All goods neatly put up in labelled boxes for the trade, to whom lowest prices will be given. Price List on application and Sample Order solicited.

Re-ground and re-cut by Hand and Warranted equal to NEW for use, at prices that will effect a great saving to Mill Owners and all large consumers of Files. Parties now sending their old files can have them shipped next spring to their order.

Factory and Offices: 35, SHERBOURNE STREET, TORONTO. 114

WISDOM & FISH

IMPORTERS AND DEALERS IN

Rubber & Leather Belting

RUBBER HOSE, STEAM PACKING, LUBRICATING OILS, COTTON WASTE

Wrought Iron Pipe and Fittings,

And all Articles used in the Application of Steam to Machinery.

No. 41 Dock Street, St. John, N. B.

(SMALL'S BLOCK.)

N.B.—Estimates for Steam and Hot Water Heating Apparatus furnished on application. All work Warranted. 1115

There is no excuse for suffering from CONSTIPATION

and a thousand other diseases that owe their origin to a disordered state of the Stomach and Bowels, and inaction of the Digestive Organs, when the use of

DR. HENRY BAXTER'S MANDRAKE BITTERS

will give immediate relief, and in a short time effect a permanent cure. After constipation follows Biliousness, Dyspepsia, Indigestion, Diseases of the Kidneys, Torpid Liver, Rheumatism, Dizziness, Sick Headache, Loss of Appetite, Jaundice, Apoplexy, Palpitations, Eruptions and Skin Diseases, etc., all of which these Bitters will speedily cure by removing the cause.

Keep the Stomach, Bowels, and Digestive Organs in good working order and perfect health will be the result. Ladies and others subject to SICK HEADACHE will find relief and permanent cure by the use of these Bitters. Being tonic and mildly purgative they PURIFY THE BLOOD

by expelling all Morbid Secretions.

PRICE 25 CTS. PER BOTTLE.

For sale by all dealers in medicine. Send address for pamphlet, free, giving full directions. HENRY, JOHNSONS & LORD, PROPS., MONTREAL.

Travelling Agent.

MR. A. L. W. BEGO has been appointed agent for the CANADA LUMBERMAN, and is authorized to collect subscriptions and grant receipts therefor and to make contracts for advertisements appearing in its columns.



DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY TOKER & Co. PETERBOROUGH.

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..... 6 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 three clear days before the day of publication, to insure insertion.

All communications, orders and remittances should be addressed and made payable to TOKER & Co., 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.

PETERBOROUGH, Ont. JAN. 16, 1884.

A MICHIGAN lumberman, sometime during the past season, bought a tract of pine land, for which he paid \$10,000. A few weeks he sold the same tract for \$23,500; which should have satisfied the most greedy speculator.

The Bobcaygoon Independent says that Mr. Hugh Regan, foreman of one of Mr. R. C. Smith's shanties, on the 25th of December had cut 26,000 logs, and of those 10,000 had been drawn to water. So good a return it would be difficult to match in this neighbourhood.

The Orillia Packet says that Mr. P. Shaw, No. 20, has nearly a million feet of logs cut and skidded, and had begun to truck them in, when the merry jingle of sleigh bells changed the tune. He is keeping the mill going cutting lumber, shingles, lath, planing lumber, and grinding grain.

During the season of 1881 the Flint & Pere Marquette railroad, in Michigan, carried 98,964,559 feet of logs, all of which, except 15,000,000 feet, went to the Saginaw river. During the same period the Detroit, Mackinac & Marquette road conveyed to the Saginaw river about 15,000,000 feet of logs.

The Culbuto dam, at Bryson, on the Ottawa, was finished on Monday, January 2nd, the last pier or key being put into position, and there now only remains some further filling in to make the structure more solid and complete the work. The dam has had the effect of raising the water about three feet higher than it otherwise would be.

The Timber Trades Journal says that the Marquis of Lorne and Princess Louise visited the establishment of A. & F. Halliday, at Eton, and ordered several pieces of furniture in American walnut to take with them on their return to Canada. Her Royal Highness said that the whole of the furniture they had taken out with them last time had gone to pieces in consequence of the climate, an assertion not very complimentary to the firm that supplied the goods.

MESSRS. IRWIN & Boyd's annual sale at Nassau Mills on the 10th inst. proved a great success. The quantity offered was 1,200,000 feet, and every board found ready purchasers at prices considerably in advance of last year. The sale was largely attended by gentlemen from Toronto, Whitby, Stirling, &c., and they were the chief purchasers.

H. H. HUNNEWELL has a contract to plant 550 acres with catalpa trees in Kansas, for Mr. Douglas, of Waukegan, Ill. The soil, the first year, is planted with corn, and afterwards the trees are set out. They are placed four feet apart, and take nearly 3,000 to the acre. The agreement is to take care of them for three cents apiece, until they are old enough to take care of themselves.

THE oldest remaining half-timber house in Hereford, England, was offered for sale by auction recently. The building, which is in Butcher's Row, dates from 1621, and it is supposed that the architect was John Abel. The ornament on the gable suggests that originally the house belonged to a butcher. A large hall is within the building, with a chimney-piece on which the arms of the Tanners', Fleathers' and Butchers' Guilds are carved. The highest price offered was £1,475, but as the reserve price was £1,700, the property was withdrawn. It was afterwards purchased for the latter sum.

A CORRECTION.

The cut over the description of Hodgson's patent saw grinder in a few copies of our last issue was by mistake placed wrong side up. Our readers will get a correct view of it by inverting the paper.

A CHANCE FOR SOMEBODY.

Those of our subscribers who are engaged in, or have facilities for manufacturing broom handles, Venetian blind laths, clothes pegs, &c. had better make the fact known through the columns of the Canada Lumberman, inasmuch as a Liverpool firm writes us for the names of some of the principal manufacturers of these articles in this country. A word to the wise should be sufficient.

1881'S OPERATIONS ON THE OTTAWA.

We have received from a reliable and well-informed correspondent living in the Ottawa Valley the following statement of saw logs made on the Ottawa River and its tributaries in 1881, with stuck logs of 1880 added thereto, deducting therefrom stuck logs of 1881, thus showing the quantity sawn in the summer of the latter year:—

Made in 1880-81, Ontario side.....	249,240,200 ft. B. M.
“ “ “ “ Quebec side.....	357,796,600 “
Stuck in 1880, Both Provinces.....	42,300,000 “
“ “ “ “ “ “ “ “ “ “ “ “ “ “	649,412,400 ft. B. M.
Stuck in 1881.....	203,718,200 “

Sawn in 1881..... 445,694,200 ft. B. M.
In the letter containing the foregoing figures our correspondent states that while it is difficult to obtain accurate information as to stocks on hand of sawn lumber, it is certain that such stocks are much lighter than usual, and that more than half of the sawn lumber in the yards and at the mills has been sold to American buyers, and is awaiting shipment either by rail this winter or boat in the coming spring.

The quantity sawn last year was small as compared with some previous years, owing to the very low water of last summer causing so many logs to be stuck on the rivers and streams—the quantity stuck in 1881 being nearly five times as much as that of 1880.

We also learn from the same source that the quantity of the timber of 1880-1 stuck in the River Ottawa and its tributaries, to come down in 1882, is as follows:—

Square White Pine.....	731,700 cub. ft.
Waney Board.....	128,000 “
Square Red Pine.....	88,800 “
Total.....	948,500 cub. ft.

A NEW OUTLET.

It must be obvious to those who have given the matter a moment's consideration, that as soon as the missing link, which at present cuts in two that portion of the C. P. R. between Thunder Bay and Winnipeg is completed, a new and valuable market will be opened up for

the lumber, now manufactured on and about the Georgian Bay. Should the present North-west fever be maintained, the demand for all kinds of lumber on the prairies west of Winnipeg must be simply enormous and entirely beyond the capacity of local production. Even now lumber in various forms is being shipped from this part of Ontario to Winnipeg by rail. If it will pay to do that now, how much more will it pay to do it when it can be forwarded from the mills to Thunder Bay, and thence by a single railway corporation to wherever required, in stead of by the present circuitous and costly railway route. So far back as during the financial year ending the 30th June, 1880, we find that there was imported into Manitoba from the United States lumber, timber and shingles to the value of \$60,285, and upon which duties to the amount of \$12,057 were paid, and also that during the same period manufactures of wood not elsewhere specified to the value of \$63,454, upon which duties to the amount of \$15,853 were paid, were imported. As in this item, doors, sash, &c. are included, they no doubt formed an important portion of the same. As all these items can, as soon as the Thunder Bay branch of the C. P. R. is completed, be quite as well and be much more cheaply supplied from our mills on the Georgian Bay, it can scarcely be doubted that our lumber trade with our own North-west must soon attain large proportions, and prove a valuable outlet for the trade.

MUSKEGON LUMBER.

The following is a special despatch to the Chicago Tribune from Muskegon, Mich., dated Dec. 30th, 1881:—The lumber season just closed has been one attendant with many unfavorable circumstances, yet upon the whole one of the most prosperous ever known here. The mills started out in the spring with the intention of clearing up the full stock of logs on hand and in the river, which amounted to about 725,000,000 feet—by far the largest stock ever put into the river for one season's operations. At the close of last year's business the lumber on the docks held over reached 70,000,000 feet, and the logs rafted and unrafted 125,000,000 feet. The mills cut 624,458,526 feet, which was nearly 90,000,000 feet more than the previous year (1879), and about 150,000,000 more than in 1878. With the new mills and with large additions to the capacity of the other ones, the mill-men figured on the largest lumber crop in the history of the trade here, and at the outset of the season's operations everything was favorable to such calculations. Late in the season, however, the scarcity of labor and the strikes upset the calculations, and, consequently, instead of the mills cutting over 700,000,000 feet, the figures reached only 632,541,632 feet. There is no doubt but that the strike lost to the mills between 60,000,000 and 70,000,000 feet of lumber, and the short hours since then a good deal more. Owing to the open winter, the mills have run much longer than usual, but on the ten hours system, and in many instances shorthanded. The cut for this year, notwithstanding the drawbacks, was the largest ever known here, and yet larger stocks are carried over to next season than ever before. For the past three years the amount of stocks on hand at the close of operations was as follows:—

1879.....	115,000,000	Lumber, in.	75,000,000
1880.....	125,000,000	“ “ “ “	70,000,000
1881.....	225,000,000	“ “ “ “	98,070,539

The logs held over this year, rafted and unrafted, are given by the booming company at 225,000,000 feet, which will greatly help in preventing the log famine threatened by the present open winter. The total amount of lumber cut by the several mills for 1881, together with the cut of 1880, and also the manufacture of lath and lumber on hand, as compiled by the Tribune correspondent from figures furnished by the mill men, is as follows:—

Cut 1881.....	632,541,632
Cut 1880.....	624,458,526
Lath.....	104,815,880
Lumber on hand.....	98,070,539

The shingles manufactured on Muskegon Lake in 1881 amounted to 58,485,000.

For the past season the lumber products of Muskegon County have been simply enormous. There was manufactured—

Lumber, ft.....	800,000,000
Shingles.....	125,485,000
Lath.....	145,000,000
Pickets.....	20,000,000

PROSPECTS FOR NEXT SEASON.

W. S. Gerrish and Col. Fuller, two of the largest log dealers in Michigan, have informed the Tribune correspondent that the log crop for next season will not exceed 500,000,000 feet, but if the present soft weather continues any length of time it may fall under that amount. This amount, with the 225,000,000 left over, would give for next season's operations 725,000,000 feet, or about the same as was put in last winter, the danger of a log famine can only be averted by a change in the weather. Under the new order of things in the woods snow is not absolutely necessary for lumbering. It enables the operators to get their logs into the rivers somewhat cheaper; but when there is no snow hard weather will answer very well. Loggers can make ice roads by the aid of sprinklers, which are in most cases preferable to snow roads. The numerous railways and tramways now penetrating the pine forests have caused a revolution in lumbering, and logs can be carried to the rollways in almost any kind of weather. But as the greater part of the logging operations are carried on in the swamps, usually filled with water, hard, frosty weather is what the lumbermen are anxiously awaiting for. Should January and February be genuine winter months, and the thermometer go down far enough to freeze the swamps, the lumbermen will get in all the logs they need for next season's business. The logging railways can put in half of the 500,000,000 feet needed for a full crop, and two months' favorable weather would enable the balance to be drawn to the railways by teams. This figuring, however, is wholly dependent upon the weather. Five winters ago the weather was much the same as this winter. The camps were broken up and the men came out of the woods in January. The situation looked blue for the lumbermen, who had not quite recovered from the panic, but in February and March it snowed a full winter's supply, men were hurried back into the woods, and logs were rushed into the streams at a lively rate. There was no log famine that year, after all, and I don't believe there will be one this year either. With the prospects of as good prices for lumber as next spring holds out, the logs will be got into the river. The lumbermen have done it before, when the prospects were much gloomier than they are now.

NORTH WESTERN PINE CUT.

The North-Western Lumberman in its annual review gives the following for the total production of pine lumber in the North-West for nine years:—

Years.....	Feet.....	Years.....	Feet.....
1881.....	5,605,500,000	1876.....	3,879,040,000
1880.....	5,561,296,000	1875.....	3,008,553,000
1879.....	4,906,945,000	1874.....	3,751,306,000
1878.....	3,639,472,759	1873.....	3,993,780,000
1877.....	3,545,333,490		

It says:—The figures in our table represent, as nearly as figures can, the amount of white pine lumber cut from the forests of the North-west during the past nine years, and while in all reasonable probability they are considerably below the actual production, they represent the enormous aggregate of 39,881,229,261 feet. Loaded into cars it would just make a train that would about reach around the earth. To its producers it represents something like \$600,000,000 received for the stock in the rough. The forests of Michigan have contributed about three-fifths of the entire amount.

An examination of the table will show that for six years, 1873 to 1878 inclusive, the limit of production was under 4,000,000,000 feet. The last three years, however, show remarkable strides, each season overlapping its immediate predecessor by nearly or quite 1,000,000,000, and to this must be added the still more significant fact that at the present time the stock of manufactured lumber in first hands, or in the hands of wholesalers at distributing points is not sufficient to meet the requirements of the trade.

HORACE GREELLY had penmanship has passed into a proverb. No description of it without a fac-simile of the writing could convey any idea of its illegibility. It is charitable, however, to the old philosopher to suppose that the fault lay with the pens he had been accustomed to use, but what a world of grief and trouble would have been saved to the compositors if he had written his editorials with an Esterbrook Falcon Pen.

CURRIE BOILER WORKS

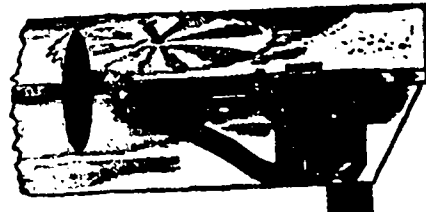
ESTABLISHED 1852

MANUFACTURERS OF

STEAM BOILERS.

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

CURRIE, MARTIN & Co.



TO MILLMEN!

HODGSON'S Patent Saw Grinder

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

Hodgson's Patent Monitor Shingle Machine

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

T. HODGSON, AMHERST, NOVA SCOTIA.

STEAM SAW MILL OWNERS

Have your Boilers thoroughly Inspected and Insured against Explosion by

The Canadian Steam Users' Insurance Association

HEAD OFFICE, 9 VICTORIA STREET, TORONTO.

SIR ALEX. CAMPBELL, President. GEORGE C. ROBB, Chief Engineer.
HON. JNO. McMURRICH, Vice-Pres. A. F. JONES, Secretary-Treasurer.

PARKER & EVANS

SOLE PROPRIETORS OF THE

FAMOUS INTERNATIONAL BOILER FLUID COMPOUND.

Patented 5th March, 1877.

This Compound will save its Cost many times in one year by saving fuel. It eradicates scale, and when the Boiler is once Clean a very small quantity keeps it Clean and Free from all Incrustation.

It is perfectly harmless to Iron, and emits a clear pure Steam.

In ordering, mention the CANADA LUMBERMAN.

504 St. Paul Street, MONTREAL.

C. H. FLEWWELLING Engraver on Wood

And ELECTROTYPED.

46 King Street, ST. JOHN, N.B.

NEWEST DESIGNS AND BEST WORK.

MACHINE CUTS A SPECIALTY.



A. LEARMONTH & Co.

ENGINEERS AND FOUNDERS,

MANUFACTURERS OF

Steam Engines, Rotary Pumps, of all sizes, for Paper and Pulp Mills, Steam Pumps, and a Variety of other Pumps, Propeller Engines for Yachts & Tow Boats.

Iron Railings, Hoisting Machines for Stores, Jack Screws, Park Mills, all kinds of Machinery for Mines, Saw Mills, Flour Mills.

St. Paul St.,

QUEBEC.



The Rainer Piano Always Triumphant!

CARRIES OFF THE HONORS OF 1880 AS FOLLOWS:

At Toronto Industrial Exhibition, 1st Prize, Diploma & Medal for Best Square Piano
At Hamilton Provincial Exhibition - - - - - 1st Prize and Diploma
At Brantford Southern Fair - - - - - 1st Prize and Diploma
At Guelph Central Exhibition - - - - - 1st Prize and Diploma

SEND FOR CATALOGUE.

RAINER, SWEETNAM & HAZELTON, MANUFACTURERS,

GUELPH, ONTARIO.

Taking Time by the Forelock.

Influential men in Australia are waking up to the importance of preserving the forests of that great continental island from further improvident destruction. The country is not over-abundantly supplied with woody growths, at the best, the interior being one vast arid waste, devoid of forests. Such being the peculiar character of its natural features, the question of the future rainfall and water-supply becomes an important one. Evils which attend the destruction of forests are already felt in many provinces in an increased dryness of climate, longer drouths, and more numerous bush fires. A lesson is learned in this respect from the history of New Zealand since the settlement of the English. During thirty-eight years ended in 1868 the annual destruction of New Zealand forests was twenty-three per cent., and in the five succeeding years twenty per cent. It is proposed in South Australia that a block of 200,000 acres of land be reserved for systematic tree planting, and that in the first year \$70,000 be expended on it, and in each of the eleven following years, \$52,000, a total expense of \$650,000. After the first five years there would be, it is estimated, a revenue from periodical thinnings, of \$172,000, and in twenty-one years the colony would possess 310 square miles of forest. —Northwestern Lumberman.

W. W. & J. H. BARROWS, of Cameron, Pa., have built a slide six miles long, from their lumber woods to their pond at Cameron. They expect to put in 4,000,000 feet of short logs and 2,000,000 of long timber.

It is stated that Capt. J. H. Williams, of Washington county, Pa., intends to plant 10,000 walnuts. He will sow them in rows; after two years will thin out, leaving only the thrifty trees; in five years will cut young walnuts for table logs; in eight years will cut again alternate trees for nowel posts; in ten years will begin to harvest nuts by the thousand bushels, and in fifteen years will have walnut logs to sell.

CUTLER & SAVIDGE are having a survey made for a new logging railroad in Montcalm county, Mich., to be twelve miles long. It will extend from the first lake above the Six Lakes dam, on Flat river, in a north-easterly direction, to a point nearly north of Cedar lake, reaching a large tract of pine purchased about a year since. The road is to be ready for operation on June 1, next. There is 175,000,000 feet of pine on the tract that this road will open up.

STEAM, SAW & SHINGLE MILL FOR SALE,

WITH

111 Acres of Land, Four Frame Houses, Etc.

Plenty Timber on Black River. Or, Mill and Limits two thirds cash.

T. COOPER, Cooper's Falls, Ont.

WANTED.

ABOUT

250,000 ft., board measure, of First Quality WHITE OAK TIMBER,

AND

100,000 feet of one-inch PINE BATTENS, for Car Sheeting.

For further particulars address P. O. Box 514, MONTREAL, QUE.

J. T. LAMBERT,

Lumber and Commission Agent.

FOR SALE.

150	Mils. White Pine,	1 x 10	Stock.
175	" do	1 x 12	"
11	" do	2 x 10	"
20	" do	2 x 12	"
140	" do	1 inch	Siding
20	" do	1 1/2	"
40	" do	2 x 10	Joists.
10	" Cedar,	3 x 6	"
19	" Basswood,	1 1/2	inch.

APPLY AT THE OFFICE,

WELLINGTON STREET, OTTAWA.

WANTED.

Cherry, White Ash, Black Ash, and Dry White Pine Lumber.

Quote Price delivered, and Carefully

Describe:—Quality, Widths, Length, Thickness, and how long Sawed.

ROBERT O. LOWRY,

Wholesale Lumber, 55 Pine Street, New York.

OTTAWA ESTIMATES.

The following is an estimate of timber expected to be manufactured in the Ottawa country during the lumbering season of 1881-2, as prepared by the Quebec Times:—

Name.	Locality.	Square White Pine Feet.	Board Timber Feet.	Square Red Pine Feet.
Barnet & Mackay.....	Bonnechere.....	250,000		230,000
Bell & Hickey.....	Temiscamang.....	180,000		10,000
Coe'ello Brothers.....	Madawaska (Private lands).....	30,000		20,000
R. Campbell & Son.....	Bonnechere.....	110,000		10,000
J. & G. Bryson.....	Keopawa.....	90,000	20,000	10,000
John R. Booth.....	Madawaska.....	130,000	100,000	
".....	Madawaska.....	70,000		10,000
".....	Keopawa.....	100,000		
Boyd Caldwell & Son.....	Madawaska.....	260,000		
A. Caldwell & Son.....	Mississippi.....	160,000		
R & W. Conroy.....	Madawaska.....	180,000	45,000	25,000
Pierre Charette.....	Oatneau (Private lands).....	50,000		
J. D. Dickson.....	River Ottawa (Ontario side).....	140,000		
".....	" (Quebec side).....	104,000	6,000	6,000
Alexander Fraser.....	River Coulonge.....	180,000		
".....	Madawaska.....	103,000		
Fraser & McCoshen.....	".....	120,000	50,000	60,000
McCoshen & Fraser.....	Sweyo.....	240,000		10,000
Sorenoy & Fraser.....	Temiscamang (Quebec Side).....	60,000		10,000
Allan Grant.....	Keopawa.....	800,000		100,000
Geo. A. Grier.....	".....	170,000		
Hillard & Dickson.....	Mississippi.....	100,000		
H. H. Klock.....	River Ottawa (Ontario side).....	180,000		
Oliver Latour.....	Keopawa.....	190,000	60,000	
".....	Temiscamang (Quebec side).....	80,000		40,000
T. & W. Murray.....	Black River.....	100,000		10,000
C. Mohr & Co.....	Madawaska.....	75,000	25,000	
William Mackay.....	".....	200,000		
".....	Amable du Fond.....	160,000		
David Moore.....	Keopawa.....	280,000	40,000	
".....	Dumoline.....	120,000		
J. P. Millar & Co.....	Black River.....	10,000		75,000
".....	Bonnechere.....	10,000		50,000
McLachlin Bros.....	Madawaska.....	270,000	30,000	160,000
A. McLean.....	Petawawa.....	270,000		80,000
Peter McLaren.....	Mississippi.....	300,000		
Richard Nagle.....	Madawaska.....	85,000	65,000	
Perley & Patco.....	Petawawa.....	120,000	10,000	
John Roche.....	Pocho Gatinoau.....	13,500		
Smith & Mackay.....	Madawaska.....	120,000		
Thistle, Carwell & Co.....	Petawawa.....	200,000	50,000	50,000
J. Francis & Co.....	Madawaska.....	160,000		20,000
Thibault & Egan.....	Chalk River.....	50,000		20,000
George Taggart.....	Block A.....	75,000	75,000	
Richard White.....	Black River.....	110,000	20,000	25,000
A. & P. White.....	Maganclippi.....	290,000		
".....	River Ottawa (Ontario).....	90,000		
J. K. Ward.....	River Rouge.....	60,000		
Young & Bronson.....	Petawawa.....			35,000
Allan Grant.....	Black River and Dumoline.....	110,000		
		7,347,000	626,000	1,025,000

TIMBER STUCK FROM 1881 WHICH WILL COME DOWN IN 1881.

Name.	Locality.	Square White Pine Feet.	Board Timber Feet.	Square Red Pine Feet.
Oliver Latour.....	Keopawa.....	200,000	75,000	53,000
David Moore.....	".....	168,500	18,000	600
".....	Dumoline.....	88,500		30,000
J. McLaren & Co.....	Temiscamang.....			2,820
McLachlin Bros.....	Coulonge.....	87,000	30,000	2,000
Sherman, Loni & Hurdians.....	Keopawa.....	7,700		
Richard White.....	Black River.....	80,000	15,000	
Young & Bronson.....	Petawawa.....	40,000		
		731,700	188,000	88,820

SUMMARY.

Total Timber expected to be manufactured during the winter of 1881-2.....	7,347,500	626,000	1,025,000
Total Timber stuck of 1881.....	731,700	188,000	88,820
Total.....	8,079,200	704,000	1,113,820

Ottawa, 26th December, 1881.

THE TIMBER QUESTION.

We find the following paper by Jas. Little, of Montreal, in the proceedings of the Montreal Horticultural Society:—

Witnessing, as I did, while engaged in the business of lumbering, in the western part of the Province of Ontario, how rapidly one extensive timber section after another was stripped of its commercial wood, my attention was necessarily drawn to an investigation of the extent and sources of supply, both in the United States and Canada, of a material so indispensable in the industries which minister to the welfare and well-being of every individual, rich and poor, of our whole people, and fully realizing that the question was beyond dispute one of the most momentous that could engage the attention of our authorities and statesmen, I have been laboring, for years, through the papers and in pamphlets, to impress upon them the necessity of adopting all possible measures for the preservation of our forests from waste, destruction by fire, the vandalism of the lumberers, and, by withholding from market such portions of our timber territory as remained unsold, keeping off, as long as possible, the terrible calamity of a fire to fan the country, but without

effect. On the contrary, the Governments of both Ontario and Quebec, through their Crown Timber officials, who are generally lawyers, and consequently totally ignorant of the duties they are appointed to administer, have been doing all in their power to hasten the stripping of the country of its invaluable timber resources, by throwing them on the market, year after year, without any reference whatever to the requirements of the trade, until a clean sweep has been made of every patch of timber held by both Provinces. No less than thirty-four townships in Ontario—the last the Province possessed—were put on the market three years ago, neither the officials nor the purchasers being, at the same time, aware that nine-tenths of the territory contained no timber of any commercial value, and the last limit held by our own Province of Quebec was disposed of but a few months ago; and this reprehensible course has been the means of stimulating production to such an extent, by bringing new operators into the field, that the foreign markets have been kept constantly glutted—the manufacturers, for several years prior to 1880, not realizing the cost of production. Instead of being obligated, as they should

have been, to cut the timber clean out of a place, the lumberers were all along allowed to run over their limits and pull out the best trees, from which one or two logs, as the case might be, that would saw out clear lumber were taken out of each, while the greater part was left to rot in the woods, or furnish fuel to burn up the remaining timber—and thus the most shameful waste and destruction were permitted to run riot. The officials at the head of the Crown Timber Department, in both Provinces, gave themselves no further trouble in the matter than that of collecting all the dues they could, their chief object appearing to be to show which party official, for the time being, could make the largest exhibit in his budget speech; while timber, of as much value—if standing to-day in the forest—as would pay off our national debt, has been lost to the country.

Referring now to the extent and condition of our timber supply of commercial value, we find that a clean sweep has been made of our oak and elm, which I had often heard spoken of as inexhaustible. That of both kinds, now reaching and shipped at Quebec, is the product of Ohio and Michigan. Our remaining supply of pine may now be said to be confined to the valley of the Ottawa, and the St. Maurice and Muskoka districts, and the question of their condition to supply our home consumption and respond to the foreign demand is one that we should look squarely in the face. We should try to arrive, as near as possible, at its actual state, and not deceive ourselves, as I fear we are doing, with regard to the amount of our forest wealth. I have no doubt many of your readers will be surprised to learn from the statement which I here make, and that without fear of contradiction, that we have not as much pine timber, fit for market, in the Muskoka and the St. Maurice together, as is cut in a single year in Michigan alone—nor is there now remaining in the valley of the Ottawa as much merchantable pine as is got out in Michigan, Wisconsin and Minnesota in two seasons' cutting. Every stream on the Ontario side has been lumbered on to its source, and, with the exception of the limits recently sold, the same may be said as respects the Quebec side of the Ottawa, and the whole territory, with the exception above referred to, has been culled over to such an extent for clear logs and square timber, that its production of the latter, which averaged, a few years ago, from 80 to 100 feet to the stick, is now brought down to from 40 to 50 feet, and to secure a raft of the latter dimensions necessitates the culling over of a large extent of territory. The larger square timber shipped from Quebec to the British markets is now got out on the south shore of Lake Superior, in the upper peninsula of Michigan, which also supplies nearly all the board-wood logs for the same market.

Our Government gives us no information with regard to the amount of lumber manufactured in the country, or of the industries in which it is consumed. They think a statement of the amount yearly shipped out of the country is all that is worth while submitting to the people. But we may, in some measure, form an estimate of its requirements in the industries of our community, apart from that of house building and the like, by consulting the census returns of the United States, which furnish valuable and highly interesting statistics on the subject relating to their consumption. The census of 1870 reports 63,938 establishments manufacturing articles made entirely from wood, and employing 313,387 persons, and using material worth \$309,921,401. There were besides 109,512 industries in which wood is an important part, for example, carriages, furniture, bridges, ships, &c., employing 700,915 persons, and using material worth \$488,530,844; 250,000 cubic feet of the best pine were consumed in making 20,000,000,000 matches. At least 125,000 miles of fencing were required to enclose the railways of the country, which, says Professor Sargent, could not cost less, on an average, than \$700 a mile, one-half of which would barely represent the wood employed, or \$43,000,000, while they must take annually to the value of \$10,000,000 to keep them in repair. It required the stripping of 36,000 acres, principally pine, to burn the bricks of that year. The value of pine packing boxes in 1850 was \$1,000,000, while in 1879 they

were valued at \$6,200,000, and in 1874 at \$12,000,000. The value of lumber converted into agricultural implements, in 1850, was \$8,000,000, while their total value in 1870 had reached the enormous sum of \$73,000,000, of which the forest must have furnished \$20,000,000; 34,000,000 million sleepers, or thirty years' growth on 68,000 acres of the best natural woodland, or, if the sleeper is artificially raised, some 700,000 acres would be required, planted with trees solely adapted to the purpose, regularly cropped and scientifically managed to supply the railways already constructed. The census of 1872 shows 63,000 miles of telegraph, which required for their construction 1,600,000 trees, for poles; while the annual repairs call for 250,000 more. The manufacture of shoe pegs consumes annually 100,000 cords of white birch, worth \$1,000,000.

Now, when we add fifty per cent. to the foregoing exhibit of the partial uses of wood and its value at the present time, can we, with the utmost stretch of imagination, conceive the consequences to the community when the supplies for those industries alone, with their vast yearly increasing requirements, are cut off? The terrible calamity of the calamity cannot be grasped by the mind, and will only be realized when a dearth of timber takes place—a calamity which, in a comparative degree, we must share with our neighbours across the line, and although it is certain to reach us in a few short years, not the slightest thought has yet been given to the subject by those having control of our affairs—whether of one political party or the other—and our lumbermen are now in the woods, with double force, slashing away as if timber was some noxious product which it was necessary to extirpate and rid the country of as rapidly as possible. The United States Government, awake, at last, to the necessity of endeavoring to make provision against the evil day of a timber famine, have established a department and schools of forestry, and set apart a large portion of their domain for tree planting—giving the settler a free deed of the lot he may select, on condition that he plants a certain number of acres of it in trees—and I find that over 2,000,000 acres have been taken up for settlement, on such terms, within the past year alone. But they have commenced too late. It takes a century to grow a standard pine saw log, and the expert they employed to estimate pine timber in Michigan, Wisconsin, and Minnesota, which contain all they have from here to the Rocky Mountains, gives them a supply but for one-tenth of that time, and, when we take into account that a million and a half of consumers will be yearly added to the population—their whole stock, at their own excessive estimate, will be swept away before their plantations afford timber for a hoe handle.

I have watched the course pursued by the lumberers of both the United States and Canada, and it has been reckless in the extreme. A Mr. Ward, of Michigan, is the only one among them who, it appears, is able to take a common-sense view of the question of supply and demand. While others have been slaughtering away their timber and laboring hard to get rid of it, as if of no value, he has been quietly picking up the most valuable lots, and has now secured in Michigan, Wisconsin and Minnesota some 2,500,000,000 of feet, from which he is sure of realizing, as it stands in the woods, \$25,000,000 in five years, and double that sum within a decade, should he keep it so long. He is, besides, now turning his attention to the timber lands of Washington territory and the South, and certain it is he will run both Jay Gould and Vanderbilt, the railway kings, a close race in the millions, and that at a comparatively insignificant outlay, and with but little trouble or anxiety to himself.

The Western papers inform us that a 100 acre lot of pine was recently sold, in Western Ontario, for \$22,000, or about as much as would purchase half a dozen farms with their buildings and improvements in the same neighbourhood, and near Guelph, where pine timber on a farm lot was looked upon, a few years ago, as an eyesore, \$1,000 were recently refused for ten trees which would not occupy half an acre of ground. Our lumberers might surely learn a lesson from these facts. It is evident that the owner of timber land who sat quietly by without lifting

an axe has been making more money than if he had been at work in the most productive gold mine. His bonanza is secured, and he will be able to realize its full value in the near future. When, from the falling off of supplies from the West, our lumberers will be called on to furnish the consumption of both white pine and spruce of New York and the Eastern States, requiring them to double their present manufacturing capacity, and enabling them to fix both terms and price.

Our average exportation of forest products for the five fiscal years from 1871 to 1875, inclusive, amounted to \$25,246,781 a year, and was largely in excess of our exportation of cereals for the same time. From 1875 to 1880 the exportation of wood goods largely fell off, which was one of the chief causes of the depression which over-spread the country during that time. But when this source of revenue totally ceases, and we are necessitated to import wood for our own home consumption, and when, besides, our foreign markets are at the same time flooded with wheat and cattle from the Northwestern Provinces, reducing the price of our farm products to the lowest point, a condition in which the statesmen of both our political parties, by rushing the country into ruinous debt in the interests of the Northwest, have been laboring to place us—your readers will, I think, find but little trouble in figuring out for themselves the state of things that must then exist in both Ontario and Quebec, from such adverse circumstances.

THE PINE AND THE WALNUT.

A mile or so from the gray little town
Of Newcastle, perched like a gull by the sea,
On the Kittery side (where the banks shelve down
To the lovely river's golden brown),
There towered, long since, an old pine tree.

And across the stream, in a right boe-line,
Like a sentry guarding the ruined fort,
Was a large-limbed walnut, where the kino
Huddled together in shower and shine,
Nibbling the herbage, sparse and short.

Summer and winter those brave old trees
Watched the blue river that slipped between—
Leaned to the sunshine and drank the breeze,
Clothed like emperors, taking their ease,
Now in ermine, now in green.

Many a time, when I was a lad,
I drifted by with suspended oar,
The wind in the walnut seemed so sad!
But, ah! what a blustering voice it had
In the rugged pine on the other shore.

And often, in restless slumber tost,
I seemed to be drifting down the tide,
Hearing the strident wind as it crost—
To die away like a murmuring ghost
In the drooping boughs on the farther side.

Perhaps 'twas a boyish fantasy—
The dream of a dreamer, half afraid—
That the wind grew sad in the walnut tree,
But surged through the pine like the surging sea,
With a sound of distant cannonade!

Only a fantasy! Who can tell?
But I think 'twill haunt me to the end,
Seeing what curious things befell
The walnut tree and the pine as well—
For they went together friend and friend!

From a sullen cloud broke war at last,
And a grim sea-dog of the quarter deck
Took the quaint old pine for a mizzen-mast;
In the flame of battle his spirit past,
And the mizzen dragged by the shattered wreck.

With the Union Jack across him laid,
They bore him back to the town by the sea,
The guns at the yard his requiem played,
And the admiral's coffin, it is said,
Was shap'd of the planks of the walnut tree!

A GREAT ENTERPRISE.—The Hop Bitters Manufacturing Company is one of Rochester's greatest business enterprises. Their Hop Bitters have reached a sale beyond all precedent, having from their intrinsic value found their way into almost every household in the land.—Graphic.

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

SORE THROAT.—Apply Haggard's Yellow Oil and take inwardly according to directions. Yellow Oil is the best remedy for rheumatism, Neuralgia, Bruises, Burns, Frost Bites and all lameness, inflammation and pain. No household should be without it.

Chips.

A PROMINENT lumberman in Burlington has had his coat-of-arms painted on the panels of his carriage, with the Latin motto, "Vidi."

THOMAS NESTER, of Saginaw, Mich., will put in 20,000 feet of logs this winter, from his Michigan lands, while he puts in his own time among the orange groves of Florida.

THE *Manistee Advocate* says that many competent judges engaged in lumbering think that the log crop this season will be much smaller than last year, notwithstanding the high price of lumber. Provisions and wages are so high that lumbering is very expensive, and many timber owners prefer to let their pine stand to cutting it at present.

THE *Timber Trades Journal* says the consumption outside of the United Kingdom, and even of Europe—South America, for instance—for housebuilding materials is an ever-increasing one, and, as fashion leads the way, each succeeding season the demand for suitable timber for constructing cities on the European model will give an impetus to trade that will materially assist the market when temporarily overburdened.

THE *Northwestern Lumberman* says that a bombshell, supposed to have been fired by Union troops during the war, was encountered in a large white oak log at a saw mill near Augusta, Ga., recently. A circular saw was going through a piece of timber when it struck a hard substance, which broke its teeth and stopped progress. Examination revealed, buried in the wood to the depth of eight inches, a large percussion bombshell, which, according to the calculations of those familiar with the growth of timber, has been there sixteen or seventeen years, and the tree has grown over it until there was but a slight scar left. It was found to be loaded.

MR. CARLWOOD has charge of a lumber camp on Pinery Point, Ponetanguishene, for Mr. Dodge. He and his men were fortunate in discovering a hollow tree, with about a bushel and a half of the meats of nicely peeled beech-nuts, carefully stowed away, and which were, of course, unhesitatingly appropriated. As if robbing a squirrel's nest of the winter supply was not enough, they also discovered a "bee tree," in the hollow of which was deposited about three hundred pounds of the purest honey. None of the discoverers had any compunctions as to its being wild honey, but cheerfully accepted their share of the booty, regardless of the protests of the bees, and wended their way homeward bending under the weight of the saccharine treasure. That was a lucky find.—*Herald*.

THE *Muskogon Reporter* says that four saw mills are running yet. About a dozen were obliged to shut down on Saturday, 21st Dec., either from the want of logs or room to pile the lumber. Never before has the sawing of lumber continued so late in the season as this year—being all of a month later on the average than in times past. The loss of time by the two weeks' strike in the fall has more than been made up. Had the booming company continued rafting with a full force of men up to the present, fully 600,000,000 feet of logs would have been handled and delivered to the several mill booms this season; as it is, the amount does not exceed 550,000,000. Navigation is closed, and upwards of 70,000,000 feet of lumber are on the several mill docks here—fully two thirds of which is sold.

INGENUOUS INVENTION.—Some shrewd Yankee has invented a key that will wind any watch; it is a neat attachment to a charm, and it is said to work like a charm. So does the grand Key to Health—Burdock Blood Bitters, the greatest discovery of the age. It unlocks all the secretions, and cleanses and invigorates the entire system. Sample bottles, 10 cents; large size, \$1.00 of all medicine dealers.

WHERE IGNORANCE IS BLISS 'TIS FOLLY TO BE WISE.—Dr. Bliss if not a success at probing for bullets, was highly successful in despatching bulletins; but the grandest bulletin of success is that which heralds the wonderful cures performed by Burdock Blood Bitters, that matchless tonic and blood purifier which acts at once upon the Bowels, the Skin, the Liver and the Kidney, while it invigorates and strengthens the whole system.

ST. JACOBS OIL
TRADE MARK



THE GREAT GERMAN REMEDY FOR RHEUMATISM,

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

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

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

Directions in Eleven Languages.
SOLD BY ALL DRUGGISTS AND DEALERS IN MEDICINE.
A. VOGELER & CO.,
Baltimore, Md., U. S. A.

PORTLAND FOUNDRY.

JOSEPH McAFEE,
(LATE ANGLIS McAFEE.)

Warehouse, Main St., St. John, N.B.

AGRICULTURAL IMPLEMENTS.

MANUFACTURER OF

Cooking, Ship, Parlor & Office Stoves

MILL CASTINGS

Ship Windlasses, Capstans, and Ship Castings of all kinds, (MADE TO ORDER.)

Power Capstans, Patent Ship Pumps With Copper Chambers. 1115

Lead Scuppers & Water Closets & all goods in my line for Ships' use.

Work done to Order with Quick Despatch.

IRWIN & BOYD

Commission Lumber Dealers,

FORWARDERS,

Shipping & General Agents

PORT HOPE. 1117

D. S. BRIGGS,
9 TORONTO STREET, TORONTO.
WHOLESALE DEALER IN
Clear, Pickings, Common and Hardwood
Lumber, Lath, Shingles, &c.
BILL STUFF CUT TO ORDER. 1111

J. K. FOST & CO.
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y. 1111

J. & F. N. TENNANT
Dealers in all kinds of
Lumber, Lath & Shingles.
Office, Union Loan Building,
Toronto Street, Toronto. 1117

S. S. MUTTON & Co.,
Wholesale Lumber Dealers
TORONTO.
We have for Sale a large quantity of PINE, OAK, WHITEWOOD, ASH, CHESTNUT, CHERRY, BUTTERNUT, BASSWOOD, &c.
S.P.S.—A SET OF TUB MACHINERY FOR SALE, CHEAP—OR EXCHANGE FOR LUMBER. 1117

A. L. UNDERWOOD
WHOLESALE DEALER IN
White Pine, Basswood & Hardwood,
82 King Street East,
TORONTO, ONT. 1117

'XMAS PRESENTS!
TRY
F. CRUMPTON,
"The Jeweller,"
83 King St. East, Toronto.
WATCHES,
DIAMONDS,
JEWELRY,
SILVERWARE,
CLOCKS, Etc.,
Suitable for 'Xmas Presents.
S.P. PRICES WILL BE FOUND
10% CHEAPER THAN HOUSES
WHO ADVERTISE
LARGE DISCOUNTS.
TRY HIM!
Goods sent by mail or
express. Perfect satisfaction
guaranteed. 112

BAMBOO FOR OREGON.

The American Consul-General at Shanghai has lately sent twenty boxes of bamboo cuttings for transplanting in Oregon. He writes to the State Department that in the Chinese Empire, south of the Yang-tze, about sixty varieties of bamboo are said to grow, although five or six furnish the principal materials used. At Foo-chow and Swatow, the large size grows 40 to 50 feet high and 6 or seven inches diameter; on the island of Formosa it is found even larger.

The bamboo serves at least five hundred different purposes in China. The roots are carved into images, lantern handles, and canes, the tapering culms are used for every conceivable place where poles and ribs can be put; the leaves can be worked into thatches, umbrellas, and screens; cut into splints, the wood is woven into baskets, plaited into awnings, and twisted into cables; the shavings stuff pillows; other parts supply chop-sticks for eating, beds for sleeping, brooms for sweeping, pipes for smoking, fuel for cooking, skewers for the hair, paper for writing, rods for whipping, tables to eat on, buckets for water drawing, and the tender shoots are highly esteemed as a vegetable to be eaten. The consul-General urges the naturalizing of the bamboo in the Southern States and on the Pacific coast.

P. T. BARNUM FALLS INTO LINE.—Scanning our various exchanges, we notice special distinction given in prominent New York dailies to Barnum, Bailey & Hutchinson's strong endorsement of St. Jacobs Oil as a pain-reliever. They too, have fallen into line, it would seem.—Cincinnati (O.) Enquirer.

J. L. Goodhue & Son

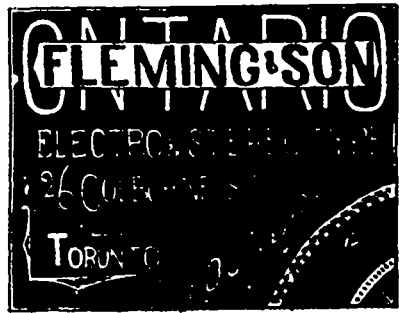
MANUFACTURERS OF

Leather Belting!

—AND—

Patent Lace Leather.

DANVILLE, P. Q.



We have added to our plant all the latest improved machinery for Electro and Stereotyping, and the manufacture of Printers Furniture, facilities for executing work which no other establishment in the Dominion possesses, and not excelled by any on the continent. A large assortment of various cuts constantly on hand.
FLEMING & SON,
26 Colborne St., Toronto.

"NIL DESPERANDUM."

TRADE MARK. Important to Nervous Sufferers.



THE GREAT ENGLISH REMEDY for Nervous Debility and all Nervous Affections, including Spermatorrhoea, Seminal Weakness, etc., result of Self-abuse, Indiscretion, &c. is **GRAY'S SPECIFIC MEDICINE.** This is the only remedy which has ever been known to permanently cure Palpitation and other affections of the Heart, Consumption in its earlier stages, Rushing of blood to the head, Wind in the Stomach, Indigestion, Loss of Memory, Want of Energy, Rashfulness, Desire for Solitude, Low Spirits, Indisposition to labor on account of weakness, Universal Lassitude, Pain in the back, Dimness of Vision, Premature old age, etc. Full particulars in our pamphlet which we send securely sealed on receipt of a cent stamp. The Specific is now sold by all Druggists at \$1 per package, or 6 for \$5, or will be sent free of charge on receipt of money by addressing **THE GREY MEDICINE CO., 3 Mechanics' Block, Detroit, Mich.**



1121



NOTICE TO CONTRACTORS.

RE-LETTING.

SEALED TENDERS addressed to the undersigned will be received at this Office until WEDNESDAY, the 18th instant, at noon, for the completion of the work remaining to be done at Greece's Point, towards the enlargement of the lower entrance of the Grenville canal.

Plans and specifications can be seen at the Office of the Superintendent Engineer, Ottawa, or that of the Resident Engineer at Grenville.

Each tender must be accompanied by an accepted cheque for the sum of one thousand dollars (\$1,000), made payable to the order of the Honorable the Minister of Railways and Canals, which will be forfeited if the party declines to enter into a contract when called upon to do so. If the tender be not accepted, the cheque will be returned.

The department does not bind itself to accept the lowest or any tender.

F. DRAUN,
Secretary.

Dept. of Railways and Canals,
Ottawa, 4th January, 1882. d7 2aw 112

LEATHER BELTING.

Chipman, Renaud & Co.

MANUFACTURERS OF

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

124 & 126 Queen St.

MONTREAL

MACK'S MAGNETIC MEDICINE.



is a Sure, Prompt and Effectual Remedy for Nervousness in ALL its stages, Weak Memory, Loss of Brain Power, Sexual Prostration, Night Sweats, Suppurative Torrhoea, Seminal Weakness, and General Loss of Power. It repairs Nervous Waste, Rejuvenates the Jaded Intellect, Strengthens the Enfeebled Brain and Restores Surprising Tone and Vigor to the Exhausted Generative Organs. The experience of thousands proves it an **INVALUABLE REMEDY.** The medicine is pleasant to the taste, and each box contains sufficient for two week's medication, and is the **cheapest and best.** Full particulars in our pamphlet, which we desire to mail free to any address.

Mack's Magnetic Medicine is sold by Druggists at 50 cts. per box, or \$2 for \$3, or will be mailed free of postage, on receipt of the money, by addressing **MACK'S MAGNETIC MEDICINE CO.,**

d133-w49-123 Windsor, Ont., Canada.
Sold by all Druggists in Canada.

HOP BITTERS NEVER FAIL

If you are a man of business, weak of memory, or suffering by the strain of your duties, avoid stimulants and use Hop Bitters.

If you are young and delicate or dispirited or single, old or poor-blooded or languid, get on a bed of sickness, rely on Hop Bitters.

Whoever you are, whenever you are, if you feel that your system needs cleansing, toning or stimulating, without intoxicating, take Hop Bitters.

Save your appetite, improve your memory, and give your system a tonic, by using Hop Bitters.

If you are a man of business, weak of memory, or suffering by the strain of your duties, avoid stimulants and use Hop Bitters.

If you are young and delicate or dispirited or single, old or poor-blooded or languid, get on a bed of sickness, rely on Hop Bitters.

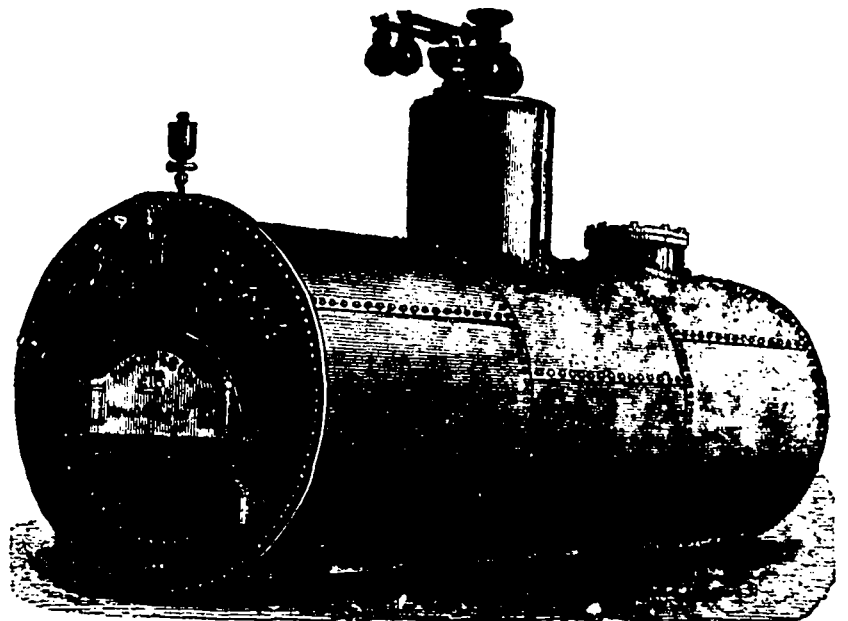
Whoever you are, whenever you are, if you feel that your system needs cleansing, toning or stimulating, without intoxicating, take Hop Bitters.

Save your appetite, improve your memory, and give your system a tonic, by using Hop Bitters.

D. I. C.
is an absolute and irrefragable cure for urticaria, eczema, and all other eruptions of the skin, and is the only safe and effective remedy for these diseases.

Sold by Druggists and Grocers.

HOP BITTERS
D. I. C.



ACADIA FOUNDRY
J. MATHESON & CO. ENGINEERS & BOILER MAKERS. NEW GLASGOW, N.S.

ADAM MCKAY

MANUFACTURER OF
Steam Engines and Boilers,

AND ALL KINDS OF MACHINERY.
Locomotives, Stationery and Marine Engines and Boilers, Girders, Heaters, Radiators, and all kinds of Steam and Brass Fittings and Sheet Iron Work; and dealer in all classes of Railway, Steamboat and MILL SUPPLIES.

144 Upper Water Street, HALIFAX, N.S.

John McGregor & Sons,

MANUFACTURERS OF ALL KINDS OF
STATIONARY,

MARINE, and

LOCOMOTIVE BOILERS,
And **SHEET IRON WORK.**



Portable Boilers for Threshing Machines, Shingle Mills, etc., furnished on short notice. All Boilers tested by cold water pressure to 100 lbs. to the square inch before leaving the shop.

SECOND-HAND MACHINERY.

BOUGHT, SOLD, OR TAKEN IN EXCHANGE FOR
NEW WORK.

Repairs Promptly Attended to.

188 Water Street, Detroit, Mich.
BRANCH SHOP,
Cor. Gleggarry Ave. & Stuart St.
1111 WINDSOR, ONTARIO

UNION FOUNDRY

Union Street, --- Carleton,
Warehouses, Water Street,

ST. JOHN, N. B.

Allan Brothers

(Late of Harris & Allen)
MANUFACTURERS OF ALL KINDS OF

Steam Engines

AND
MILL MACHINERY.

Ships Windlasses, Iron Capstans
and Ships CASTINGS of all kinds.

Ships Cambooses & Cabin Stoves
COOKING AND HEATING

STOVES,

Shop, Office and Parlor Stoves, and Franklins.

Agricultural Implements.

BRASS CASTINGS.
Tin, Sheet Iron and Copper Ware for SHIP and HOUSE use.

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

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

1117

SAINT JOHN, NEW BRUNSWICK.

ROBIN & SADLER

594, 596, 598, St. Joseph St.

MONTREAL

Manufacturers

of

HOSE,

Lace Leather,

Mill Supplies, &c.

1113

Wrought Iron Shanty Cook Stoves

The Best Article ever offered to the Trade.

I have much pleasure in drawing attention to my **WROUGHT IRON COOKING STOVE**, for Shanty, Hotel and Boarding House use. These Stoves are made of **Heavy Sheet Iron**, the top and lining of the fire-box being of **Heavy Cast Metal** and all the connecting parts of substantial **Wrought Iron Work**. The dimensions of these Stoves are as follows:—

SINGLE OVEN STOVE

Top surface contains six 10-inch holes, with ample room between, and one oven 10 x 21 x 26.

DOUBLE OVEN STOVE

The Double Oven has a top surface containing twelve 10-inch pot holes, with two ovens, each 16 x 21 x 26. One fire-box of suitable size for area to be heated. Below will be found Testimonials from some of the leading Lumbermen, who have used my Wrought Iron Cook Stoves since I commenced manufacturing them. They are the names of gentlemen who are well known and reliable, and will carry more weight than any recommendation of my own could do.

The Best Stove I have ever Used.

PETERBOROUGH, May 31, 1880.

ADAM HALL, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our Lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

PETERBOROUGH, June 1st, 1880.

ADAM HALL, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, IRWIN & BOYD,

Gives the Greatest Satisfaction.

PETERBOROUGH, June 3rd, 1880.

A. HALL, Peterborough. Dear Sir,—I have had the Wrought Iron Cook Stove, purchased from you, in constant use ever since last fall, and it gives the greatest satisfaction in every respect. I can recommend them highly to any one who is in the lumber business.

Very truly yours, GEO. HILLIARD, M.P.

EVERY STOVE GUARANTEED

All the necessary **TINWARE** and **CUTLERY** for Shanties supplied at the **Lowest Prices.**

117

ADAM HALL, Peterborough.

D. McLACHLAN & SONS,
 Manufacturers of all Descriptions of
STEAM BOILERS.

SHIPS' WATER-TANKS. Repairing Punctually Attended to.

1115

NORTH SLIP, ST. JOHN, NEW BRUNSWICK.

ABRAMS & KERR

MANUFACTURERS OF

Steam Engines, Mill Gearing, Rotary Mills, Shafting, Planers, Hangers, Pulleys, Variety Moulders.

SPECIAL MACHINERY MADE TO ORDER

Latest Improved Spool and Bobbin Machinery.
Every Variety of Heavy and Light Casting.

1119

Foundry and Machine Shop on City Road,
ST. JOHN, NEW BRUNSWICK.



ESTABLISHED 1874.

ESTABLISHED 1874.

Norman's Electro Curative Appliances

RELIEVE AND CURE

Spinal Complaints, General and **NERVOUS DEBILITY**, Rheumatism, Gout, Nervousness, Liver, Kidney, Lung, Throat and Chest Complaints, Neuralgia, Bronchitis, Incipient Paralysis, Asthma, Sciatica, Sprains, Consumption, Sleeplessness, Colds, Indigestion.

Ask for Norman's Electric Belts and you will be safe against imposition, for they will do their work well and are cheap at any price.

A. NORMAN, Esq.,

Dear Sir,—Please send me a waist belt. Enclosed find price. Head band I got for my wife has almost cured her of neuralgia. Yours truly,

WATERVILLE, N. B.

C. L. TILLEY.

Numerous of such testimonials can be seen at my office, proving that they are doing a good work and worthy the attention of all sufferers. Circulars free. No charge for consultation.

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

N.B.—Trusses for Rupture, best in America, and Electric Batteries always on hand at reasonable prices.

1112

OAK HALL

Nos. 115, 117, 119, 121, King St. East, Toronto.

We are the most Extensive **CLOTHIERS** in Canada.

We carry a **STOCK** of **FIFTY THOUSAND DOLLARS** to choose from.

We watch the interest of our Customers. Our stock is **FULL** of the very best goods in **Scotch, English and Canadian Tweeds.**

We **BUY** and **SELL** for Cash, therefore it enables us to do business on very **SMALL PROFITS.**

NOTE THE PRICES.

We give a Good Tweed Suit for.....\$6 00

We give a Good Tweed Pants for..... 1 50

We give a Good Overalls for..... 0 35

LUMBERMEN!

When you visit Toronto, come direct to **OAK HALL**, and fit yourselves out with a Good Suit. Remember the address—**OAK HALL**, the Great One Price Clothing House, Toronto, opposite St. James' Cathedral.

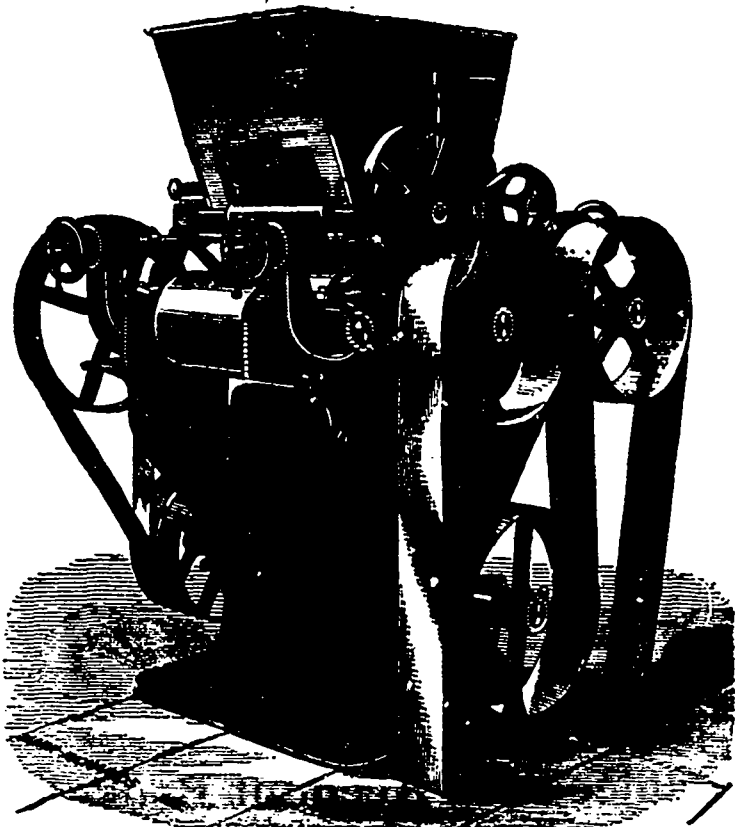
113

Flour Making by the New Process

GRAY'S PATENT NOISELESS ROLLER MILL

A Model of Perfection!
Every Mill a Success!

CORRUGATIONS of all Descriptions.
Smooth Iron or Porcelain ROLLS.



These Roller Mills are used by all the Representative Millers of the United States.

The Machine is Perfect in all its adjustments, and RUNS WITHOUT NOISE.

It is doing Better Work than any other Machine in use.
Automatic Lubrication of Principal Bearings.
Driven entirely by BELTS.
Differential Speed always insured.

WEYMAN'S NEW IMPROVED PATENT Porcelain Rolls

The BEST ROLL FOR MIDLINGS in the world. Over 6000 in use in this country and Europe. Send for particulars.

MILLER BROS. & MITCHELL,

Nos. 110, 112, 114 and 116 KING STREET

MONTREAL.

SOLE LICENSEES FOR DOMINION.

Manufacturers of Improved Hoisting Machinery, MINING and CONTRACTORS' PLANT. Importers of BEST STEEL WIRE ROPE. Mention this Paper.

1119

Northey's Steam Pump Works

BOILER FEED PUMPS, MINING PUMPS,
AIR AND CIRCULATING PUMPS, PUMPS SPECIALLY ADAPTED for
STEAM FIRE PUMPS, and OIL PIPE LINES,
WRECKING PUMPS. And CITY WATER WORKS.

No. 47 King William Street.

HAMILTON, ONTARIO.

SEND FOR CIRCULAR.

1112

MILL SUPPLIES.

Extra Stretched and Patent Smooth Surface

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

DISSTON'S CELEBRATED MILL SAWS.

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

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

1121

ESTABLISHED 1820.

EAGLE FOUNDRY!

GEORGE BRUSH

14 to 34 King and Queen Streets, MONTREAL,

MAKER OF

Steam Engines, Steam Boilers, Hoisting Engines, Steam Pumps,
CIRCULAR SAW MILLS, BARK MILLS, SHINGLE MILLS,
Ore Crushers, Mill Gearing, Shafting, Hangers and Pullies, Hand and Power Hoists for Warehouses, &c., &c.,

AND AGENT FOR

1123

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

HEADQUARTERS FOR INSERTED TOOTH SAWS!

THE BROOKE BITT SAW,
With interchangeable Trenton Teeth.

THE HOE BIT SAW.

FLANGE TOOTH SAWS.

Write McLachlan Bros., Amptor, as to how they like 2-06 inch brooke bitt, and 2-06 inch Hoe Saw—running 800 revolutions per minute on 10 to 15 inch feed. Also, E. F. Parson's, Amptor, running 60 on brooke bitt on 6 inch feed—800 revolutions per minute; cut 500,000 feet with two sets of bits, costing less than \$10.00.

ORDER BY THIS GAUGE.

EWART'S PATENT DRIVE CHAIN
FOR SAWDUST CARRIERS, LIVE ROLLS, TRIMMERS and REFUSE CARRIERS.
BROWN'S PATENT SPALT MACHINE
FOR SAWDUST CARRIERS out of inch board. Cuts shingles out of slab and all manner of refuse. Will soon pay for itself around any large Mill.

AUTOMATIC GANG TRIMMERS, SIX SAW EDGES, and the most improved SAW MILL Machinery. PORTABLE SAW MILLS OUR SPECIALTY

Address, WATEROUS ENGINE WORKS CO., Brantford, Canada.

Cuts three perfect shingles out of inch board. Cuts shingles out of slab and all manner of refuse. Will soon pay for itself around any large Mill.

AUTOMATIC GANG TRIMMERS, SIX SAW EDGES, and the most improved SAW MILL Machinery. PORTABLE SAW MILLS OUR SPECIALTY

Address, WATEROUS ENGINE WORKS CO., Brantford, Canada.

LUMBERMEN'S STATIONERY.

We will supply anything in the line of BLANKS or STATIONERY for Lumber Shanties and Offices at City prices.

Shanty Settlements

Shanty Orders

Shanty Receipts

Shanty Time Books

Shanty Log Books

Shanty Reports

Shanty Ledgers

Shanty Cash Books

Shanty Way Bills

Drive Books

Office Letterheads

Office Noteheads

Office Envelopes

Office Cards

Office Notes

Office Drafts

Office Orders

Office Receipts

Office Blank Books

Office Ship Account Books

And everything necessary to a complete office outfit.

All Printing done in the Highest Style of the Art, and at Lowest Living Prices.

Book-Binding of every Description got up in a very Neat and Superior manner.

Account Books Ruled and Bound to any desired Pattern.

For Schedule of Prices address, describing the kind and quality of work desired,

TOKER & CO.,

"THE CANADA LUMBERMAN,"

PETERBOROUGH, ONTARIO.

HART EMERY WHEEL COMPANY, Limited

HAMILTON, CANADA.

GILBERT HART, Detroit,
President.

JAMES T. BARNARD, Hamilton,
Secretary-Treasurer.

SAMUEL BRIGGS, Hamilton,
Superintendent.

MANUFACTURERS OF THE CELEBRATED

DETROIT

EMERY and CORUNDUM WHEELS

These Wheels are

Wire Strengthened



And Specially Adapted

For Saw Gumming

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

They Surpass All Other Wheels for Free Cutting and Durability.

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

Messrs. SHURLEY & DIETRICH,
GALT.

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

JAMES ROBERTSON, ESQ.,
MONTREAL.

Messrs. JAMES ROBERTSON & CO.,
TORONTO.

WE ALSO REFER TO

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

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

EMERY WHEELS FOR SAW GUMMING!



Solid Emery Wheels are now almost in universal use for the purpose of gulletting and gumming saws. Statistics show from 2,000 to 3,000 saw-mills in the United States. Many of these run only a single saw each. A one-saw mill would use one or two wheels a year, costing \$3 to \$4 each, and when such small mills order single Emery Wheels from the factory, the express charges often equal the cost of the wheel. There was a time when the quality of Emery Wheels was so uncertain, and the demand so sickle, that storeroom men could not afford to carry them in stock. Now, however, Saw Gumming Wheels have become as staple an article as files, and every dealer in saws, hardware and mill supplies can afford to carry a few dozen standard sizes in stock, large dealers order stocks of \$500 to \$750 worth at a time. Saw Gumming Wheels are used with the edge (or face) square, round or beveled. Probably seven-eighths of all in use are beveled.

The principal sizes are:

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

Probably more wheels 12x $\frac{1}{2}$, 12x $\frac{3}{4}$ and 12x $\frac{7}{8}$ are used than all the other sizes together. Saw Gumming Wheels are used, however, of all sizes up to 21x1. The most frequent complaint is that Emery Wheels harden the saw so that a file won't touch it. The answer is that you don't want a file to touch it. An expert workman will shape and sharpen the teeth with an Emery Wheel, leaving the teeth case hardened, in which condition the saw will cut about 33 per cent. more lumber than a soft saw will. Those who want to use the file, however, have only to touch the saw lightly a second time (after going all over it once), and this second touch will cut through the case-hardened scale.

A QUESTION OF QUALITY.

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

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

CLASS 3. MEDIUM-SOFT.—The same as to coarseness and fineness as "Class 2," but a *softer*, and therefore freer cutting wheel.

CLASS "POCONO." EXTRA SOFT.—This Wheel we prefer to all others. It is both *finer* in grain and *softer* than either of the above. As a Saw Gumming Wheel, Class "Pocono" is specially suited to those practical and experienced sawyers who know how to grind with a light touch, and who want a free cutting wheel that will not create much heat.

Illustrated Circulars and Catalogue, showing Cuts of Saw Gumming Machines, and Shapes, Sizes and Prices of Wheels, sent free on application. 115

The Tanite Co. Stroudsburg, Monroe Co. Pennsylvania

CANADIAN TRADE SPECIALLY SOLICITED.

M. Covel's Latest Improved Automatic Saw Sharpener!

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

**CIRCULAR SAW
STEAM FEED!**

I would also call special attention to my

Heavy Circular Saw Mills

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

GRAVENHURST, August 20th, 1880.

WM. HAMILTON, Esq., Peterborough.

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

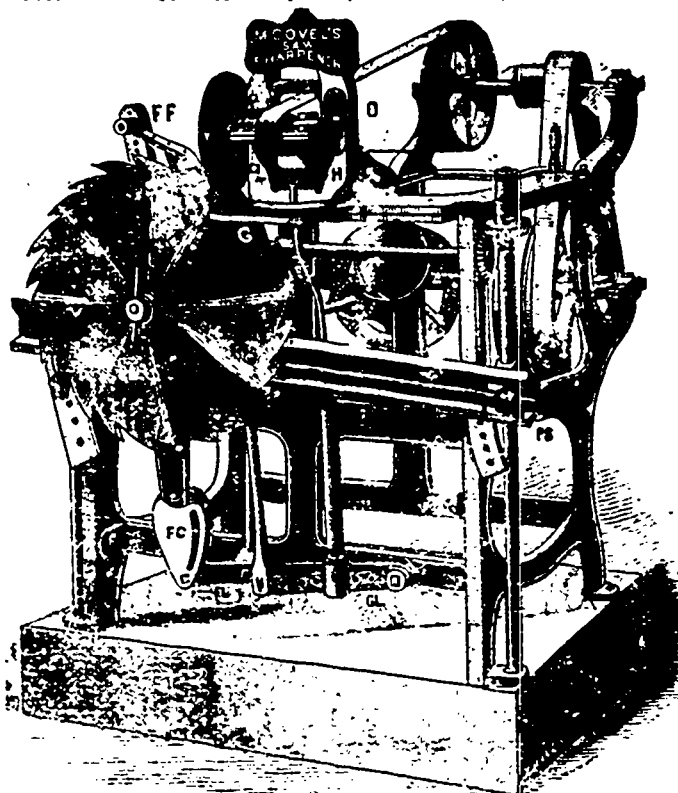
Yours respectfully,
WILLIAM TAIT,
Lumberman, Cravenhurst.

Toronto, August 11th, 1880.

WM. HAMILTON, Peterborough, Ont.

DEAR SIR:—The Steam Feed you put in is working splendidly.
Yours, &c.,

THOMPSON, SMITH & SON.



MILL MACHINERY!

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

Horizontal Engines and Boilers



Where economy of fuel is the great consideration, along with uniformity of speed, such as is required in Grist and Flouring Mills, Woolen and Cotton Factories, or large Factories of any kind, I supply the Corliss Engine. I feel justified in saying that our Style, Workmanship and Finish on this engine will be no discredit to its renown, and certainly is not equalled in this country for economy of fuel. I have them working at 24 pounds of coal per horse-power per hour.

WILLIAM HAMILTON, PETERBOROUGH, ONT.