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

SUBSCRIPTION
\$2.00 PER ANNUM

VOL. 4.

PETERBOROUGH, ONT., NOVEMBER 1, 1884.

NO. 21.

OTTAWA LUMBER TRADE.

The following, from a letter of the correspondent of the London Times who accompanied the British Association to Canada, shows how the Ottawa lumber manufactures are viewed by a stranger:—"Without touching on the applications in this way to their waterworks, it will be interesting to allude to the enormous lumber trade of Ottawa. One of the most interesting excursions of the association was to the capital of the Dominion, and an inspection of these works was a surprise to most of the members. From the heights of the Parliament House, hundreds of acres around the Chaudiere Falls are covered with vast stacks of lumber, which had been carried from the interior by the river. At the time of our visit 25 large barges were being loaded. Nothing but water power is used, and this is employed to the extent of several thousand horse power by means of turbines. The logs are drifted up to a sloping side along which an endless chain with hooks attached is continually running. Thus they are dragged up to the floor of the saw mill. They are then moved by water power to position and sawn by to-and-fro saws of from six to twenty in a machine, into planks. The waste sides of these planks are cut off in a separate machine. The ends are cut off and sent to the match factory. The waste sides are passed to another room to be sliced into laths for building, and thus every available piece of wood to the smallest size is used up, and only chips are thrown away. The small number of workmen employed on so huge a mass of material, which passes through the mill from the state of logs 3 ft. in diameter to the state of mathes and laths, was a matter of astonishment to our most distinguished engineers."

THE TIMBER ON MANITOULIN ISLAND.

A correspondent of the Toronto Globe has made a thorough tour of Manitoulin island, in the northern portion of Lake Huron, and was much impressed by its extent—90 miles long and 25 miles wide on an average—its bays, lakes, rivers of pure water, its rich agricultural lands, stock and dairying capabilities, healthy climate, and, especially, its timber. In reference to the latter he says:

"The timber on Manitoulin island is perhaps somewhat better than that of Muskoka or Parry sound. The trees are much the same size as in these districts. Unfortunately fire has ravaged the forests and destroyed much valuable timber; and this, together with the great quantities which have been taken away, render it much less abundant than it was a few years ago. Still there is a good deal of valuable timber remaining, and many saw, shingle and lath mills do flourishing business in reducing it to forms adapted to the use of mankind. Pine, cedar, spruce, maple, black birch, yellow birch,

white birch, white poplar, rough bark poplar and whitewood are to be found in considerable quantities, while white oak, hemlock, balsam, tamarac and basswood, though not so plentiful, are by no means scarce. Saw mills are situated at the following places, and many of them are doing a large business, while the remainder are doing very well: Michael's bay, on south shore of island, large mill, driven by waterpower; township of Sansfield, McDonald's mill, driven by water power; Providence bay, on south shore, water power; Manitowising, on the north shore of the island, steam power; She quiandah, on the north shore, water power; Little Current, steam power; Kogawong, on north shore, water power; Gore bay, on north shore, two steam mills; township of Burpee, near south shore, steam power; Meldrum bay, western portion of island, steam power. In connection with most of these mills will be found lath and shingle mills, while Gore bay boasts of a separate shingle mill. The Manitowising, Black and Kagawong rivers afford excellent water power to drive the saw and grist mills to be found on their banks. The timber on Manitoulin is a great boon to the settlers; it renders building and fencing an easy task; the hardwood furnishes fuel; the pine gives the settler a fair revenue; the cedar affords employment to the industrious in getting it out for railway ties, telegraph poles, and preparing it to be cut into block for paving purposes; and the firwood yields quite an income to the settler, who lives near enough to a steamboat landing to profitably dispose of his wood to the steamers which are constantly calling there. It will be seen that the settler who casts his lot in this part of our province has many ways of earning a livelihood. If his crops fail he may turn to the many sources of employment to keep himself and his family, if he has one—from suffering and from hunger, and at any time, when his farm will permit, he may direct his attention to those different ways of bringing 'grist to the common mill,' and by industry and perseverance see his efforts rewarded by success, in a nice farm with good crops and the many comforts of home surrounding him. The last fall the steamer Silver Spray ran up to Manitoulin island, a married man with a family worked on the steamer for his passage to Mud bay. Here he obtained work at the saw mill, and kept his wife and family during the winter. He located on a lot, and being industrious, he improved his position day by day, until at present he is the owner of a fine farm back of Gore bay. This is only one instance—I might mention many."

THE CITY OF WOOD.

Ottawa might be appropriately called the "City of Wood." High stacks of planks cover acres of ground, barges full to the brim with lumber lie in the harbor, the very air is fragrant with the aroma of the pine, whilst above the

Falls the river is crowded with floating logs, soon to become planks and laths. There is a rapid transformation of the rough round log into the smooth straight plank. At one moment a pine tree's trunk is skillfully hooked by a man who dances about in the eddying water and never tumbles in; the next it is caught by the sharp teeth of an endless chain and drawn up into the mill, passing under the upright frame in which are fixed the saws, ten or twenty in number, according to the size of the log. Now the transformation is complete; at the other end eager hands carry away the pine log, now perhaps in a dozen long planks. And so this goes on from May to November, and 200,000 feet of lumber are sawn into planks in one day in one mill in Ottawa.—London Echo.

THE MINNEAPOLIS MILLS.

A special despatch from Minneapolis, Minn., to the Chicago Tribune, dated Oct. 16th, says:

"A review made to-day of the season's work by the Minneapolis saw mills shows the heaviest lumber cut ever known for the corresponding time, although the total for the season will not vary much from that of 1882, as the mills will shut down earlier. The total cut of the mills at present is fully 2,000,000 feet per day, and this will be maintained until the mills shut down. The total cut for the season will be about 315,000,000 feet. The mills will shut down about November 1, which is fully two weeks earlier than usual. There will then be about 80,000,000 feet to be carried over in the boom and about 45,000,000 feet in the upper Mississippi and its tributaries, or 125,000,000 feet in all, a much larger amount than was carried over last year. The log cut in the woods next winter will not be as large as last year. Estimates made by good authorities place it from 50 to 60 per cent. of what it was last year, with 60 as an outside figure. Those firms which do their own cutting will not send in as many men as usual on account of the large amount of logs each will carry over, and it has been demonstrated that sometimes logs are not good property. This was the case with Wilson & Gillespie, who got \$4.25 per thousand, or about enough to pay the cost of putting them in, they losing the stumpage. The number of 1,000,000 and 2,000,000 operators will also be largely decreased, as the disastrous results of last winter's operations have floored them financially, and as to borrow money on the prospective success of a winter's logging business is just now a work in which banks are not engaged to any remarkable extent. Still there are many firms which at such times assume that, as the others are not cutting heavily, there will probably be a scarcity, and they will therefore cut an extra amount. It is not likely, however, that the cut will exceed 200,000,000.

The drives have been unusually successful during the season. The water has been low at

times, but the average has been very good. More lumber has been shipped out of Minneapolis this year than ever before, but that is not saying that the year has been most successful to the dealers. A good demand for lumber is coming from Iowa, and the majority of the shipments from this city are going there, but a number of the dealers state that they cannot send the stuff there at present prices, and accordingly they have withdrawn. Dakota, however, is receiving attention, and a good trade is being built up in that territory. A printed list is still sent out by the lumbermen, but they do not pretend to adhere to it, and there is more cutting than ever before. Discounts from 2 to 5 per cent. are made, and in some cases even more than that. Stocks are badly broken, particularly in dimension and pine lumber, and the different dealers are buying from each other as much as they ever did."

A MAINE OPERATION.

The Milling and Industrial Journal, of Bangor, Me., says that up in the northern wilderness of that state, near Mount Katahdin, is a wild little stream, called the Wassatquoik, which runs through a rocky valley, surrounded by rich timbered country. The timber has heretofore been almost inaccessible on account of the difficulty of driving the stream, but now preparations are being made for a large operation in that region. F. H. Todd & Sons, of Calais, and others, own tracts of spruce and pine in township 4, range 9, and have entered into contract with Tracy & Love, of St. Stephens, N. B., for hauling and driving into boom at Oldtown, on the Penobscot, 15,000,000 feet of logs this season, and 5,000,000 to 6,000,000 each of the next successive five seasons, the whole contract involving a cut of 40,000,000 feet of pine and spruce logs. The contractors now have 80 men at work on the stream, building dams and clearing the stream for driving. About \$90,000 will be expended in labor and supplies the coming winter. During the active logging season a force of 400 men and 100 horses will be employed.

The Lumber Trade.

A despatch from Ottawa dated Oct. 12, says: The lumber mills here will likely close down about the end of the month. One of the prominent lumbermen here states that for upper grade lumber the price is about the same as that of last year. The lower grades have fallen slightly, and lumbermen have been obliged to make some concessions to buyers in this respect. The trade in the Western States was very dull all summer. In some particulars it was a failure, and it is only a wonder that things have been so lively here. Lumbermen are not sending so many men to the shanties this winter, and the number of logs turned out will not be so long as during the past few years.

DURABILITY OF TIMBER AND WOODWORK.

In every department of human industry the successful man is generally one who has learned from the experience of others. In the particular matter of building there is much to be learned respecting the durability of different materials from the buildings of times gone by.

The proper seasoning of timber is one of the very best means of securing it against decay, from whatever cause it may originate. The seasoning, however, to be effectual, must be thorough and complete. In late years the modes of seasoning timber have changed. In olden times it was allowed to dry in the air a long period of time. The carpenter or builder of the present day who would feel any delight in the progress of his art cannot feel insensible to the advantage of giving durability to his materials, and yet be uninterested in any inquiry into the probable extent of their duration; for while his productions are worthy of imitation, the remembrance of them will be preserved by the engraver's art as long as there shall be men capable of paying a just tribute to the memory of departed merit. The French army in 1799, under the great Napoleon, destroyed the celebrated bridge across the Rhine, at Schaffhausen, but the fame of Grundeumann, the carpenter, will long continue; and the form of that excellent structure of the art will only cease to be remembered when carpentry itself no longer exists. We have introduced our subject in this way for the purpose of citing some of the most remarkable incidents on record in history. We have taken the pains to condense a number of the most remarkable of these, as showing our readers how long timbers have been preserved in almost perfect state. Examples are not wanting in the history of Mexico, where timbers have been found in a perfect state after being cut over 300 years. But our examples are obtained mostly from ancient history, and exist in the old world. The piles of the bridge built by the Emperor Trajan, across the Danube, is a striking instance of the durability of timber in a wet state. One of these piles was taken up and found to be petrified to the depth of three-fourths of an inch. But the rest of the wood was little different from its ordinary state, though it has been driven more than sixteen centuries.

The piles under the piers of London bridge have been driven over six hundred years, and from observations made by Dancis, 1746, it did not appear that they had materially decayed; and they are to-day sufficiently sound to support the massive superstructure. These piles are chiefly of elm.

In digging away the foundation of the old Savoy Palace, London, some 60 years ago, which was built 700 years before, the whole of the piles consisting of oak, elm, beech, and chestnut, were found in a perfect state of soundness, as also was the planking which covered the pile-heads. Some of the beech, however, after being exposed to the air a few weeks, though under cover, had a coating of fungus spread over.

On opening one of the tombs of Thebes, some 60 years ago, there was discovered two statues

of wood, a little larger than life, and in good preservation; the only decayed parts being the sockets to receive the eyes. The wood of these statues is most probably the oldest in existence that bears traces of human labor. We believe they are in the British Museum to-day.

A continued range or curb of timber was discovered in pulling down a part of Trowbridge Castle, in Kent, which was built over seven hundred years ago. This curb was built in the middle of the thickness of the wall, and was, no doubt, to prevent the settlement likely to happen in such heavy piles of buildings, and therefore is an interesting fact in the history of constructive architecture, as well as an instance of the durability of timber.

In digging for the foundation of the present house in Ditton Park, near Windsor, the timbers of a draw bridge were discovered about ten feet below the surface of the ground; these timbers were sound, but had become black. Hakenwell says that Sir John de Molines obtained liberty to fortify the Manor House of Ditton, in 1396, and it is probable the draw bridge was built soon after that time; accordingly the timbers have been there about 400 years.

The durability of the framed timbers of buildings is also very considerable. The trusses of the old part of the roof of the Basilica of St. Paul, of Rome, was framed in 816, and they were sound and in good condition in 1814, a space of nearly one thousand years. These trusses are of fir.

The timber work of the external domes of the church of St. Marks, at Venice, is more than eight hundred years old, and is still in a good state.

The timber roof of Crosby Hall, in London, was erected over three hundred years ago, and the roof of Westminster Hall, which is supposed to be of chestnut, is now over three hundred and fifty years old.

The rich carvings in oak, which ornamented the ceiling of the king's room in Sterling Castle, are many of them still in good preservation. It is nearly three hundred and fifty years since they were executed, and they remained in their original situation until a part of the roof gave away, in 1877, when the whole was removed, and afterwards were dispersed among the collectors of curious relics of the olden times.

In some of the old mansions that yet remain, and in ancient cathedrals and churches, there is nothing like dry rot found.—Wood and Iron.

CARDIFF.

The *Timber Trades Journal* of Oct. 11, says: During the past seven days there have come to hand once cargo of deals from Miramichi, and one cargo of pitch pine from Pensacola. Our market has not altered in any material degree from the position we have had occasion to record recently; there is apparently not the slightest present improvement, and we can but confirm our previous remarks relative to the outlook of the timber trade. There is a steady, but not large delivery going on from stocks.

Subscribe for the CANADA LUMBERMAN.

LIVERPOOL STOCKS.

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

	Stock, Oct. 1st, 1883.	Stock, Oct. 1st, 1884.	Consumption for the month of Sept., 1883.	Consumption for the month of Sept., 1884.
Quebec Square Pine.....	444,000 ft.	392,000 ft.		
Waney Board.....	455,000 "	500,000 "	371,000 ft.	304,000 ft.
St. John Pine.....	10,000 "	63,000 "	2,000 "	20,000 "
Other Ports Pine.....	70,000 "	61,000 "	16,000 "	8,000 "
Red Pine.....	60,000 "	52,000 "	21,000 "	7,000 "
Pitch Pine, hewn.....	409,000 "	600,000 "	48,000 "	43,000 "
Sawn.....	150,000 "	510,000 "	102,000 "	62,000 "
Planks.....	57,000 "	67,000 "	20,000 "	25,000 "
Dantzic, &c., Fir.....	134,000 "	67,000 "	24,000 "	8,000 "
Sweden and Norway Fir.....	24,000 "	109,000 "	1,000 "	8,000 "
Oak, Canadian and American.....	374,000 "	310,000 "	123,000 "	104,000 "
Planks.....	175,000 "	179,000 "	54,000 "	67,000 "
Baltic.....	21,000 "	0,000 "	0,000 "	0,000 "
Elm.....	37,000 "	43,000 "	31,000 "	17,000 "
Ash.....	27,000 "	40,000 "	20,000 "	12,000 "
Birch.....	71,000 "	102,000 "	69,000 "	41,000 "
East India Teak.....	28,000 "	71,000 "	17,000 "	6,000 "
Greenheart.....	105,000 "	30,000 "	12,000 "	13,000 "
N. B. & N. S. Spruce Deals.....	50,481 stds.	25,770 stds.	9,843 stds.	8,129 stds.
Pine.....	900 "	1,082 "	2,637 "	2,358 "
Quebec Pine & Spruce Deals.....	7,820 "	9,269 "	1,384 "	742 "
Baltic Red Deals, &c.....	5,533 "	3,982 "	61 "	67 "
Baltic Boards.....	316 "	67 "	24 "	84 "
prepared Flooring.....	4,007 "	8,172 "		

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OFFICE OF THE INDUSTRIAL EXHIBITION ASSOCIATION,
TORONTO, MARCH 10, 1884.

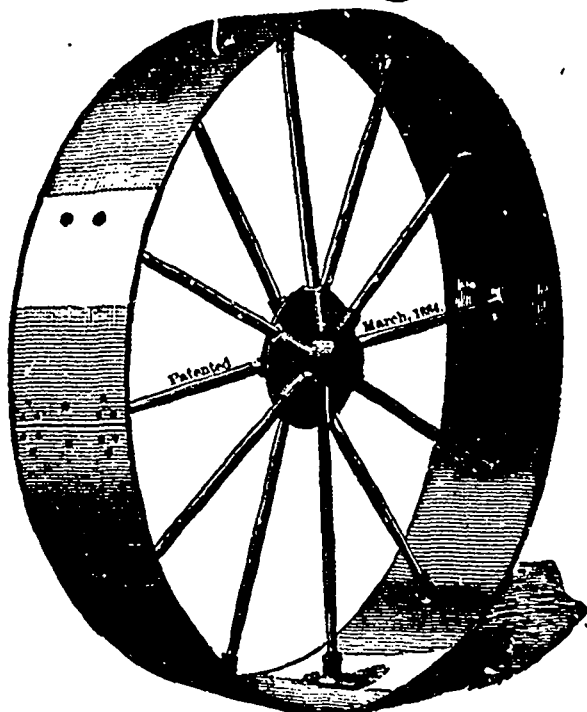
The National Manufacturing Co's, Ottawa:

GENTLEMEN,—In reply to your enquiry, I beg to say that the highest awards made at the Industrial Exhibition for the years 1881, 1882, and 1883, for Tents, Marquees and Flags, were to your Company, being a Silver Medal for each year. Last year, 1883, was the first in which a medal was specially offered for Camp Furniture and Equipages, and it was awarded to the National Manufacturing Co's, of Ottawa.

I am, your respectfully,

H. J. HILL, Manager and Secretary.

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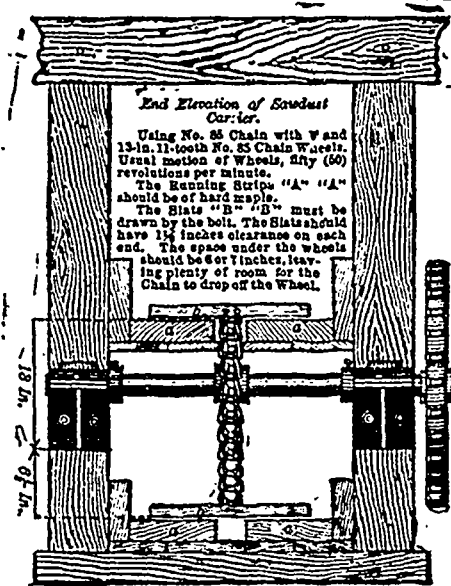
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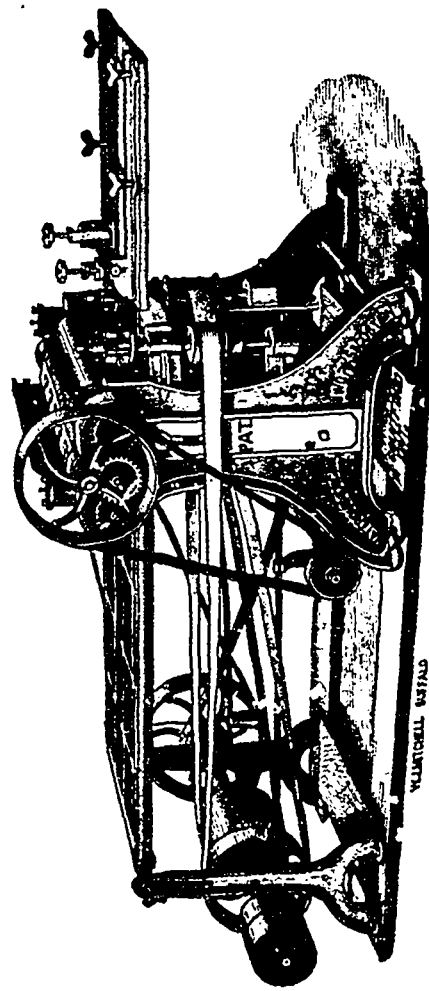
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METALLIC SHINGLES.

We copy from the *Mail*, of the 18th Sept. a description of metallic shingles, which we understand are being largely used in Ontario, where the ordinary shingles are much cheaper than here. We therefore infer that these metallic shingles require only to be known to come into common use. We understand that a car load has been ordered from Prince Albert, and has been shipped by the manufacturer to that distant point. We would advise architects and persons intending to build to communicate with the manufacturers and obtain full information, as any roofing that combines the advantages of durability while reducing the danger from fire cannot but be matter of general interest.

The description is taken from the *Mail's* report of the exhibits at the Toronto Industrial exhibition: In this class is prominent the exhibit of metal shingles by Messrs. West, Pasching & Montrose, Simcoe. They show a small building roofed and sided with these tin and iron shingles, which are of unique design, being provided with certain corrugations to stiffen the sheets, while they interlock with each other, forming obstacles against snow or rain driving through the joints, and at the same time presenting an exceedingly ornamental appearance. Contraction and expansion of the metals are provided for by the corrugation and methods of nailing. They are very securely fastened to the roof, having six barbed wire nails through each shingle. These iron shingles are preserved by dipping in composition of pure oil and ironclad paint, which effectually protects from rust. The matter of repainting once in six or eight years must be trifling, as iron does not absorb; one gallon is sufficient for ten or twelve squares. These shingles possess the advantage over slate of being thoroughly fire-proof, of not breaking, and of being lighter. They require no repairs, will conform readily to the shape of the roof, and must beyond doubt be the most durable in this climate. This exhibit should prove interesting to our railway companies, where many stations and buildings are so much exposed to fires from passing trains, especially as the first cost of roofing with this material is very little in excess of wood shingles. This firm is the only one in the Dominion engaged in this line of manufacture. Yet metal shingles are not an experiment, as several firms in the States have been for many years past engaged in the manufacture of a somewhat similar tile, and the rapidly increasing demand proves their merit. They are adopted by many American railway companies as a standard roof. The firm showed us several flattering testimonials from influential men in this country and the States who have their shingles in use.—*Winnipeg Times*.

JAPAN AND AMERICAN WOOL.

Speaking of the exhibit at the forestry exhibition the *London Timber Trades Journal*, among its references to the woods from different countries, has this to say:

"Among the splendid specimens of timber from Japan we may mention a magnificent slab of *Retinospora obtusa*, which attains to a height of 120 feet and a girth of 20 feet. The timber, which is of superior quality, and is not unlike that of the redwoods of California, is largely used for building houses and ships, and for the making of household utensils, while the bark is used as oakum and for roofing. Other six varieties of the same wood are also shown, some of a white, others of a yellowish color. Alongside may be seen the wood of another conifer, known to us only in its dwarfed habit, that of the highly ornamental *Cryptomeria japonica*, which, to judge by the sections of its timber exhibited, grows also to stately proportions. The examples of the beautifully grained camphorwood, with its fragrant perfume, are very fine, and the slabs of maple, bird cherry, junipers, and yows are exceedingly pretty.

The California Redwood Company, 123, George Street, Edinburgh, show a grand specimen of *Sequoi sempervirens*. The section, which measures 13 feet in diameter, was cut at five feet from the ground. It is 41 feet in circumference, and the height of the tree to first branch is stated as 150 feet—total height 230

feet. The age is estimated at 2,000 years, and the entire tree, when felled, 75,000 super feet board measure, and 26,250 cubic feet, good timber. The exhibit of the company also embraces several articles of furniture made from Sequoia wood. The timber of this conifer seems to lend itself in a peculiarly excellent manner for decorative treatment. Red in color, it is of various shades some of them when polished being exceedingly rich and pleasing; while a specimen of beautiful wavy texture stamps the redwood as one of the best acquisitions to the stock of cabinet making woods, the more especially as it is said to be durable, and not liable to shrink.

PAINTED FLOORS.

That carpeted floors are harbingers of disease is a question which, to those who have been placed in position to fully investigate, having but one side, and since some of our leading journals have called to mind long arrays of unquestionable authorities proving that carpets, however clean, and free of dust apparently, give off at every step or movement infinitesimal germs of lung irritants. The people seem to have indorsed the theory, and in many a fine house carpets have given place to Eastern rugs, which, occupying a central position, leave a fine opportunity for the painter to display his taste in decorating the intervening space between the rug and wainscoting. It will, however, place the work and imperfections of the carpenter more prominently before the people, inasmuch as the floor, being constantly exposed, must be made smoother and of better lumber than often finds its way into the floors of our houses, for when the floors were entirely covered with carpets, damp, unseasoned lumber or timber, or the same affected with dry rot, could be used and the occupants be little the wiser for the deception, but now the floors must be of good lumber and nicely fitted, else the painter, whose work supersedes that of the carpet layer, will not accept the floor as the carpenter left it, for his work, being on top, he will be held responsible for the appearance forever afterward. If this change in fashion brings about this revolution in floor-making, the change will have another argument in its favor; for others, as well as we, have seen damp, unseasoned lumber put in floors, which in turn were lain upon the joists of the same or even worse quality, then a carpet covering all, the poor inmates were compelled to breathe the moisture of seasoning lumber after it was filtered through a carpet, which would tend to render it still more unhealthy, hence we are of the opinion that the carpet is responsible for much less disease than charged with; nevertheless, we are decidedly in favor of the rug system of covering floors, for the reason that it is much more economical, it is hygienically and otherwise a very wise plan, besides the facility of often removing and thoroughly shaking the rugs, without employing an army of workmen to take up, beat and put down again. It looks as though carpets "must go."—*Lumber Trade Journal*.

WATER POWER AND STEAM POWER.

Water-power, for saw mills, flour mills and factories, says the *Monetary Times*, is no longer to the same extent the cheap and desirable motor it was formerly considered to be. Relatively to steam, the use of water pressure as a means of driving machinery, has declined within a score or two of years, in a very marked way in this country as well as in the States. The reasons for the great advance of steam power are not far to seek. Water power is not as reliable as it was before the forests were thinned out or cleared away, while, owing to the improvements in engines and boilers, steam power is now more reliable.

The relative decline in the amount of water-power utilized for business purposes, as compared with steam power, is, says the *American Machinist*, a highly suggestive phenomenon in the industrial progress of the country. "This tendency is all the more suggestive by reason of the fact that no other country in the world is as well endowed with natural water power as the United States. Manufacturing enterprises usually seek water power in a new country, because of its cheapness and availability, but when

all the valuable powers have been absorbed by those who are determined to get a steady revenue from them, neither of these two features of original desirability stand forth with much allurements. As water powers are improved they become more costly to the users; as steam power is improved it becomes less costly to the users."

In 1870 the census showed that there were more water wheels in use in the United States than steam engines, and that their horse power was almost as much as the total horse power of the engines. The census for 1880 showed more steam engines than water wheels, and a total power far in excess of the latter. The change is best shown in tabulated form, thus:

	Water Wheels.	Horse Power.	Engines.	Horse Power.	Total.
1880....	55,404	1,925,870	56,483	2,185,463	2,410,837
1870....	71,018	1,130,431	40,191	1,215,711	2,346,142

Pr. ct. of inc. 8.00 2.40 40.64 79 45.38

During the four years since the census was taken, says the *Milling World*, the progress of steam power has been greater than in any other four years of American history. What a census would now show as the relative decline of water power to be, or what the next census will show it to be, can be imagined after a study of the above figures.

THE TUPELO-GUM AND WILLOW-OAK.

The Memphis, Tenn., *Appeal* says:—The tupelo gum and the willow-oak are timbers that are destined to a commercial value never until recently dreamed of. A gentleman residing in Mississippi, who has tested them thoroughly, says the first variety is almost as soft and light as the cork of commerce, and is the whitest wood in the valley. It is extremely light, and cannot be split, and at the same time is very tough and tenacious, and will bear a very heavy strain. It will, some day soon, be used principally for buckets, bowls, pitchers and trays; also for ox-yokes, and for almost all kinds of water vessels. For bread trays it is the finest in the world. This wood grows among the cypress trees, and is far more abundant, and floats like cork. The water, or willow, oak is second only to the live oak, and is almost an evergreen; it takes the coldest weather to make it shed its leaves, and it is almost as hard, when seasoned, as the live oak, and for the rim and spokes of wheels it has no superior. For ship-building it will almost equal the live oak. "I have tested the crushing capacity of this wood," this Mississippian says, "and also the transverse strength, and it is one-third stronger than any white, post, red or black oak, and only 1-80th less than live oak. And yet this wood has no market value!"

HOW TO CARE FOR DOWN TIMBER.

The Bangor *Courier* of late date had the following:—"The lumber in the region in Piscataquis county that was blown down in the gale one year ago will be in good condition for cutting this winter, but before another season it will be well advanced in the state of decay. Last winter different firms got out a large number of logs there. The weather was good the first part of the winter, and the amount of snow was small, thus making the condition favorable for the saving of the timber. Deep snows cover the fallen trees so that it is extremely difficult to get them out. A number of firms already have men in the woods cutting and hauling the logs short distances. Much work will be done before winter, and the logs will be hauled to the streams and rivers after the snow comes. Atwell & McLeod, of Stillwater, did an extensive business last winter in the district where the trees had been blown down by the wind, and they will probably again send large crews to those places this season."

FURNITURE WOODS.

A generation or more ago the most admired wood for furniture purposes was mahogany. Until quite recently the taste for mahogany has been held in abeyance, and black walnut has long reigned the king of the furniture woods. Before mahogany controlled the popular desire, cherry was a favorite, and our white walnut or hickory was used to a considerable extent.

These old fashioned woods are coming into favor again, and very fine effects are produced by the contrasts of cherry and hickory, and by mahogany and hickory. Mahogany and cherry blend admirably as shades of color instead of contrasts. The so-called "branch" mahogany, that in veneers on the fronts of bureaus and in the frames of mirrors formerly produced such impossible effects of grain, has given place to that of plain straight grain, the effect of color rather than of grain being desired.

Except yellow and black birch and the satin and birdseye maple, there are few of our native woods that show a very distinctive grain. This makes them valuable as foils to the more erratic grained woods of the tropics. One of these, the *coco bolo*, of a deep red color, with broad straight grain, works up beautifully with the cherry, making a complement of tints, or with the hickory, showing a contrast of color and of grain.

According to the statement of a prominent dealer in furniture woods, our cherry and hickory are coming rapidly into demand, and for foreign woods the mahogany and comparatively little known *coco bolo* are much called for by makers of fine furniture, carvers, and interior finishers.—*Scientific American*.

THE OLD SAW MILL.

There are scenes of our youth that we love to remember,

And others, perhaps, that we long to forget;
A word, or a look, sets afire every ember,
And we find them aflame in our memories yet.
The buzz of a saw set my mind to reflection,
To-day, as I wandered, my soul to-rogale,
And rose like a picture the fond recollection
Of the busy-old saw mill that stood in the vale.
The weather-worn saw-mill—
The musical saw-mill—
The busy old saw-mill
That stood in the vale.

It was built by a brook, far from all habitation,
That left 'twixt the hills 'mid the silence profound;
The mill was the earnest of civilization,
As it sawed out the logs for new dwellings around.
They grew to a village, by thrift and by labor;
And the miller grew old, but still hearty and hale.
How he smiled with delight as he welcomed each neighbor

To the busy old saw-mill that stood in the vale.
When school was dismissed all the children would rally
To play on the plants that were piled on the stream;
And their shouts and glad laughter would fill all the valley,—

I can hear them to-day like sounds heard in a dream.
To the buzz of the saws it was music to listen,
As out from their jaws slid the board and the rail,
Ah, do wonder the tears on my eye-lids will glisten
As I think of the saw mill that stood in the vale.
Where? Where are they all; the familiar old faces,
That made of my childhood a season of joy?
Some are dead, all are scattered, some are filling high places,

The children that knew me when I was a boy,
And the mill, although still to my vision appearing,
Too, is gone; in a storm it blew down with the gale;
And all that remains are the memories endearing
Of the busy old saw-mill that stood in the vale.

The weather-worn saw-mill—
The musical saw-mill—
The busy old saw-mill
That stood in the vale.

—George Burdette, in the *Journal of Progress*

A Church Built With One Tree.

A redwood tree, cut in this country, furnishes all the timber for the Baptist church in Santa Rosa, one of the largest church edifices in the country. The interior of the building is finished in wood, there being no plastered walls. Sixty thousand shingles were made from the tree after enough was taken for the church. Another redwood tree, cut near Murphy's mill, in this country, about ten years ago, furnished shingles that required the constant labor of two industrious men for two years before the tree was used up. The above statements are vouchered for as true by Supervisor T. J. Proctor, of Santa Rosa.—*Santa Rosa (Cal.) Republican*.

Any Small Boy, With a Stick,

Can Kill a Tiger.—If the tiger happens to be found when only a little cub, his consumption, that deadliest and most feared of diseases, in this country, can assuredly be conquered if Dr. Pierce's Golden Medical Discovery be employed.

THE PARIS BUILDING TRADE.

The building fever which has prevailed in the west end of Paris for the past few years, says *Galignani*, has ended as was to be expected, in a crisis in the building trade. Hundreds of houses have been roared in the richer quarters of the town. Many of them, completed in some cases two years ago, are still without a single occupant. Others, again, have been left unfinished. The rents demanded in these palatial residences are scarcely over below 4,000 fcs. or 5,000 fcs. for the uppermost story, which places them beyond the reach of any but the wealthy classes. There is no demand for house-room in the quarters named above, whereas in the centre of the town and the popular districts, small tradesmen, clerks and artisans, have to crowd in wretched houses at comparative high rents, or take up their residence in the outskirts. Architects, builders and contractors alike have ignored a great law in the economy of a town of over two millions of inhabitants; supply far exceeds the demand in the west end of the town, whereas, on other points of the circumference, the reverse is the case.

THE APPLE TRADE.

Apples continue to come along in large quantities and prices are certainly no higher than last week. If anything the tendency is downward. Supplies are arriving from all sections some choice varieties coming from Nova Scotia, and there does not seem any chance for a rise this season. Choice Pippins, Hubbards, and other desirable kinds are selling in large lots at \$1.25 to \$1.50 per barrel, and dealers are indifferent about taking any variety except Gravensteins at over \$1.50. This is for first-class fruit. Common and medium are offering at 75c. to \$1 per barrel. Very nice apples are offering at \$2 per barrel, by the single barrel. Shipments to England continue to be made on a liberal scale, the exports from Boston last week being 12,000 barrels, which make a total for the season of about 35,000 barrels against only about three hundred barrels for the same time last year. Full returns from late shipments have not yet been received, but cable advices of sales show no margin of profit. Some claim they will result in a loss. Under date of Oct. 6th, Messrs. J. O. Houghton & Co. cable that at the sales in Liverpool to-day 5,000 barrels of American apples were sold at following quotations:—Baldwin, 10s. to 14s.; Northern Spy, 10s. to 12s.; Greenings, 8s. to 11s.; Kings, 10s. to 22s. Estimating freight and other expenses at \$1 per barrel, which is a low rate, the first two varieties would not net much over \$1 per brl., and the greenings from 75c. to \$1. Most of the shippers say the exporting business is unprofitable. Beside the freight, which is 75c. to 90c. per brl., there are numerous other small charges for insurance, commissions and shrinkage, which absorb all margins of profit, and often leaves shippers in debt.—*Boston Journal.*

A Long Bridge.

The bridge to be built across St. Louis bay, at Duluth, by the Northern Pacific company, will be nearly one mile in length. The draw-bridge will be 246 feet long, the fixed truss portion 100 feet, and the pile bridging 4,200 feet long. The contract calls for the structure to be completed January 1, 1885.

The damage by forest fires in southern New Jersey is over \$100,000. One church, several buildings, and immense cranberry bogs have been destroyed.

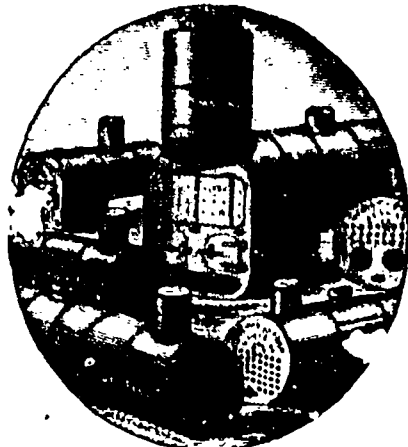
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Advice to Mothers.

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

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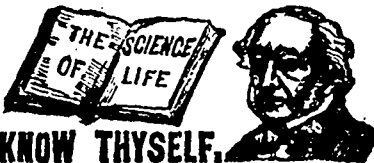
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This book should be read by the young for instruction, and the afflicted for relief. It will benefit all.—*London Lancet.*

There is no member of society to whom this book will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.* Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate diseases that have baffled the skill of all other physicians are a specialty. Such treated success. HEAL THYSELF fully without an instance of fail.

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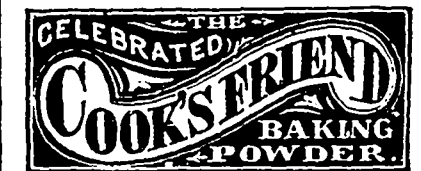
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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number,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

The CANADA LUMBERMAN is filed at the Offices of Messrs. SAMUEL DRACON & Co., 164 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., NOV. 1, 1884.

FOREST fires have been burning in the Great Dismal swamp, destroying much timber and cordwood.

SEVERAL of the large saw mills on the Eau Claire, Wisconsin, have been shut down for the season.

AN exchange says that an order for 500,000 feet of timber has been placed at Baraga, Mich., for the Canadian Pacific railway.

L. H. DWELLY & Co., spool manufacturers at Foxcraft, Me., use 1,000,000 feet of white birch yearly in their output.

THE Pentwater, Mich., Lumber Company's saw and shingle mill were burned on October 9. Loss, \$25,000; insurance \$18,000.

THE Chicago Times says that the contracts have already been entered into for cutting 250,000,000 feet on the headwaters of the Muskegon.

THE saw mills in the New Orleans World's Exposition will occupy a space of 40,000 square feet, next the river, from whence logs can be taken for sawing.

OPERATIONS of considerable extent in getting out rock elm timber for eastern markets will be carried forward in Leelenaw county, Michigan, this winter.

THE Eau Claire Company's mill at Eau Claire, Wis., is in full operation again, and the damages to the lower dam, caused by the late floods are being repaired.

A BEST in the new mill of the Midland & North Shore Lumber Company at Parry Sound, Ont., fell, injuring one seriously and two others slightly.

FOREST fires have been raging in the swamp in Camden and Gloucester counties, N. J., and large quantities of valuable cedar timber have been destroyed.

THE dry kilns, planing mill and sheds of the Onocota Lumber Company, of Onocota, Minn., four miles from Duluth, were burned October 12, causing a loss of \$23,000; insurance, \$13,000.

THE Jonesboro Lumber Company, Jonesboro, Me., is building two vessels, and this winter the company will get out the timber for a three-master, that will be built next season.

NEWS has been received from Bulstrode, Arthabasca Co., Quebec, that the saw mills of Mr. Thibaudou there have been destroyed by fire. Those mills cost over \$20,000, and were insured for \$4,000.

THE Winnipeg Lumber Company's mill which has been purchased by J. Macauley, has been removed from its old site at Rat Portage, and is being re-erected at Blumerville, in that vicinity.

JOHN MURRAY & Co., lumbermen of Roscommon county, Mich., will soon commence their winter operations. They will cut from 8,000,000 to 12,000,000 feet of logs, banking them into Higgin's lake and tributaries.

AN English architect says that wooden houses can be built last longer than brick or stone houses, and instances the fact that in many English towns wooden houses are standing and in daily use that were built 500 years ago.

FROM New York, 6,342,000 feet of white pine were exported in September. From January 1 to October 1 of this year the amount exported was 50,006,000 feet; in 1833 for the same months, 45,796,000, and in 1882, 41,039,000 feet.

SOME of the manufacturers says an exchange will operate on their best tracts of pine the coming winter. They recognize the fact that the country is flooded with common lumber and they hope to improve matters by having a better trade to sell.

THE N. Ludington Company, of Monominee, Mich., will bank but about 18,000,000 feet of logs this season, as compared to 29,000,000 last winter. The company will deduct all the logs over from the amount cut last year, and put in enough more to make even.

THE total receipts of lumber at Tonawanda, N. Y., for five months, ended October 1, was 385,214,098 feet; shingles, 50,493,000; lath, 12,000,000. It is expected that 500,000,000 feet of lumber will have been received there by the close of the season. The average value of lumber is \$2 less than it was last year.

THE lumber barges Johnson and Desota, in tow of the Germania, were waterlogged in a late gale on Lake Huron, and put into Port Huron, where they reported a loss of 80,000 feet of lumber from the Johnson's deck load, and a quantity of shingles and lath from the deck of the Desota.

NEGLECT of the attendant of the Fond du Lac boom, near Duluth, after the passage of a tug, caused a partial loss of 1,000,000 feet of logs. The logs were hung up above the Dalles, in the St. Louis, and a rise carried them down through the open boom, scattering them in all directions, and some of them out into the lake.

S. & J. ARMSTRONG have started two lumber camps near McKellar, Ont., in the Georgian bay district, and will get out over 4,000,000 feet logs for the Georgian Bay Lumber Company. They are also cutting white oak plank and timber for the Midland & North Shore Lumber Company, to be used in the latter's new mill at Parry Harbor.

CURIOUS freaks of nature are very common, in every department, but one rarely hears of anything equalling that of a pine tree in Irwin county, Ga., that has two distinct bodies, but only one top. The trunks grew out of the ground about five feet from each other, but at forty feet, grow into each other, forming one tree with one top.

LIST OF PATENTS.

The following list of patents upon improvements in wood-working machinery, granted by the United States Patent office, Oct. 14, 1884, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of American and foreign patents, No. 617 Seventh St., Washington, D. C.:

- 306,424.—Floor clamp—H. A. Pichard, Danvers, Mass.
- 306,525.—Lathe, turning—G. S. Roberts, Meredith, N. H.
- 306,399.—Log loader—W. E. Hill, & M. J. Lyons, Kalamazoo and Saginaw, Mich.
- 306,433.—Log turner—D. J. Sattman, Brown, Ala.
- 306,333.—Lumber trimming machine—T. J. Frazier, Lyons, Iowa.
- 306,404.—Mortising machine—J. J. Keane, Pittsville, Wis.
- 306,507.—Plane—O. W. Mockins, Pine Meadow, Conn.
- 306,093.—Plane, moulding—J. R. Lawronce, Durham, N. C.
- 306,522.—Sawing machine, circular—G. R. Johnson, St. Marys, Ohio.
- 306,543.—Vencer cutting machine—N. E. Ranger, Weld, Me.

PATENTS ISSUED OCT. 21.

- 306,838.—Bench for jointing lumber—O. A. Williams, Webster City, Iowa.
- 307,074.—Bit auger, tool for cutting the floor lip and cutting spur of—J. Swan, Seymour, Conn.
- 306,939.—Dust from shavings, apparatus for separating—J. B. Mahaffey, Baltimore, Md.
- 306,723.—Latho for turning wheels—J. Du Bois, Du Bois, Pa.
- 307,065.—Mortising machine—J. Oppenheimer, Shenandeah, Iowa.
- 306,763.—Plane—S. G. Laskoy, Chelsea, Mass.
- 306,877.—Plane, bench—J. A. Traut, New Britain, Conn.
- 306,826.—Saw mill, band—D. B. Hanson, assignor to Sinker, Davis & Co., Indianapolis, Ind.
- 306,811.—Saw mill set-works—J. Cook, assignor to Sinker, Davis & Co., Indianapolis, Ind.
- 306,967.—Saw tooth, insertible—O. F. Simonds, Fitchburg, Mass.
- 307,018.—Sawing machine—J. H. Coppock, Deer Creek, Ind.
- 306,949.—Sawing machine, circular—R. G. Peters, Manistee, Mich.
- 307,033.—Stump extractor—L. B. Gibson, South Addison, N. Y.
- 306,916.—Stump-puller—D. L. Grossman, Rutland, Ind.
- 306,850.—Trees, device for felling—P. Miller, Norwich, Conn.

THE INVENTOR'S OPPORTUNITY.

It is about time that some ingenious inventor contrived something that shall prevent the fearful mortality and bodily injury resulting from the running of edgers in saw mills. Now that the mill machinery of the country has been brought to such capacity and perfection that, when it is all running at high speed, and on full time, the lumber market is soon glutted, it would be well for the experts to contrive a few few safety devices. Though it is an unpleasant thing to do, we must say that the logging and sawing industry kills by far too many men, and mangles more than it kills. The proprietors and machinery manufacturers have a responsibility in this matter, and should awaken to it. In a majority of instances in which we have to record a mill or logging casualty, it is stated in the local report or daily paper despatch that the man killed or injured had a wife and one or more children. The woe that is caused by these casualties is fearful to contemplate. A feature of them is that the deaths resulting and injuries inflicted are of the most horrible description. It does seem as though three-fourths of them could be averted by protective appliances.—Northwestern Lumberman.

"The play's the thing, wherein I'll reach the conscience of the King." And equally true is it that Dr. Pierce's Pleasant Purgative Pellets (the original Little Liver Pills) are the most effectual means that can be used to reach the seat of disease, cleansing the bowels and system, and assisting nature in her recuperative work. By druggists.

BOARD OF TRADE RETURNS.

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

Timber (Heavn).	Quantity.	Value.
Loads.	£.	¢.
Russia.....	31,118	52,971
Sweden and Norway.....	59,883	91,409
Germany.....	19,501	47,484
United States.....	8,116	22,929
British India.....	6,630	86,677
British North America.....	31,371	142,981
Other Countries.....	34,100	86,654
Total.....	139,000	491,105
Timber (Sawn or Split, Planed or Dressed).		
Russia.....	204,503	467,143
Sweden and Norway.....	107,445	849,490
British North America.....	139,753	323,495
Other Countries.....	18,199	53,049
Total.....	529,900	1,689,179
Staves, (all sizes).....	16,977	53,012
Mahogany (tons).....	5,849	51,098
Total of Hewn and Sawn.....	719,500	1,689,284
NINE MONTHS ENDED 30TH SEPT., 1884.		
Timber (Hewn).		
Russia.....	190,966	358,046
Sweden and Norway.....	433,325	730,172
Germany.....	222,090	538,441
United States.....	147,009	342,372
British India.....	31,793	464,109
British North America.....	172,193	758,347
Other Countries.....	312,613	451,327
Total.....	1,671,410	3,821,368
Timber (Sawn or Split, Planed or Dressed).		
Russia.....	843,094	1,803,171
Sweden and Norway.....	1,247,192	2,655,916
British North America.....	729,793	1,721,002
Other Countries.....	322,791	983,846
Total.....	3,142,910	7,169,635
Staves (all sizes).....	104,544	299,180
Mahogany (tons).....	46,850	427,949
Total of Hewn and Sawn.....	4,714,228	10,990,903

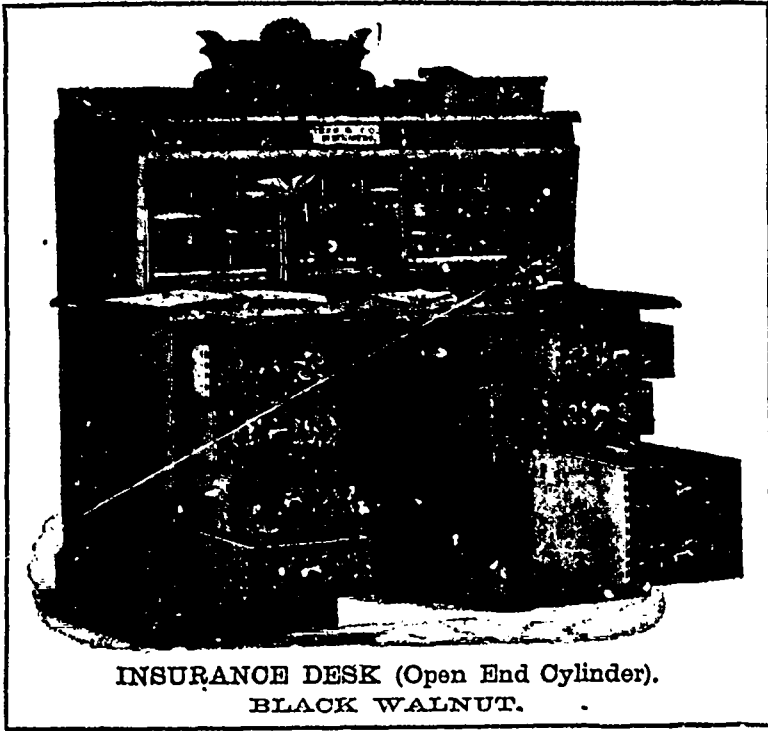
GLASGOW.

The Timber Trades Journal of Oct. 11th, says:—A considerable amount of business has been done at the auction sales held during the past week, one at Greenock on 3rd inst. and the other at Yorkhill wharf here on the 8th inst. At the latter the goods offered comprised a large parcel of Michigan 1st pine deals, besides Quebec and Lower Port deals, Namsos battens, birch and whitewood timber, ash boards, &c., making altogether an attractive catalogue. There was a large company gathered, and sales made were principally of Michigan deals and St. John birch timber.

On 3rd inst., at Greenock, Messrs. Edmiston & Mitchell, brokers, sold by auction:

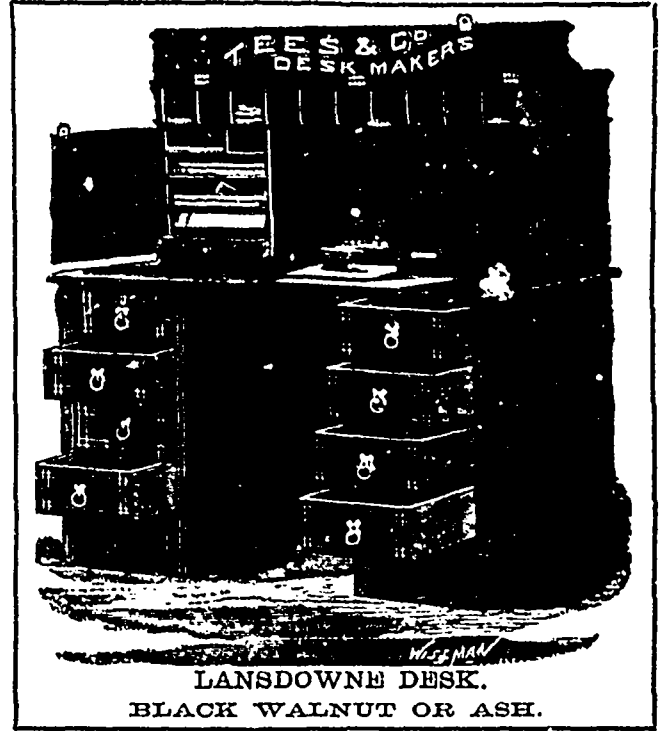
Quebec waxy boardwood—	46 c. ft. avg. per log	1s. 8d.	per c. ft.
Do. yellow pine (deck plank)—	60 c. ft. avg. per log	2s.	"
Do. yellow pine (sup. B. qty.)—	55 c. ft. avg. per log	1s. 6d.	"
Do. yellow pine (ordinary)—	60 c. ft. avg. per log	1s. 1d.	"
Do. red pine (first-class)—	30 c. ft. avg. per log	1s. 0d.	"
Hewn pitch pine—	32 & 45 c. ft. avg. per log	1s. 1d.	"
Fitch pine planks—	3 & 4 in.	11d. & 11d.	"
9 logs Quebec ash (515 c. ft.)		1s. 10d.	"
3 " Hickory (152 ")		1s. 10d.	"
1 log birch (69 ")		1s. 6d.	"
1 " oak (33 ")		2s. 2d.	"
Quebec 3rd bright pine deals—			
12 ft. 11x3		11d.	"
21 " 11x3		11d.	"
12 " 9/11x3		11d.	"
12 " 7/8x3		9d.	"
9 to 14 " 7/17x3		11d.	"
Do. 3rd bright pine ends—			
6 to 8 ft. 7/14x3		8d.	"
Do. red pine deals—			
9 to 17 ft. 6/15x3		10d.	"
Do. 4th spruce deals—			
12 ft. 9x3		9d.	"
12 " 7/9x3		8d.	"
Do. 4th spruce ends—			
6 ft. 7/9x3		7d.	"
The following without reserve:			
Quebec waxy boardwood—	42 1/2 c. ft. avg. per log	1s. & 1s. 1d.	"

Many imitations, but no equal, has Dr. Sage's Catarrh Remedy.



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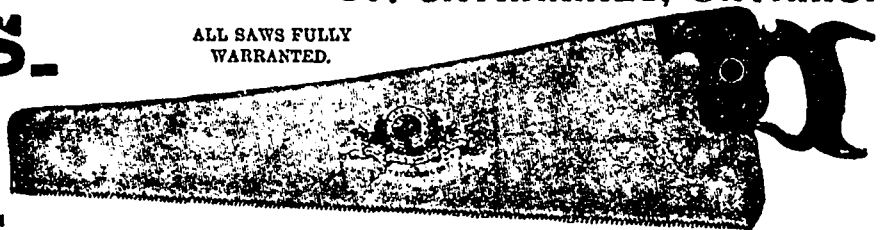
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The Northwest.

Our attention has been called in various ways to the forest wealth of the Canadian Northwest, and recently we published some account of it given by the *Calgary Herald*. Its extent is not yet fully known. Mr. W. O. Van Horne, General Manager of the Canadian Pacific Railway Company, has lately been over the mountain section of the line, and thus remarks about the country it traverses:—"In addition to the agricultural possibilities of the many valleys of British Columbia, and its great mineral wealth, its magnificent forests alone will furnish a large and remunerative traffic for the railway."

A Fatal Accident at Kincardine.

KINCARDINE, Oct. 27.—John McLeod, a young man, lost his life this morning. While attending to his duties in the engine room of Rightmy's salt works he came in contact with the driving wheel and was instantly killed.

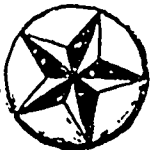
How to Save Money,

And we might also say time and pain as well, in our advice to good house-keepers and ladies generally. The great necessity existing always to have a perfectly safe remedy convenient for the relief and prompt cure for the ailments peculiar to woman—functional irregularity, constant pains and all the symptoms attendant upon uterine disorders—induces us to recommend strongly and unqualifiedly Dr. Pierce's Favorite Prescription—woman's best friend. It will save money.



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MICHIGAN FORESTS.

The American Forestry Congress which met in Saratoga considered various questions relating to trees, tree planting, and tree preservation, which will be of interest. Mr. Perry Hannah said, in the course of an interview published recently in the *Post*, that the pine forests of the state would last about ten or 15 years more; that is, before the year 1900 the great lumber industry of Michigan would have died out for want of material. There seems to be no way to prevent this result. The owners of the pine lands bought them for the special purpose of converting their growth of pine into logs, lumber and cash. It seems like a work of devastation, but, whether the rapid clearing will in the long run appear to be the most profitable move in a business view or not, it is progressing too rapidly, and the plants for logging, sawing and transportation are too extensive and too well established to admit of any doubt that the manufacture will go on till there is not a merchantable pine tree left standing in the lower peninsula.

The same fate is in store for the hardwood lumber trees, of which there is such a splendid growth in the northerly part of the state—ash, maple, birch and others. Within the past ten years, and chiefly within the last five, steam and water mills have sprung up for the manufacture of these woods into lumber for house-finishing, furniture and cabinet work, and they are increasing at a rate that promises to exhaust the supply during the lifetime of some who are now engaged in the business. The sugar-maple is especially in demand, and factories for making the birds-eye veneering are to be found in many of the maple localities. Denuded pine lands in other states have become barrens. There are great tracts in the State which the owners do not reckon worth paying taxes on, now that they are stripped of their trees.—*Lumber World*.

BLACK BIRCH.

Black birch is a close-grained, handsome wood, and can be easily stained to resemble walnut exactly. It is just as easy to work, and is suitable for nearly, if not all, the purposes to which walnut is at present applied. Birch is much the same color as cherry, but the latter wood is now scarce, and consequently dear. It is with difficulty that cherry wood can be obtained at \$50 a thousand feet, while birch wood can be purchased at any saw-mill for \$10 per thousand feet. When properly stained it is almost impossible to distinguish the difference between it and walnut, as it is susceptible of a beautiful polish, equal to any wood now used in the manufacture of furniture. In the forests throughout Ontario birch grows in abundance, especially if the land be not boggy. There is a great difference in the wood of different sections. Where the land is high and dry the wood is firm and clear, but if the land is low and wet, the wood has a tendency to be soft and of a bluish color. In all the northern regions it can be found in great abundance, and as the tree grows to such a size, little trouble is experienced in procuring a large quantity. The forests of Manitoulin Islands abound with it, as well as those of Peterborough and Haliburton districts. The Muskoka district also contains a plentiful supply. During the past few years large quantities of this wood have been exported from the Province of Quebec at a low figure. It is very easily detected among other trees by its height, large trunk, and the peculiar color of its coarse bark. Most of the perforated chair bottoms now in use are manufactured from it. There is a species of bird's-eye birch, but it is very scarce. An evidence of the weight and solidity of the wood is the fact that it will sink after being a few days on the water.—*Toronto Globe*.

LUMBER PROSPECTS.

"It is useless to expect a revival in the logging business this season," observed a veteran lumberman to the reporter, yesterday, "the outlook is not so good as it was last fall, logs are lower, men harder to get, supplies about the same, and there is about the usual supply of deals on the other side. In former years we were all well into the season's work by the middle of October, but at the present time only

a few of the leading operators are making any move. Nearly everybody lost money last season and few contracts have been let so far. Logs were sold at less than they cost last spring, and having been bitten once most of the prominent dealers will hold back to the last minute before putting in men and supplies.

"Of course, operations are becoming more and more difficult every year, and at the present outlook the lumber business in this Province is doomed to a rapid decline. The trees are remote from the water, and have to be hauled miles to the brow in many cases, and as the camps are moved further into the heart of the country, the portaging of provisions foots up a serious item. Last year the weather was favorable, yet it was after May 1st when the last of the logs reached the brows.

"Mr. Gibson's men are at work on the Nashua, and the understanding is that the output on that river will not exceed 25,000,000 feet of logs. There is some stir on the Miramichi river, and a few of the old-timers have opened up the upper St. John, but, on the whole, the prospect is so blue that the spruce cut will be very limited this season. Probably not more than 50 per cent., or less than 200,000,000 feet will be cut in New Brunswick this year."—*St. John Telegram*.

PURCHASE NOW.

The *Northwestern Lumberman* says:—Those who contemplate engaging in the business of manufacturing lumber, and have their pine to buy, would do well to consider the wisdom of buying it before there comes another boom in prices. During the last two years it has been shown in numerous cases that the manufacturer cannot pay such prices for stumpage as ruled in 1881-82, and succeed in business. Their ships sail well so long as high prices are obtained for lumber, but when depression comes the wind leaves their canvases and disaster follows. Stumpage is now 25 per cent. lower than it was in the years above named, and in many individual cases 25 per cent. would not begin to cover the decrease in prices. The best business men sell when prices are highest and buy when they are lowest, so far as they can determine when those points are reached. That stumpage will advance as soon as better conditions govern the lumber market is inevitable, and we know of several operators that sold pine two and three years ago who think it is about time to begin to buy it in again. There are men who will make respectable fortunes by these transactions.

TIES TO ONE HUNDRED FEET.

There was addressed to the *Register* this week the query: "How many ties are laid to 100 feet of track, and, also, how many to the mile?" The number of cross-ties in a mile of track varies largely in different roads. Every first-class line has at least 2,640, or one every two feet, and some exceed 3,200 per mile. Then again, there is a difference on different parts of the same road. A tie, to grade, must present a clear surface of eight inches and a thickness of six inches. Sometimes ties below grade are used and the difference balanced by increased numbers. To illustrate the existing difference take the following examples from St. Louis roads: The Cairo Short Line uses 2,640 cross-ties per mile, as does also the Missouri Pacific on all new road; The Wabash, from 2,700 to 3,000; with the St. Louis and Cairo, 3,000 is the standard. The Vandalia Line uses 3,200 cross-ties per mile, and this also the average on the Frisco Line, although there are as high as 3,280 on some portions of the Arkansas division of the latter road. Of the railways entering this city perhaps 2,900 cross-ties per mile would be a fair average.—*Railway Register*.

SHAFTS AND BELTS.

In many cases the shafting is too light for the weight put upon it and the strain to which it is subjected. In many cases the bearings are too far apart to properly sustain the load when in motion. In many cases the directions of the belts are either absolutely improper or relatively wrong.

Recently much trouble was caused by the heating and rapid wearing out of the boxes on the receiving length of a main countershaft in an establishment which occupied a four story

building. The length of shaft, which was only two inches in diameter, was replaced by one of two inches and three-eighths, but the trouble still continued. Between two hangers, a little over eight feet apart, were hung pulleys, the aggregate weight of which could not have been less than six hundred pounds. The main driving belt, twelve inches wide on a six foot pulley, ran directly up and down—vertically—and every other belt pulled in one direction. The main belt that ran vertically weighed about two hundred pounds. With these data the intelligent millwright or other mechanic can readily see that economical running was impossible.

Objection is made to shafting, stiff enough to bear the load and strain, on account of its weight. This might be remedied in a great measure by substituting hollow for solid shafting. The subject was treated definitely in the *Scientific American* of May 12, 1883, under the heading "The Load of Shafting," showing that the change was entirely feasible.

Part of this objection might have been removed, also, by sufficiently supporting the shaft, as it is evident that a shaft will run with less friction when running perfectly straight and level than when running on the "double wabble" principle; at least no deflection out of a direct line should be permitted on a shaft at any place in its entire length. Even if a deflection is not apparent to the eye, it can be detected by holding the finger against a shaft in motion.

The direction of belts is a subject that is not usually sufficiently considered. If a belt is hung to run vertically its entire weight is upon the upper shaft, and it must be kept so tight as to take up the sag of its weight, which causes it to fall off from the bottom of the lower pulley. If a belt must run vertically, let the lower pulley be as much larger than the upper one as possible, so that the belt can have a bearing on its sides. Under no circumstance allow the lower pulley to be smaller than the upper one; it is best always in leading from a lower to an upper shaft, or vice versa, to give the belt an angle; the best running belts are those which run horizontally.

Never have the pull of the belts all on one side of the shaft; it is unnecessary to point out the reasons why. The pull of belts should be as equally distributed relatively as possible.

It is an easy matter to ascertain the proper position of the bearings of a shaft relative to its weight before the hangers are placed and the shaft hung. Place the bare shaft on boxes on movable horses, the bearings being at the desired distance apart. Then load the length of shaft with the weight or estimated load of pulleys, and notice any deflection. The load test need not be the actual weight, but only a relative portion. Rig a lever over the shaft midway between the bearings on the horses, one end of the lever to be held by a rod bolted to the floor and the other end loaded. By estimating the difference (relative) between the fulcrum and the shaft and the weight at the end of the lever, a comparatively easily handled weight can represent the total weight of the shaft, on the principle of the ordinary steam boiler safety valve lever. After testing the shaft by the actual weight of the pulleys and belts it has to carry, add 50 per cent. more for the sagging, swaying, and vibration of the belts in motion, and when this total weight can be sustained without deflection, the position of your bearings is determined.—*Scientific American*.

Shipments from St. John.

According to the *St. John Globe* the shipments of deals from that place to trans-Atlantic ports during the past nine months show some reduction as compared with the shipments last year. From January 1st to September 30th last year 153,535,517 feet of deals were sent forward, while this year 145,957,817 feet were exported. There has been an increase in the shipments of birch timber, which this year amounted to 11,546 tons compared with 7,401 tons last year. Of pine timber 3,642 tons went forward this year and 7,401 tons last year. The two largest shippers this year are Alex. Gibson with 90,789,825 superficial feet of deals, and W. M. Mackay, 22,337,201 S. feet. Then follow in order Guy, Bevan & Co., Samuel Schofield, and R. & J. Stewart.

A TOUR THROUGH THE WOODS.

Some weeks ago we noticed the departure of Mr. Phipps, the Ontario forest conservator, on a tour of examination in the lumbering woodlands near the Upper Ottawa. He has now returned and is staying for a day or two at the Grand Union. During his journey he visited the establishments of Messrs. Booth, Thomas Mackey, Levi Young, William Mackay, Bronson and others, stopping some days with each, travelling through their limits, remaining over night at their camps in the bush, and observing thoroughly the manner of their operations and the management of the forest. Mr. Phipps describes himself as having been treated with the greatest hospitality at all these establishments, and given every facility for observation and enquiry. He is of opinion that, with regard to a very large portion of the country, settlement by farmers should be discouraged, and every effort made to retain a permanent and productive forest. This, he observes, is being done in many countries of Europe, where land is much more valuable than here, and where the opportunities of attaining the object are not nearly so great. There they have to plant a forest—here, we need only protect one. It is to be noticed, he remarks, that houses and furniture, and many another product of the forest, are almost as necessary to the comfort of man as food itself, and that we need land to grow the one as well as the other. Everywhere on his journey the ravages of fire, both of this summer and of earlier date, were visible in the timber lands, and the general opinion of practical men was found to be that Ontario loses millions of dollars annually by this cause. With the assistance of such men, Mr. Phipps has matured a plan, which he will shortly submit to the Ontario Government, by which these great losses may be largely diminished. It is to be hoped that it will soon be in successful operation.—*Ottawa Free Press*.

FAMINE CAUSED BY GOATS.

According to the *Indian Forester* famines in India are caused by goats. The goats in India appear, as a rule, to live on the brink of starvation, as, indeed, goats almost everywhere seem to do, collecting a scanty livelihood out of the barrenest materials. Especially, however, do they attack the green shoots and topmost twigs of every young tree which they come across. A herd of goats, numbering, say, from 15,000 to 20,000 animals, as is sometimes the case in the desert tracts of Asia, is not likely to leave much vitality in the saplings that grow in its line of grazing. These saplings, therefore, never grow to trees. The old trees, unless reinforced from time to time by a younger growth, die off, and thus whole forests disappear. Without forests the rainfall ceases; without rain the crops fail. In spite of the enormous extent of Indian plains, it is altogether possible that the action of the goats must be thus indirectly responsible for Indian droughts. St. Helena, as every one knows, has been converted from a Garden of Eden to a howling wilderness owing to the importation of the goat alone. In Cyprus, too, the diminished rainfall and consequent sterility is attributed almost entirely to the herds of goats which every Cypriote appears to keep, and which have long ago devastated the vegetation of the island.

QUEBEC OULLERS' OFFICE.

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

	1882.	1883.	1884.
Waney White Pine..	2,473,010	3,027,589	2,125,267
White Pine.....	7,433,695	6,292,583	3,686,694
Red Pine.....	1,410,054	443,974	309,940
Oak.....	1,149,396	1,716,636	706,633
Elm.....	701,028	509,261	651,722
Ash.....	268,196	250,004	410,200
Basswood.....	1,273	2,244	4,121
Butternut.....	2,639	1,098	1,300
Tamarac.....	51,482	5,283	19,113
Birch & Maple.....	268,333	138,803	201,141
Masts & Bowsprits..	— pcs	— pcs	— pcs
Spars.....	51 pcs	— pcs	41 pcs
Std. Staves.....	382,621.3	627,011.22	66,922.20
W. I. Staves.....	1134.8.0.6	510.2.3.5	176.3.2.19
Std. Staves.....	764.2.29	87.2.1.19	24.2.29

Quebec, Oct. 10.

JAMES PATTON,
Supervisor of Oullers.

Chips.

At the Forestry Exhibition at Edinburgh, out of 290 awards for Great Britain, Scotland got 231. J. H. WALLER, a Canadian, will operate in square timber, elm and pine, in Grand Traverse county, Mich., the coming winter.

It is estimated that 6,000,000 feet of English deals have this year been shipped from ports on Lake Superior and Michigan.

CAPT. JOHN M. WILSON, a pioneer lumberman of the Lake Umbagog region, died at Old Orchard, Me., recently, where he had long resided.

WHITNEY & REMICK, Saginaw manufacturers, on account of carrying over such a large stock of logs and lumber, will log but about 5,000,000 feet the coming winter.

GINSENG root is a forest product that is dug by Indians and marketed to considerable extent at Ludington, Mich., where it brings 30 cents a pound. A single Indian has sold as much as \$60 worth at one log.

ONE train of 18 cars is daily required to transport the lumber manufactured at Stillwater, to Bangor, Me., where it is transhipped to vessels. There are three mills at Stillwater owned by John Morrison & Co., A. B. Sutton and Geo Lewis.

McARTHUR Bros., an Ontario firm, says the Northwestern Lumberman, have this year shipped from Lake Huron and Lake Michigan ports to Canada, 3,000,000 feet of what is called in the provinces "board pine" or pine in the log, slabs off, for re-sawing. It sells in Quebec for 35 and 36 cents per cubic foot, and is shipped to England.

It has recently been stated that the Canadian Pacific Railroad Company has this year purchased of Duluth lumbermen 7,500,000 feet of square timber, to be used on the line of Port Arthur, Ont. Previous to that it had been stated that 3,000,000 had been purchased for such purpose, which was too small by more than one-half.

The wood industry is a most important branch of Austrian trade, particularly the manufacture of furniture at Vienna, where two companies alone have seven manufactories, as well as branches in Moravia, Silesia, and North Hungary, employing altogether some 8,000 persons. Wood carving is largely carried on in the homes of the operative carvers, and this is especially the case in the mountain districts.

PLANER KNIVES, Stave Outter^{er}, Stave Jointing, Shingle do, Cheese Box, Veneer Cutting, Paper Cutting, Leather Splitting, Moulding and Tenoning Knives.

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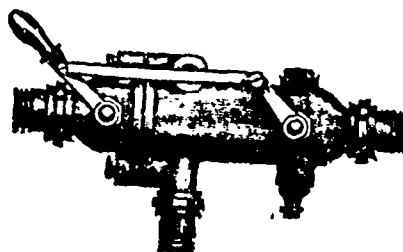
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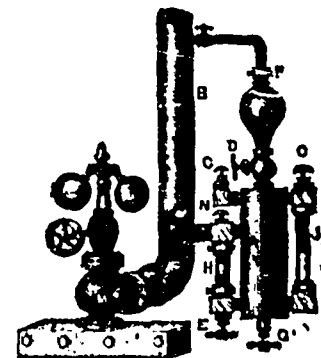
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For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

MISSISSIPPI, June 7th, 1883.

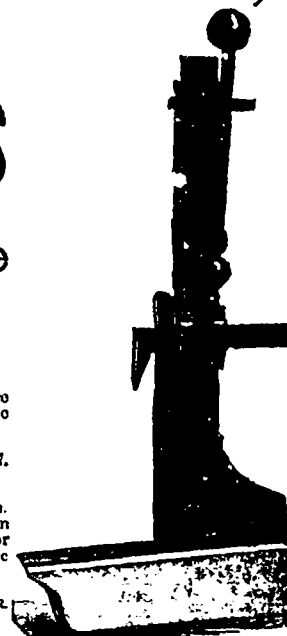
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Yours Respectfully,
PETER McLAREN.

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HUGH GIBSON,—Sir,—The Dogs I bought of you give satisfaction. They beat any Dog that I ever saw for ripping or edging lumber on carriages. They are just the thing for scantling. I would not take \$30 for them to-day and have to wait for another pair to come from you, because I believe they make two dollars a day for me.

Yours truly,
GEO. S. BROWN, JR.



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as illustrating a downward tendency in spruce prices, and is probably due to the chapter of accidents. Taking one with another, however, we find that for such goods as are plentifully presented in the London Dock stocks prices very unsteady, and continue unreliable, though for scarcer goods values are inclined to advance.

In our list we have the first instalment of the Canadian fall fleet in the shape of a Quebec and a Three Rivers cargo, both for Messrs. Bryant, Powis & Bryant, our old friend the Howling being the earliest forward with pine and spruce.

Spruce keeps low, but there is nevertheless a general increase in buying, and we are informed that round the coast importers are ready to do business at even a shade above late prices. It is usually in this way that any upward movement begins, and the scarcity of stock at the Canadian shipping ports, with the present extraordinary low rates of freight, would appear to warrant some movement of the kind.

AUSTRALIA.

Messrs. Lord & Hughes' monthly circular, dated Melbourne, August 23rd, says:

Referring to business done during the past month, we have now to report sales of every description of timber and building materials have been regular, but not excessive, Oregon showing a small advance, as also does American lumber. Baltic flooring is a little easier, while Baltic dealers and Canadian spruce are a shade firmer.

The future of our market depends on the most careful handling by importers, as the receipts of Baltic flooring and deals promise to be very heavy direct, while the collapse in the Adelaide market is likely to divert many of their shipments to this market.

Deliveries from the yards continue steady, though showing a slight falling-off in quantities. With the opening of our spring, however, we look for an improved demand as money is plentiful and cheap.

The arrivals have been—Passapartout, from Frederickstadt, with flooring; Birchgrove, from Puget Sound, Helicon, from Tacoma, Nanaimo, from Burrard Inlet, with Oregon timber, laths and pickets; Ferdinand, from Boston, with clear pine, white pine shelving, slates and laths; Adelaide, from Adelaide (transhipment ex Edith Carmichael), with clear pine; Cardigan Castle, Gulf of Carpentaria, Fort Adelaide, Kent, River Nith, Ben Voirlich, Thyatira, Miltiades, Macduff, Melbourne, Africa, Andora, Loch Long, Mermorus, Loch Tay, and Fontanton, from Great Britain, with red deals, flooring, slates, lead, galvanised iron, and cement; Adelaide, Franklyn, Victorian, Claud Hamilton, from Adelaide, with Baltic deals, Waitemata, from Kaipara, with Kauri pine and pickets; May Newton, from Richmond river, with cedar; Cheviot, Rodondo, Wendouree, Fitzroy, Gabo, Leura, City of Adelaide, Cahora, Nemesis, and Buninyong, from Sydney, with cedar, laths, lead, Galvanised iron, and cement.

RED DEALS—20,223 pieces from the Baltic, 338 pieces from the United Kingdom. The arrivals have been Adelaide, Franklin, Victorian and Claud Hamilton, from Adelaide, with transshipments from the Baltic; Mermorus, from United Kingdom. Sales by auction have been ex Leviathan, from Laurvig; Adelaide, Franklin and Victorian from Adelaide. W S W brand, 9x3, 6d. to 5½d.; 7x2½, 5½d. to 5d.; P x H, 9x3, 5 11-16d.; 11x3, 6d.; 7x3, 5½d.; 7x2½, 5 5-16d. to 5½d.; WTW, 9x3, 4 13-16d.; 11x3, 5½d.; 7x2½, 4½d.; 9x4, 4 9-16d.; TWF, 10x3, 3½d.; 9x3, 3 3-16d. to 3 1-16d.; FWT, 11x3, 3½d.; 9x3, 3 1-16d., TWF, 11x3, 3½d.; 9x3, 3½d.

SPRUCE DEALS.—Imports: Nil. The only public sale has been the parcel of 11x3 and 9x3, ex Saml. Skolfield, on 8th instant.

OREGON TIMBER.—Imports: 1,574,565 feet super. The arrivals have been Birchgrove, Helicon and Nanimo. Sales by auction since our last report have been the cargoes ex Birchgrove and Minnie Carmichael, at an advance on last month's rates, viz., £6 17s. 6d. to £6 5s., and the balance of cargoes ex Howard D. Troop, at £5 5s. to £6 2s. 6d. The cargo ex Nanaimo, is advertised for sale on 26th instant, and that ex Helicon on 29th instant.

LUMBER.—Imports: Clear pine, 150,735 feet super; white pine shelving, 57,281 feet super. On 8th inst. the shipment ex Saml. Skolfield was sold at auction, showing an advance on last month's rates on nearly every line, and yesterday the parcel ex Adelaide, from Adelaide, and Ferdinand, from Boston, were offered, but only portions of each were quitted.

PITCH PINE.—Imports: Nil.

REDWOOD.—Imports: Nil. The only sale by auction has been small line 2½ in., at £10 per 1,000 feet super.

FLOORING AND WEATHERBOARDS.—Imports: 1,823,428 feet lineal. The arrivals have been Passapartout, from Frederickstadt; Thyatira, Loch Long, Mermorus, and Loch Tay, from Great Britain. The cargo ex Passapartout is advertised for sale on 26th inst. Sales by auction during the month have been ex Ernst, Atlantic, and Loch Long, and prices realized were as follows:—Red, 6x1½, at 10s. 3d. to 9s.; 6x2, 8s. to 6s. 9d.; 6x2, 5s. to 4s. 11d.; 6x2, 5s. to 4s. 1d.; 4-out weatherboards, 6s. 6d.; white, 6x1½, 8s. 9d. to 8s. 6d.; 6x2, 7s. 9d. to 7s.; 6x2, 5s. 6d. to 4s. 9d.; 6x2, 4s. 8d. to 4s. 4d.; 4-out weatherboards, 6s. 4d. to 6s. 3d.

KAURI PINE.—Imports: 309,810 feet super. The only arrival has been Waitemata, from Kaipara. Sales by auction during the month have been very limited, being confined to balance of logs ex Killarnoy, at 15s. to 14s. 9d.; and balance of shelving ex Naiaid.

CEDAR.—Imports: 152,800 feet super. The arrivals have been May Newton, from Richmond River, and various coasting steamers. Sales by auction of various parcels, logs and sawn boards have been made.

DOORS.—Imports: Nil.

LATHS AND PICKETS.—Imports: Laths, 15,129 bundles; Pickets, 10,651 bundles. The arrivals during the past month have been heavy being principally—Nanaimo, which brought fully half the above quantity; Ferdinand, from Boston, and various steamers from Sydney. Sales by auction have been made of Oregon laths, 4½-ft., 33s. 9d. to 32s. 6d.; spruce laths, 4½-ft., 33s. 3d.; Oregon pickets, 4½-ft., £8 7s. 6d. to £8; 6-ft., £10 10s.

SLATES.—Imports: 442,950 pieces. The arrivals have been River Nith and Andora, from Liverpool; Ben Voirlich and Thyatira, from London, and Ferdinand, from Boston. There have been no sales by auction during the month.

PLASTER.—Imports: 70 barrels. The only sale publicly of plaster has been small parcel, ex Anahusc, King's Windsor Mills plaster, all faults, at 9s. 3d. per barrel.

CEMENT.—Imports: 13,441 barrels. The arrivals continue heavy, and there is no improvement in the market to report. No sales by auction have taken place, and transactions privately have been chiefly of small parcels, Knight, Bevan & Co.'s realizing up to 15s. 3d.

GALVANIZED IRON.—Imports: 2,379 tons. Arrivals continue large and the market depressed. Several small lines Orb have been sold privately at prices not transpired. Prices range from £21 to £19, according to brand.

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

Drying Wood in Sand.

An eastern contemporary says that small pieces of wood, such as are used by joiners and furniture makers, can be readily and effectually dried by being placed in dry sand, and then heated to 100 degrees. By this process the sand acts in the manner of an absorber of the moisture, as well as a diffuser of the heat, and the effect is uniform and complete.

Loss of Flesh and Strength,

With poor appetite, and perhaps slight cough in morning, or on first lying down at night, should be looked to in time. Persons afflicted with consumption are proverbially unconscious of their real state. Most cases commence with disordered liver, leading to bad digestion, and imperfect assimilation of food—hence the emaciation, or wasting of the flesh. It is a form of scrofulous disease, and is cured by the use of that greatest of all blood-cleansing, anti-bilious and invigorating compounds, known as Dr. Pierce's Golden Medical Discovery.

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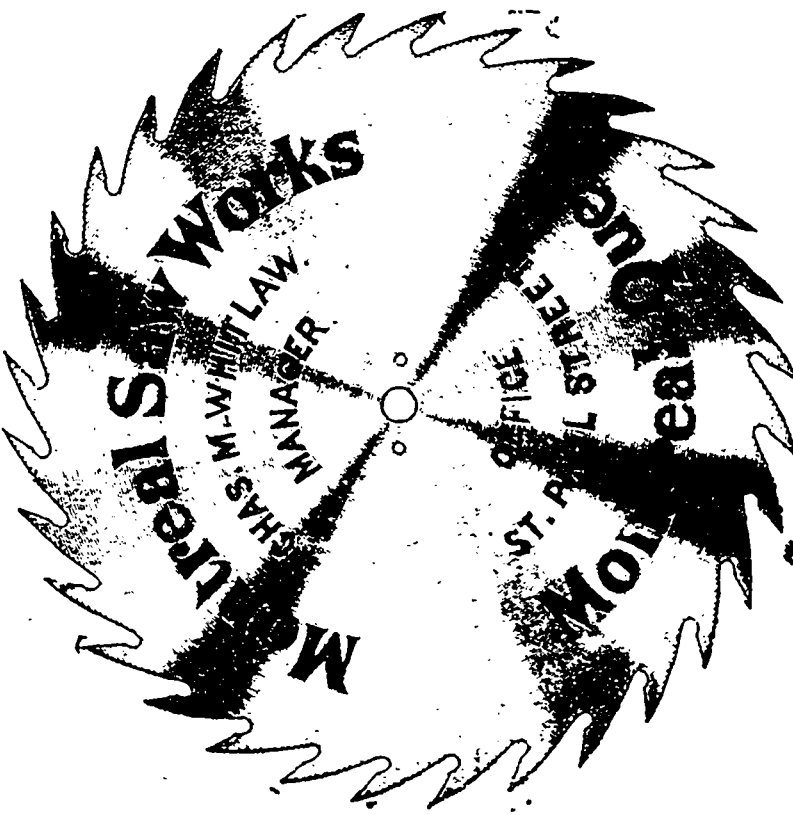
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RUBBER & LEATHER BELTING, SWAGES, SAW SETS.



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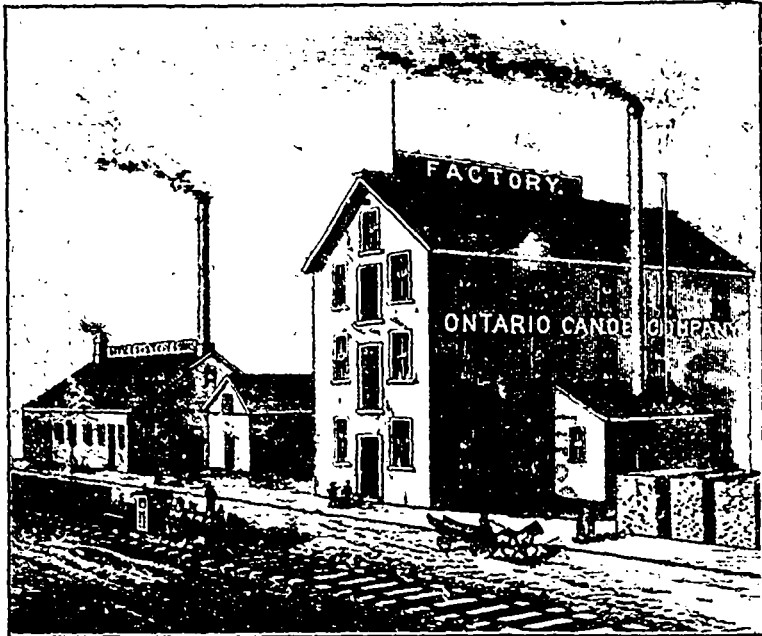
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CANOEES

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



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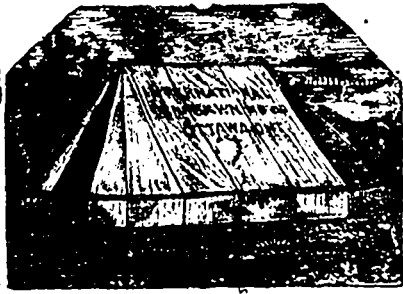
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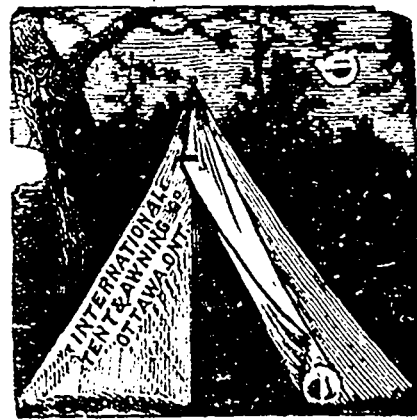
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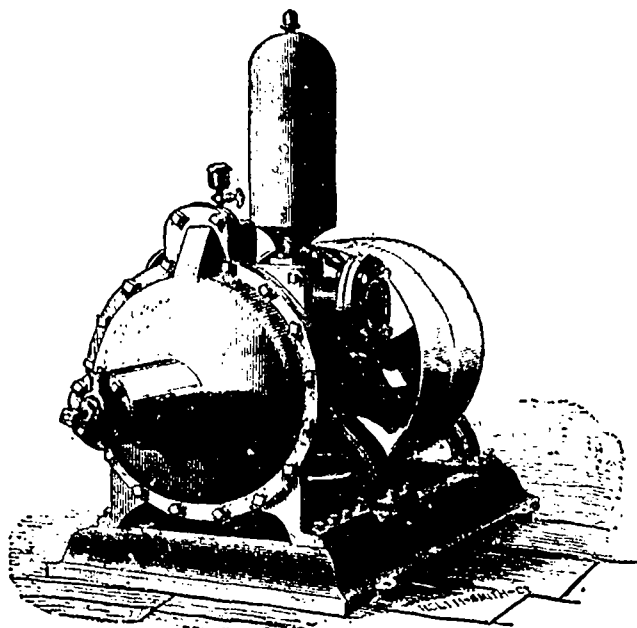
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No.	Diameter of Pipes.		No. of Revolutions.	Capacity per minute at table speed.	Price.
	Suction.	Discharge.			
2	2½ in.	2 inch.	250	125	\$100
3	4 "	3 "	250	250	150
4	5 "	4 "	250	400	225

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<p><i>Cheaper than any Pump built.</i></p>	<p><i>Only two moving parts in Engine.</i></p>	<p><i>Having the well known compactness of direct acting Pumps.</i></p>
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<h1>Pump</h1>	<h2>PUMPS</h2> <p>— TO —</p> <h2>RUN WITH BELT</h2> <p>— OR —</p> <h2>DIRECT FROM POWER</h2>	
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Our make of Pump is specially adapted to Mills in out of the way places, as they can be absolutely relied on, and occasion no vexatious stoppages for repairs.

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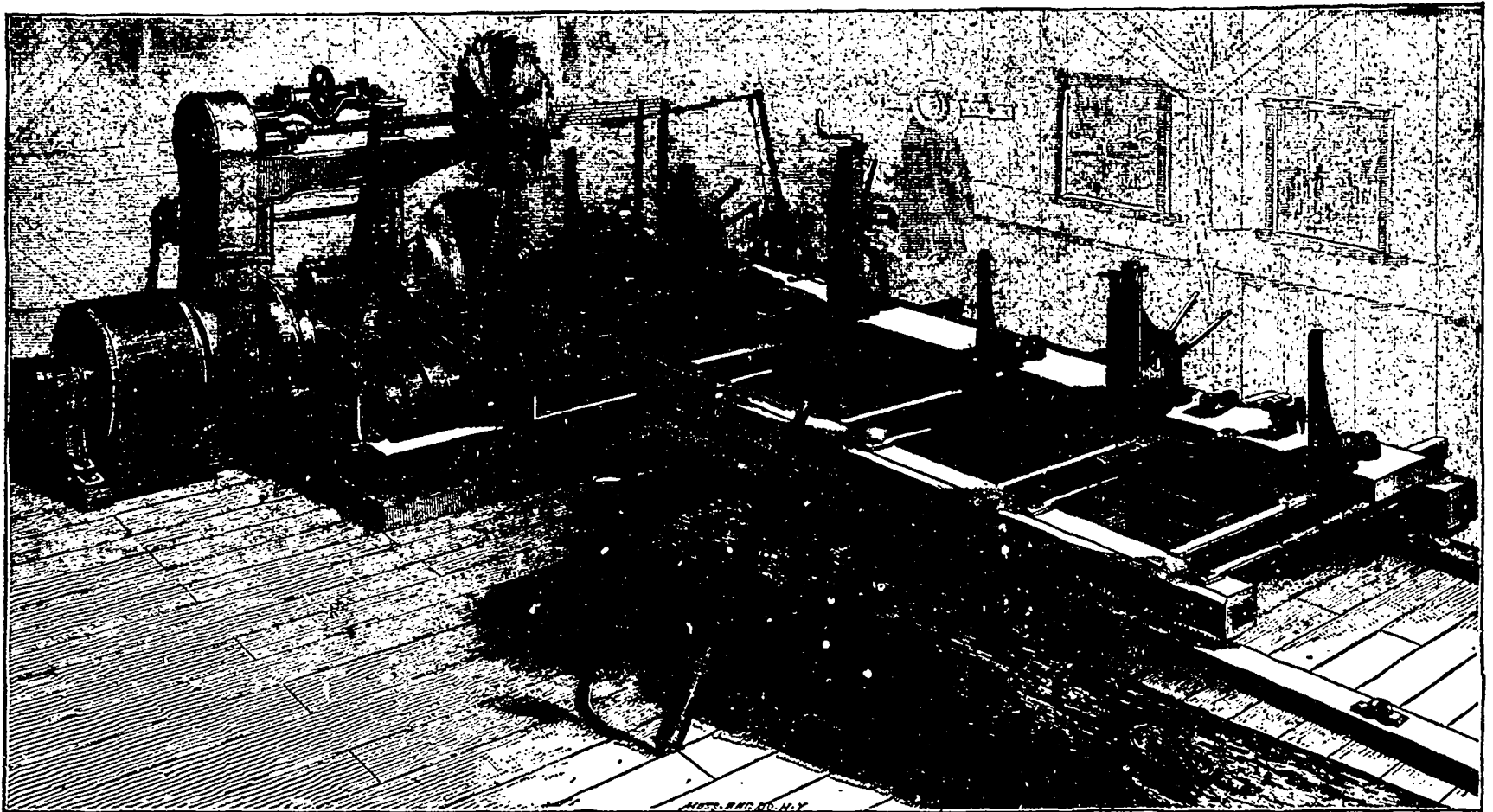
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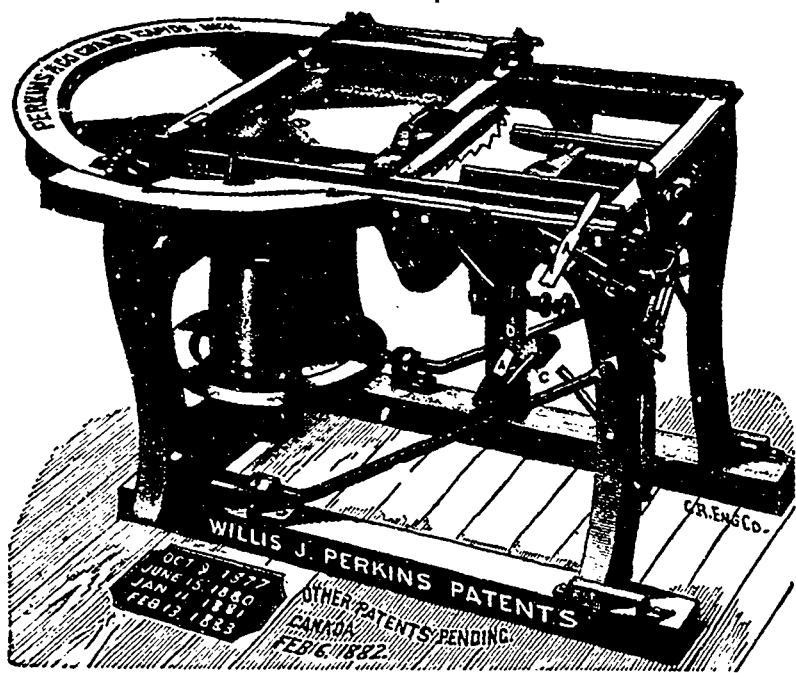
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We wish to call the attention of our Canadian Lumbermen to our First Class HEAVY SAW MILL MACHINERY for Circular Mills and Circular and Gang Mills of the most improved designs. We are prepared to submit Plans and Specifications, together with any information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

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GRAND TRIUMPH.

Willis J. Perkins' Drop Tilt!

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

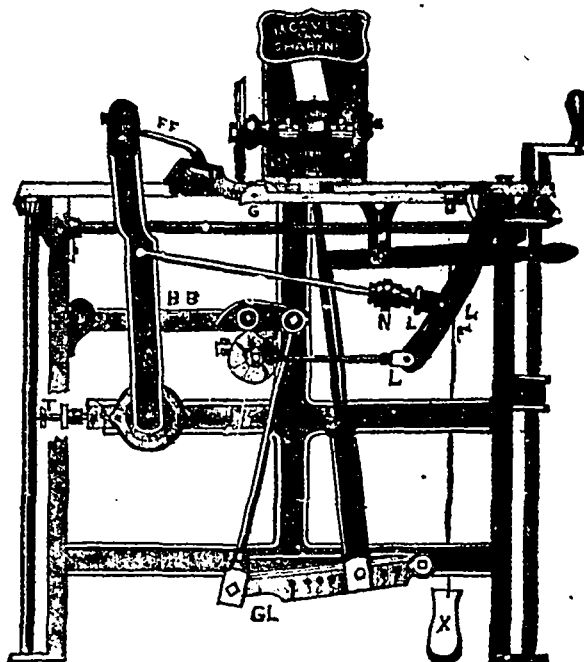
SECOND CUT ALWAYS A SHINGLE.

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

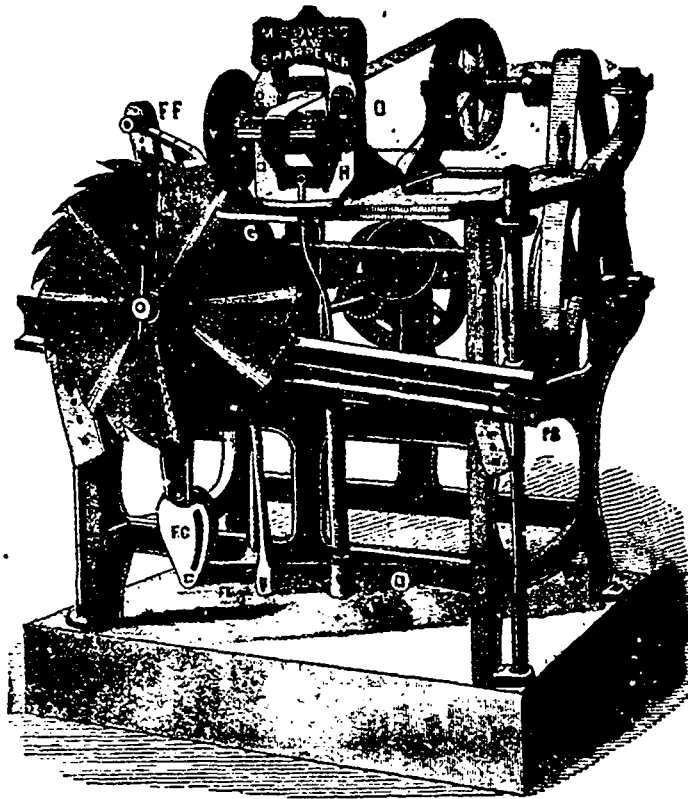
THE WILLIAM HAMILTON MANUFACTURING CO.
PETERBOROUGH, ONTARIO.

Send for Price List and Circular.

The M. Covel Patent Saw Sharpener.



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



SOLE MANUFACTURERS AND AGENTS FOR THE DOMINION