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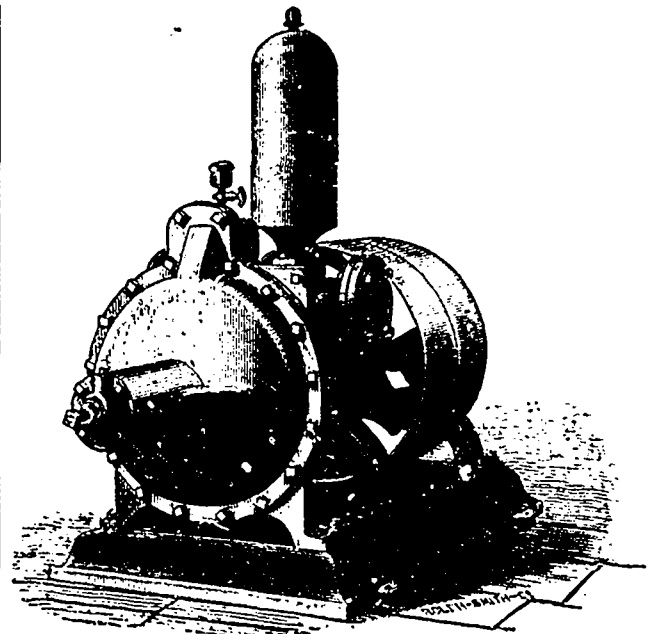
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PUBLISHED SEMI-MONTHLY. } The only Newspaper devoted to the Lumber and Timber Industries published in Canada. { SUBSCRIPTION \$2.00 PER ANNUM

VOL. 5. PETERBOROUGH, ONT., MAY 1, 1885. NO. 9.

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**THE QUEBEC TIMBER FLEET.**

A striking evidence of the depressed condition of shipping is at present made manifest by the almost entire absence of chartering British owned ships this season which are usually employed in the Quoboc timber trade. The rate of freight offering is, we understand, so low as to be quite unremunerative, and we believe many Clyde shipowners, under the circumstances, have resolved to allow their ships to remain in port rather than accept shippers' present terms. At this season of the year the ports of Greenock and Port Glasgow are usually all bustle, owing to the fitting out of the timber ships preparatory to sailing on their spring voyage to the St. Lawrence, but up till the present time not a movement has been made among the large fleet owned at these ports and laid up in harbors; and unless freights considerably improve the shipowners' resolution will prove a very serious loss to many parties. For the past four years the ships employed in the Clyde and Quebec timber trade were as follows—

Year.	No. of vls.	Register Tonnage.	Rate of Freight Per Load.
1881.....	55	64,009	25s.
1882.....	50	54,380	23s. to 25s
1883.....	74	83,293	25s.
1884.....	26	29,583	17s. " 22s.

Roughly speaking, these ships would carry crews averaging 18 men, the rate of wages earned by the seamen ranging from £3 6s. to £4 per month. Nearly all these ships, with the exception of last year, made two voyages each season to and from Quebec, bringing an average of 75,000 loads of timber of 50 cubic feet. Outwards most of the ships were partly laden with coals, carrying an average of something like 600 tons each, which taking an average of 50 ships per annum during the past four years, represents a shipment of 30,000 tons of coal per year. Then at the fitting-out ports during the spring months a large amount is usually disbursed in repairs, outfit, stores, provisions, &c., while seamen's wives, families and relatives were provided with part of the wages engaged for at the time of shipment.

The rates of freight offering this season, we understand, range from 19s. to 19s.6d. per load, a rate which, if accepted, would simply entail considerable loss upon the shipowner, his disbursements, insurance, wages, and general outlays exceeding the rate of freight earned. Under these circumstances it is not to be wondered at that shipowners prefer to incur the loss which they will sustain by their ships lying up in harbor in preference to sending them to sea, where a greater loss would be the result. Up till the present time only two or three British-owned vessels have been fixed, viz., the late Greenock owned ship, the Craigs, now owned in the Tyne, and Princess Alexandra, of Belfast, and another, said to be at Plymouth. On the other hand, a considerable amount of foreign-

owned tonnage has already been secured at the low rates.

It would thus appear that foreign shipowners, freed from the restrictions and vexatious supervision placed on the British shipowner, are enabled to send a class of vessels to sea, and work them so cheaply that a very low rate of freight yields to them a profit. Many of these ships, however, coming to this country are of such an inferior character that our Board of Trade would not for a moment allow them to go to sea, while the seamen are paid a much lower rate of wages, and the dietary scale is much inferior to that served out to the British seaman.

At this season a large number of seamen belonging to Shetland usually come to the Clyde for employment in the Quebec fleet. These men, from their steady and industrious habits, often get a higher rate of wages, the money so earned being generally carried back to their homes at the completion of the fall voyage. On the other hand, the money earned by foreign ships and seamen is nearly all sent out of the country. It may be roughly estimated that something like 100,000 tons of British tonnage has hitherto been employed in the timber-carrying trade, and the present collapse from the want of remunerative employment is a matter to be viewed with deep concern.—*Glasgow Herald, March 22nd.*

**THE WOOD TRADE.**

What the insurance fraternity might term "the war hazard" is being considered just now with reference to prices in many lines of goods. The wood trade we find, is no exception. An active trade in lumber and timber, at good prices, is so important to Canada that the interest felt in the prospects for our lumber in this coming season of navigation is quite natural.

As we note elsewhere the demand for our best pine boards and bill stuff, from the United States, is constant, and the price had advanced even before war with Russia was deemed imminent. But of ordinary or inferior goods there is no scarcity, nor is there for these any decided rise in quotations. Advices from American markets are to the effect that the natural consumptive demand will call for a heavy distribution of lumber. But the late opening of navigation means, as the *Northwestern Lumberman* says, that lumber will come forward late, and that mills will start late; and meanwhile, in the eastern markets, winter has lingered long in the lap of spring and movement is as yet limited. The statement is made, on good authority, that all the cut of good Canadian pine lumber is pretty well placed for spring delivery; and the proportion which this bears to the whole crop is sufficiently small to make a good price certain.

The resume made by our Chicago contemporary on the 11th instant is that while business in

the Eastern States is backward, the distributive trade west of Lake Michigan is active. Building operations in New York and New England cities, however, promise well for the season, and a brisker movement may be expected later. As for Chicago, "it is sufficient to say that shipments in March were considerably in excess of the aggregate in March last year."

Supposing war to be declared there is no doubt that the Baltic would be blockaded, and shipment of lumber thence practically stopped. This means much when we remember that Britain receives most of her timber and deals from Baltic reports. Norway and Sweden constitute the great source of supply, but Russia furnishes no small amount. Russian cruisers might seriously damage the British carrying trade, and give rise to a much greater export from the United States, carrying in American bottoms. According to last mail advices from England stocks at the receiving ports for timber are very low, and imports must be soon begun in order to furnish the yearly supply for that market.

At Liverpool business in wood was paralyzed by uncertainty and transactions limited. "Orders from the country are small in extent and few in number" says the *Timber Trades Journal* of the 4th. With the withdrawal of tonnage from the Atlantic trade in two Cunard mail steamers and two of other lines, some sailing vessels have already been withheld from market, looking for higher freights; 21s. to 22s. Quebec to Liverpool were the figures talked of in the first week of this month. Accounts from other ports in the United Kingdom state that at Hull, the political strain with Russia is still showing its effect on the wood trade. The salesmen are nearly all withdrawn from the road, and there is no desire to sell stock except at an advance.

Slackness of trade is noted at Cardiff; Norway mining timber is a drug there; some Baltic orders in market. A Sunderland letter says the building and shipbuilding trades are far from brisk, and everything points to a bad year. At Leith, "trade remains in the same depressed condition."

Deliveries of wood goods at Glasgow during March fell off nearly a fourth as compared with the previous March and stocks of everything at Yorkhill yards except red pine deals, St. John spruce boards and oak plank were smaller than a twelvemonth before. As to Clyde shipbuilding, the amount of tonnage launched last month has touched a low point, comparatively, the total being 15 vessels, 13,667 tons. The first of the timber fleet, the Somand, a Norwegian owned vessel, left Greenock for Quebec on 30th March.—*Monetary Times.*

A KENTUCKY concern is stated to be getting rich out of the manufacture of wooden stirrups.

**OIL IN BOILERS.**

In an article upon a bulge in a boiler, produced when the fires were first banked, after putting a gallon of black oil in the boiler, the *Locomotive* takes occasion to say:—"The action of grease in a boiler is peculiar, but not in so far as we might expect. It does not dissolve in the water, nor does it decompose, neither does it remain on top of the water, but it seems to form itself into what may be described as slugs which at first seem to be slightly lighter than the water, of just such a gravity, in fact, that the circulation of the water carries them about at will. After a short season of boiling, these slugs or suspended drops seem to acquire a certain degree of stickiness, so that when they come into contact with shell and flues of the boiler, they begin to adhere thereto. Then under the action of heat they begin the process of varnishing the interior of the boiler. The thinnest possible coating of this varnish is sufficient to bring about overheating of the plates, as we have found repeatedly in our experience. We emphasize the point that it is not necessary to have a coating of grease of any appreciable thickness to cause overheating and bagging of plates and leakage at seams. The time when damage is most likely to occur is after the fires are banked, for then, the formation of steam being checked, the circulation of water stops, and the grease thus has an opportunity to settle on the bottom of the boiler and prevent contact of the water with the fire sheets. Under these circumstances, a very low degree of heat in the furnace is sufficient to overheat the plates to such an extent that bulging is sure to occur. When the facts are understood, it will be found quite unnecessary to attribute the damage to low water."

**To Clean a File.**

When you are filing a saw and the file gets gummed up don't try to work with it so, or throw it one side and get a new one. If you have no card to clean the file, take a piece of pine wood 2 inch square by 3 or 4 inches long. Rest one end of the file upon the bench; with the little strike the file nearly edgewise with a square corner of the stick following the slant of the teeth. This will clean a file nicely without causing half the wear that a card would. A little practice would enable you to clean a file in half the time it would take you to hunt up a card cleaner.—*Hobart.*

The Harmon Lumber Company, that this winter has built a mill at the point where the Felch mountain branch of the Northwestern railroad crosses the east fork of the Sturgeon, Menominee county, Mich., has 11,000,000 feet of logs ready for sawing. A planing mill has been added to the capacity of the plant. The headquarters of the company is at 158 Superior street Cleveland, Ohio.

## BELT MATERIAL.

The first idea of a belt for machine purposes is a leather band, but other materials have been used for many years; the writer remembers seeing a six-inch or an eight-inch belt that had run for more than a year in a woodworking establishment, which was made of cotton cloth—sail duck. The belt connected two pulleys of three and two feet diameter respectively, the shafts of which were on the same level. To compensate for the shortening and lengthening of the belt by change in the humidity of the atmosphere, a pivoted idler was used. This change of length appeared to be the only serious drawback to the employment of cotton as belt material, for the adhesiveness of the material to the face of the pulley was excellent. Rubber belting is simply cloth and rubber united by being pressed between heavy rollers; its strength depends upon the fibrous portion—the cloth. There has recently been another cloth belt put upon the market that depends for adhesiveness to the pulley face on cotton. This is a woven belt, the wool or warp of which is a series of continuous steel wires, the filling being coarse cotton yarn, or twine. No preparation is given the cotton either before or after the weaving, and the "shed" in weaving is so arranged that the steel wires, on which the strength of the belt depend, are entirely covered. One of these belts has been noticed by the writer for more than two years—a twelve-inch belt leading from the fly-wheel of an engine—and it shows no signs of destructive wear yet, and has absolutely no stretch. From these examples it would appear that under some circumstances (those of a dry atmosphere, equable temperature, and an unshippable belt,) cotton might prove to be an excellent substitute for leather for belting purposes. There appears to be only one kind of leather that is applicable to belt making that from the skin of the ox or Bos tribe. During a residence of several years in one of the British American provinces the writer was compelled by circumstances to make his own belts, of such material as could be obtained. Moose hide leather was tried, but it had a quality of indefinite stretch; to obtain a six-inch wide belt, strips not less than 10 inches wide were required, and these were wotted and stretched by powerful winces for several days before they were fit to cut to widths. The leather was very thin for the width of the belt, but it was wonderfully tenacious and adhesive. Rawhide (untanned skin) will do well as a belt if kept soft, by oil, but it lacks the hug of leather and has little elasticity. Ox leather belts stand at the head of those of all other materials for the satisfaction of all demands on belts. No other belt will stand the wear of the shipper; cotton belts are weakened when wet; rubber belts are rotted when oiled, but leather will stand wet and dryness, cold and heat, and last a long time even when oil saturated.—*Scientific American.*

## DEFECTS IN THE INSPECTION SYSTEM.

Chicago, Boston and many other lumber markets have licensed lumber inspectors, holding certificates issued by the proper legal authorities. This system is supposed to be a guarantee of an impartial and uniform grading of lumber passing through their hands; but unfortunately the guarantee does not always hold good. Hardwood inspection particularly is so varied, and so much depends upon the probity and skill of the inspectors, that especial pains should be taken to insure the purity of the service.

In this city after making application for a certificate the candidate undergoes a practical examination by the hardwood inspection committee of the Lumberman's Exchange, which proving satisfactory he receives his license. This is well enough as far as it goes, but is not thorough enough. Often one member of the committee may discover a man's unfitness for a certificate when others have passed him, but as the examiner is in the lumber business he does not wish the enmity of the inspector, and so concurs with the verdict of his fellows. Objection from one member of the committee should disbar the applicant, and the discussion of each should be privately returned to the proper authority. But after the inspector gets his

certificate he is safe for a year, unless he does something outrageous that complaint is made. He either goes into business for himself, hires out to a chief inspector or goes into the employment of a lumber yard. That word "business" is the explanation of all the trouble. Inspector should be a trade and not a business. When he goes into the "business," and hangs out his shingle as inspector, he enters into competition with every other inspector or firm of inspectors. He is anxious to get business, and as about all the business he gets come from one class of lumbermen; namely, wholesale buyers—there is a constant temptation to favor that class.

The Chicago inspectors, as a body, cannot be accused of being guilty of any favoritism; but men in such a responsible position should not be subjected to such temptations. That they sometimes yield is well known. A \$5 bill, or *carte blanche* at a neighboring bar, has been known to effect the grade of a lot of lumber very materially. The impropriety of an official inspector being in the employ of a lumber dealer is manifest, and still greater is it for him to be in the lumber business for himself; but both conditions are found in Chicago. The inspector should be wholly divorced from any interest in the buying or selling of lumber. He should be an inspector merely. To avoid the chances of collusion between inspectors and those who employ them, it should be out of the power of any one to obtain any particular inspector. There should be one chief, to whom applications should be sent, and he should have no power to discriminate, but should send out men in regular rotation—the one who has been longest idle to receive the first assignment. Then, with strict examination and watchfulness as to qualifications, experience and personal character, a tolerable uniform and very reliable inspection could be maintained to the honor and benefit of the market so guarded.—*Northwestern Lumberman.*

## A NEW YORK VIEW OF THE OUTLOOK.

During the recent depression in business the wood-working industries have suffered to a far less extent than many other branches of trade. Since July, 1884, wages in saw mills have been reduced but little. In sash, door and blind factories the reduction has not been more than 8 to 10 per cent.; in furniture factories it has been from 10 to 15 per cent.

In drawing conclusions from wages statistics it is to be remembered that they do not tell the whole story. They do not take into account hands discharged through lack of work and in many instances men whose wages remain nominally as high or nearly as high as ever have not been working on full time. Yet it is still true that generally speaking mill men and wood-workers laboring for wages have suffered less than the journeymen in most other trades. The fact is that the decline in wages in the lumber and kindred industries has been much less in proportion than the fall in the prices of manufactured lumber.

But it is certain that lumber values must now advance. During the last two years the decrease in the call for lumber from the farmers has been the worst trouble with which the trade has had to contend, and this decrease was, of course, chiefly due to the fall in the prices for farm products.

This decline has now ceased, and henceforth the values of all products, whether for the farm or factory, must advance. If there is to be a European war the rise will be rapid, and even if hostilities do not break out at present, the advance in values must occur. It will be in the one event a sudden jump, and in the other a gradual, steady tendency upward.

Quite apart from the condition of affairs in Europe, there are circumstances in the business situation in our own country which all tend toward an enhancement in prices and a revival of general business, and when to these factories there is added, as now, the probability of a war between England and Russia, and perhaps further complications in European affairs, the effect on this country cannot fail to be very great, and of such advantages as might accrue therefrom, whether they be permanent or merely transient, the lumber and wood working trades may surely count upon a liberal share.—*Saw Mill Gazette.*

A FULL LINE of all Sizes  
Single and Double Belting  
constantly in stock.

ALL ORDERS  
Filled same day  
as received.



MONTREAL, QUE.

## HOW TO BURN COAL DUST.

Economy is the order of the day, and anything that promises a reduction of expenditure in manufacturing should be put in force, says the *Mechanical Engineer*. Coal dust is a fuel of the best quality if it can be burned easily; and that it can, in an ordinary furnace, a young engineer of New York, B. Smith, has demonstrated. Mr. Smith had taken a contract to run the steam power department of a factory, and in seeking to reduce expenses he naturally sought the greatest item—the fuel. How to burn the dust, or culm, which can be had for a dollar a ton, or less (in some places for the carting away), was the question he wished to solve, and by experimenting he found a plan which succeeded perfectly, and he presents it through the *Mechanical Engineer* to the steam using public. Mr. Smith riddled the culm through a sieve, the mesh of which he did not mention. From this he obtained a small proportion of good coal.

On leaving off work at night he made up a good fire of coal, and on top of this he put ten or twelve inches of culm, or dust, wet down just so it would slide of the shovel easily. This was practically banking the whole fire with a blanket of culm, and in this condition it remained until morning. Before starting, Mr. Smith made holes clean through the culm, to the grate bars, and then put on the draft. The fire thus treated would run five hours, or until noon, with plenty of steam all the time. At twelve o'clock the same method was repeated. The results, Mr. Smith states, were a very great saving in fuel, and he seems to have been in a position to judge, for the saving was his profit, or portion of it, on the contract he made. The only change made was in the grate bars, which were much heavier than the old ones, and with narrower air spaces; half an inch we believe Mr. Smith said.

This plan was new to our informant, and is to us; we consider it of sufficient value to our connection to make it public. It must be remembered, however, that this was anthracite culm; just how it would work with bituminous, or semi-bituminous coal slack, we do not undertake to say. The plan needs good natural or forced blast to make it successful, as engineers will easily see.

## Every Woman Knows Them.

The human body is much like a good clock or watch in its movements; if one goes too slow or too fast, so follow all the others, and bad time results; if one organ or set of organs works imperfectly, perversion of functional effort of all the organs is sure to follow. Hence it is that the numerous ailments which make woman's life miserable are the direct issue of the abnormal action of the uterine system. For all that numerous class of symptoms—and every woman knows them—there is one unfailing remedy, Dr. Pierce's "Favorite Prescription," the favorite of the sex.

## LUMBER BUSINESS IN THE NORTHWEST.

The lumber trade opened in very good shape this spring, and the prospects were that an unusually brisk demand would continue all through the season. With the idea of ascertaining how business in this line was going, and whether the Northwest troubles would seriously affect Port Arthur dealers, a *Sentinel* reporter called on the firm of G. A. Priest & Co., South Water street, and found every evidence of a rushing business. There are twenty-seven men employed in the mill at the present time, mostly of a superior class of workmen. The trade of this firm is pretty evenly spread over Southern Manitoba and the Northwest territories. They have done a large business in Morden, Manitou and all through the Turtle Mountain district, as well as along through Regina, Medicine Hat and Calgary. For the last two weeks the firm has shipped orders at the rate of fifty thousand feet per day, and plenty of orders to fill. They have secured this large trade by carefully grading all lumber. Formerly dealers were supplied with anything and everything in the shape of boards, the result of which was to load the country with culls, and compel buyers to seek supplies from Minneapolis and Chicago. But by always enforcing the grading rule Priest & Co. have earned the most favorable reputation all over the vast northwestern country, and now control a very large trade, and no small portion of which formerly drifted across the border. Regarding the effect of the rebellion upon business, Mr. Priest thinks that it cannot fail to retard the growth of the country and greatly check building operations, especially so if not immediately settled. Already there must be from 1,500 to 2,000 teams employed in shipment of troop and stores, which will result in little or no seeding being done. That will necessarily demoralize all present arrangements for building, and thereby affect many of the lumber dealers and manufacturers. This firm has secured the contract for all supplies for the breakwater and the corporation, and when the war is over will undoubtedly secure a large share of the revival of business throughout the northwest.—*Port Arthur Sentinel.*

## Science in Driving a Nail.

There is a science, after all, in so simple a matter as driving a nail. A correspondent in an exchange writes that he recently witnessed the experiment of driving nails into timber that had been hard seasoned and was well dried. The first nails, after passing through an ordinary board, went into the timber about an inch, and then doubled up under the hammer. The tips of the rest of the nails were dipped into lard, and the driving was accomplished without any difficulty. The remedy is not a new one, but it is simple enough to be recommended for trial.



# American Saw-mill Machinery, PORTABLE AND SEMI-PORTABLE Direct Action & Belted Saw-mills

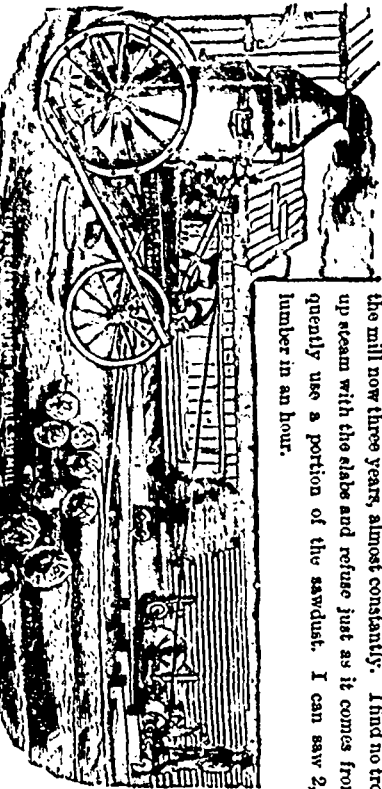
From 16 to 200 horse-power, and from a capacity of 2,000 to 80,000 feet per day of 10 hours.

## CHAMPION PORTABLE SAW-MILLS

12, 16, and 20 H.-P.

George Book writes as follows:—"St. Ann's, Ont., July 27th, 1882.

I have just finished sawing with your 20-horse Champion Engine, and No. 3 mill before harvest. At the last place I set down, we cut 345,000 feet, mostly inch, 70,000 being oak, in nine weeks. We were just ten weeks from time we moved mill till we returned home with it. We sawed above without an accident or delay of any kind. I have run the mill now three years, almost constantly. I find no trouble in keeping up steam with the slake and refuse just as it comes from saw and frequently use a portion of the sawdust. I can saw 2,000 feet 1-inch lumber in an hour.



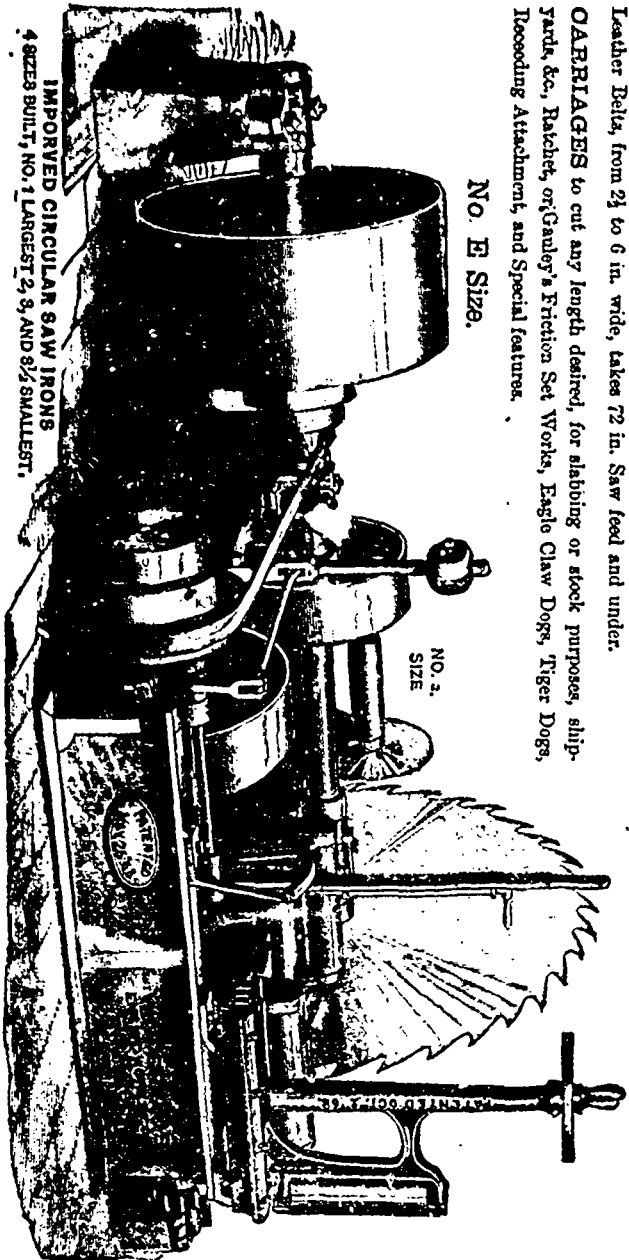
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## IMPROVED SAW FRAME.

Using 4 to 12 in. Face-Frictions: Steel Mandrels; Reservoir Oil Boxes;—Double Leather Delta, from 2 1/2 to 6 in. wide, takes 72 in. Saw feed and under.

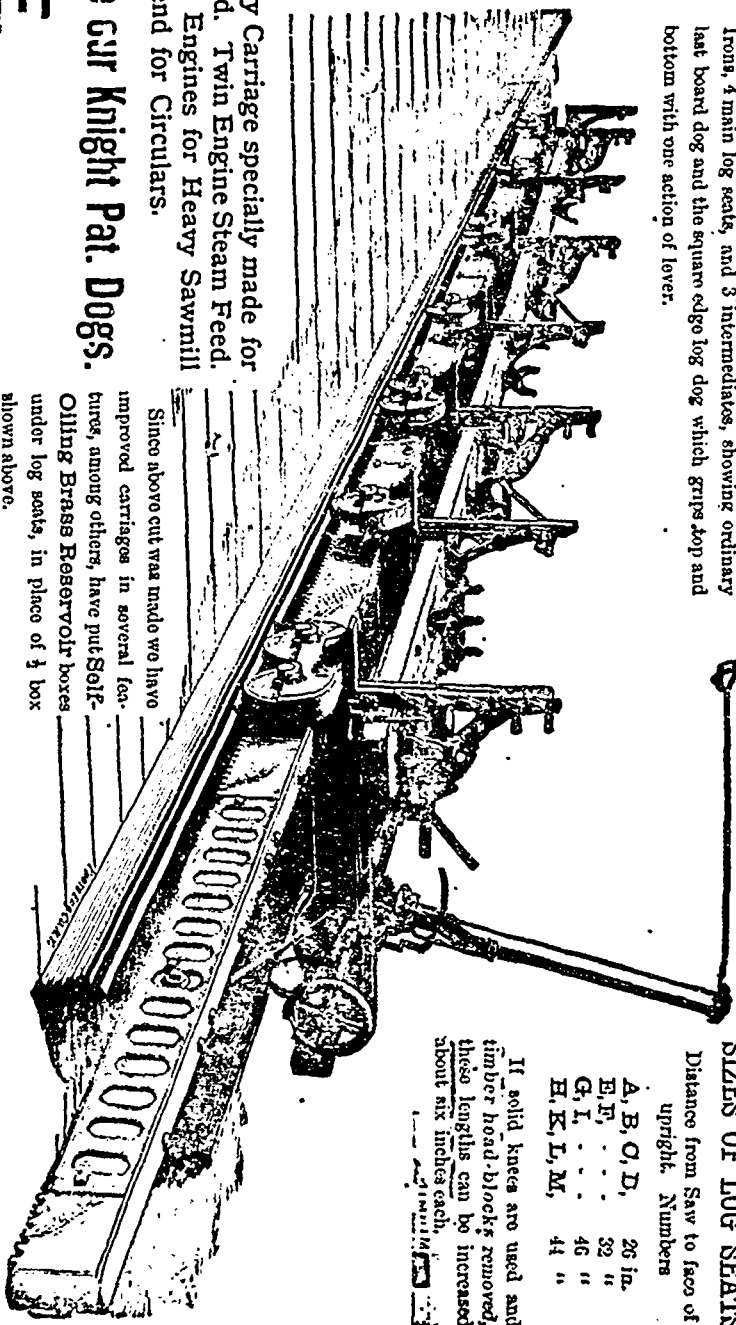
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4 SIZES BUILT, NO. 1 LARGEST, 2, 3, AND 3 1/2 SMALLEST.

Represents Log Carriage to cut logs 40 ft. long. No. E Saw Irons, 4 main log seats, and 3 intermediates, showing ordinary last board dog and the square edge log dog which grips top and bottom with one action of lever.



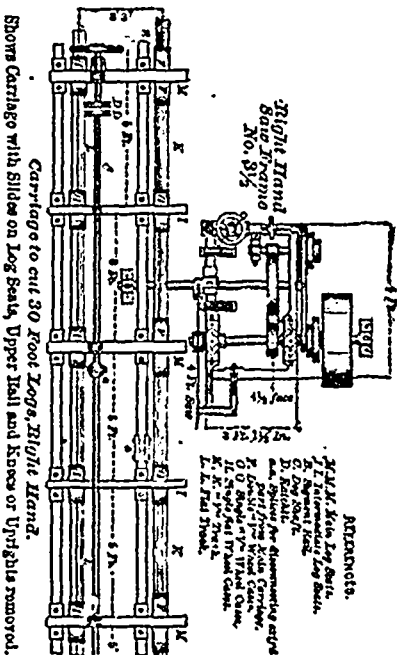
Heavy Carriage specially made for Steam Feed. Twin Engine Steam Feed. New Style Engines for Heavy Sawmill Work. Send for Circulars.

Examine our Knight Pat. Dogs.

Since above cut was made we have improved carriages in several features, among others, have put Self-Oiling Brass Reservoir boxes under log seats, in place of 1/2 box shown above.

By direct practical experience of over forty years in the lumber woods of Canada we have gained an intimate practical knowledge of what is necessary to produce a cheap, practical, efficient saw-mill, and have so built and improved our machinery that no mills can compare with them to-day in these respects.

Send for Prices and Illustrated Catalogue.



This view of our smallest Saw-Irons illustrates fairly all the eleven larger sizes that we make.

No. A.

Shows Carriage with Slides on Log Seats, Upper Tail and Knives or Uprights removed.

SIZES OF LOG SEATS  
Distance from Saw to face of upright. Numbers

- A, B, O, D, . . . . . 26 in.
- E, F, . . . . . 32 "
- G, I, . . . . . 46 "
- H, K, L, M, . . . . . 44 "

If solid knees are used and timber head-blocks removed, these lengths can be increased about six inches each.

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### THE PROVINCIAL FORESTRY ASSOCIATION.

QUEBEC, April 11.—To-day the annual meeting of the Provincial Forestry Associations was held in the Parliament buildings. There was a very large attendance of members of the house and others taking an interest in the important subject. Hon. H. G. Joly, president of the association, occupied the chair and amongst others present were, Hon. Premier Ross, Hon. W. W. Lynch, Minister of Crown Lands; Hon. B. de la Bruyere, Speaker of Legislative Council; Hon. Louis Beaubien, Hon. J. S. C. Wurtelo, Speaker of Assembly; Messrs. Chas. Gibb, Abbotsford; S. O. Stevenson, Montreal; W. Little, Montreal; S. Lesage, Assistant Commissioner of Agriculture; E. A. Barnard, Director of Agriculture; O. Dunn and E. I. Roxford, Secretaries Department of Public Instruction; W. J. Poupore, M. P. P.; W. Owens, M. P. P.; E. E. Spencer, M. P. P.; G. Carbray, M. P. P.; Demers, M. P. P.; Lavalee, M. P. P.; Richard, M. P. P.; Beauchamp, M. P. P.; Duhamel, M. P. P.; Martel, M. P. P.; Faucher de St. Maurice, M. P. P.; Desjardins, M. P. P.; Asselin, M. P. P.; Marion, M. P. P.; Deschenes, M. P. P.; Gagnon, M. P. P.; Gauthier, M. P. P.; Picard, M. P. P.; Poulin, M. P. P.; St. Hilaire, M. P. P.

Hon. Mr. Joly, in opening the Congress, said that the object and purpose of the Forestry Association of the Province of Quebec was twofold; to protect standing timber and to create new forests where old ones had become destroyed. As to the cultivation of orchards, he would leave that to Mr. Charles Gibb, of Abbotsford, who was better qualified than anyone else in the country to deal with the subject. He referred to the great sacrifices made by that gentleman in travelling at his own expense to Russia to find out the kind of fruit trees which might be introduced here with the greatest prospect of success. He hoped his devotion would be appreciated, and thought the best reward the public could give him was to assist him in carrying on the good work which he had begun. The hon. gentleman spoke of the difficulty which existed here in protecting timber on private lands, but timber upon crown lands can and must be protected, and he was sure that under such a Commissioner of Crown Lands as Hon. Mr. Lynch the country can depend upon this being done. His devotion to the cause of forestry was well known throughout the Province. Mr. Joly also spoke of the importance of the preservation of forests from many different points of view, such as the supply of fire wood, of timber for building purposes, of lumber for trade purposes, of the great climatic influence exercised by forests and their importance in securing a regular supply of water, ensuring the success of agriculture. He also referred to the great good which had been accomplished in England by re-forestation, and instanced again the case of Landes in the South of France, where hundreds of miles of barren sand have been planted with pine forests which yield an enormous revenue. The same policy was being adopted in nearly every civilized country in the world. Our people must be taught in early childhood the value of our forests. The cultivation of trees should be part of the education of our children. Such a training develops all the best qualities of manhood, — prudence, foresight and perseverance, and teaches them that no details should be neglected, and that success is only to be attained by continued exertion. The hon. gentleman referred to the institution of Arbor Day, which after two years' trial had now become one of our provincial institutions. He entered upon details as to the best mode of spreading a knowledge of the culture of trees among the people, and closed with an earnest appeal to all men of good will, who were ready to work not only for themselves, but for those who were to come after them, to lend a helping hand to the Forestry Association in the extension of its labors, and dissemination of the facts and teachings which it sought to have prevail on a subject fraught with so much importance to both the present and the future of the Province of Quebec. The hon. gentleman resumed his seat amid loud applause.

The Hon. Mr. LYNCH said that the hon. president had so fully discussed the object of the association that little remained for him to do but to second his remarks. The association had its origin in the idea that the time had arrived in the history of this province when it was necessary that something should be done in the direction of preserving what was really to-day the most valuable asset in the revenue of the province. A great deal has been said about the preservation of the autonomy of the province and yet he feared that little or no consideration had been given of the means by which this desirable end was to be attained. The people seemed disposed to regard this desired end without consideration of the means by which it is to be reached. If reference were made to the receipts of the provincial treasury for the past year it would be seen that the revenue derivable from the crown lands of the province or rather from the timber growing upon those lands constituted a very considerable portion of the total. It therefore became a matter of the highest necessity that we should give our attention to the means by which this source of revenue was to be continued and if possible to augment it. The tendency unfortunately was to open up for settlement a much greater extent of our crown lands than should be the case and in doing this a double injury was done, owing to the fact that perhaps an honest settler was induced to buy for settlement purposes, land utterly unfit for cultivation. (Hear.) The settler cut the timber which gave him a temporary reward and when it disappeared he too often found that nothing but unproductive land remained. In the meantime the treasury was deprived of the revenue which under other circumstances would have reverted to it. (Hear, hear.) This association should do all in its power to strengthen the hands of the government in their endeavor to make a more effective division than had hitherto been made of the public lands of the province, both those which were to be opened for settlement and those to be allotted for timber purposes. These observations applied only to the unsettled portions of the province, but there remained another and an equally important work to be done which was to educate public sentiment in the direction or re-forestation in localities where a wanton waste or unfortunately neglected want. (Applause.) Much could be done in this direction and was shown by the facts that the older countries of Europe as well as the states of the American Republic have awakened to the fact that climatic as well as other reasons demanded that consideration must be given to this subject. There could be no doubt that the absence of forest trees had a tendency to produce an absorption of the moisture in the ground and the result was that there was too much damp, floods were helped and the country suffered from disastrous freshets. The policy of the Government had been in leasing the fishing rights pertaining to rivers and lakes to reserve from sale a portion of the lands adjoining those rivers and lakes, not alone for the preservation of its fishing rights, but for the more important purpose of preserving the climatic influence which forests exercised in the vicinity of waters. As for as the hon. gentleman was personally concerned, he would give the question of tree culture and re-forestation his earnest attention, and whenever a suggestion was made to him by gentlemen who took an interest in this matter, the suggestion would meet his earnest attention, and he would only be too glad to recommend it to his colleagues in the Government. (Applause.)

Mr. Wm. LITTLE, Montreal, moved: "That this association respectfully recommend the Government to take early action to arrive at an appropriate idea of the quantity and quality of the pine and spruce timber still remaining on the crown lands in this Province." He said: In moving this resolution I would remark that the income derived by the province from woods and forests has in the past been one of its main sources of revenues, the total as returned in the Report of the Hon. the Commissioner of Crown Lands for 1894, amounting to the handsome sum of \$860,767, nearly the whole of which was derived from pine and spruce timber. These figures show how deserving of attention this question is, and that, therefore, it is of the

greatest importance to know how the country stands for the future.

In connection with the business of lumbering in which I am engaged, I have had occasion to observe how rapidly the quality of the pine was deteriorating, even when the quantity showed little signs of reduction. To-day, however, there are evidences that the quantity in some sections with which we are acquainted is seriously falling off. Few, I am sure, who have not given close attention to the subject will be prepared to learn that within the short period of twelve years the amount of pine lumber sawn on the St. Lawrence, below Montreal, has fallen from 250,000,000 feet to less than 25,000,000 feet last year, an amount barely sufficient to furnish a factory on the other side of the river with a full supply of pine stock for making match splints. Now, while this shows that a section of pine, but recently having a large amount of pine, must now be getting short of pine stock and that there was every reason for the Government to be careful of its spruce timber, which must take the place of the pine when it is gone. A sale of timber limits held in this city in December last, and the price which the Government was pleased to accept for them would indicate at least that it had no fear for the future. I quote from the *Chronicle* of December 18th, 1884. For the first lot put up, 60 square miles, the sum of \$103 per square mile was accepted as bonus, the purchaser having of course to pay the dues fixed by the government on any timber cut therefrom. It was but 17 cents an acre.

The friends of the Forestry Association can see that our association has not lived in vain. In all seriousness I must say that this trifling with the property of the country, and members of parliament who permit such sacrifices with out protest fail in their duty as guardians of the country's wealth. In connection with this subject and here I beg leave to remark, as the foregoing would seem to imply, some sort of censure of the hon. gentleman, the Commissioner of Crown Lands, that is not so intended. No one who has the pleasure of the acquaintance of this honorable gentleman and takes any interest in the subject of forestry can do otherwise than feel the heavy obligations the cause is under to him, and it is the intelligent interest he has always shown and is now taking in the subject in connection with our honored and honorable president that leaves reason to hope that something may yet be done in the direction of forest preservation and its attendant advantages, and the names of Joly and Lynch always side by side when anything connected with this interest is opposed, will stand out prominent as the first friends of forestry in the Province of Quebec. (Applause.) It is not the commissioner that is to blame, but the pernicious system, only less bad than that which previously prevailed of selling off large blocks of timber lands in advance of any real demand, for comparatively nothing as regards price, that has caused lumbermen and others to look upon such property as of little value, to sacrifice it without getting satisfactory returns, and to nearly rid the country of the most valuable property it possessed. It is now fully time in my humble opinion that more intelligent methods should prevail, that we should take stock of our forests and see how we stand, and, while blaming nobody for the past, all join hands to make the most out of what is left. And, if we could only prevail on honorable gentlemen to give some of their time to the investigation of the important subject of forest supplies in which the whole country is most deeply interested, much good would no doubt result from it. "Agriculture and the lumber trade," says *Hystander*, "are commercial Canada. Vain is advertising, vain all policies of development if the substantial wealth of the country is allowed to perish. But trees have no votes and the general carelessness of elective governments in this respect presents an immense contrast to the carefulness of administrative monarchies." Let the Province of Quebec show the world that there is one elective government at least that has some regard for the public interest, and in no way can this be better done than by sacredly guarding the forest wealth of the country, which, though badly mismanaged hitherto, is yet of enormous value. To show how important it is that we should

husband our timber resources and not cut them off in the reckless manner we have been doing, permit me to add there are evidences existing to show that, apart from what we send our friends and others across the seas, our great and wealthy neighbor to the south of us, the largest consumer of forest products in the world, may require before long to draw more heavily on our resources than she has hitherto done, and since she has kept us from sacrificing a large portion of our timber by an almost prohibitive duty, it would be only fair to allow us a handsome profit for keeping it till she requires it. The great northern pine producing states, Michigan, Wisconsin and Minnesota, which, notwithstanding the serious depression in all other industries, increased the output of sawn lumber from 3,600,000,000 in 1878, to about 8,000,000,000 in 1884, every year showing an increase on the previous one, and as you may observe, more than doubling the quantity in six years, with an almost similar increase in the output of shingles, the amount for 1878 being 2,600,000,000, as compared with 4,600,000,000 in 1884, now begin to show unmistakable signs of exhaustion. Adding the timber made into shingles to that sawn, and including also squared or flatted timber, would make a grand total of more than 9,000,000,000 of feet last year, of which the single state of Michigan produced fully 5,000,000,000. This latter state being the one entering more immediately into competition with us in the eastern markets will this year barely turn out 60 per cent. of last year's product, or 3,000,000,000 of feet, and that this occurs from a scarcity of stock of a suitable quality for profitable conversion is evident from the fact that many mills will have no stock whatever of their own to saw, and are offering to contract to saw for others as low as \$1.25 per thousand feet, while the great states of Ohio, Pennsylvania, New York and most of the New England States, those states that consume the whole of the product of Eastern Michigan, besides what is sent from Canada, have been, if anything, more prodigal in their waste of timber than ourselves, so that Ohio having, in 1833, 55 per cent. of her land in forest had reduced the forest area to 23 per cent. in 1870 and to 20 per cent. in 1881.

"In Pennsylvania," says Professor Hough, one of the most intelligent writers on forestry subjects, and late chief of forestry in Washington, "the forest area is now 25 per cent. It is the same in Ohio and New York and in most of all the older states of the north, while in the prairie states of the west it is very much less. We are already on the borders of the dangerous limit and were our supplies from Canada and from Michigan stopped, we would speedily begin to feel the burden of prices, which would not long precede the pressure of absolute want."

So that by husbanding our timber and prudently conducting our lumbering operations till our wealthy neighbors require what we have to spare, which all indications point to an early date, we may expect a profitable future not only for the province, but for the lumbermen as well. (Applause.)

Hon. Mr. LYNCH, in reply to the remarks of Mr. Little, said that were it not that he knew the deep interest this gentleman took in the question he might be induced to regard as personally offensive the remarks which he had offered in support of the resolution. He was disposed, however, to forget for the moment his official relations, and to regard the subject matter of the resolution rather in the nature of a desire on the part of the association to strengthen the position which the hon. commissioner had taken in connection with the administration of the public lands of the province. It was true that during the past year a considerable extent of ungranted lands had been sold at public auction for timber purposes. This has been done at the request of various persons and because the government felt that in the public interest it was desirable that these lands should be in the hands of individuals who having a personal interest in them would be induced to give them a protection which could not be expected if they remained in the crown domain. As regards those in the eastern portion of the province, they were known to be of comparative little value and it was hoped that their pur-

chasers would devote themselves not only to the cutting of the timber, thereby enabling the settlers in the vicinity to profit by the lumber trade, but also to give them a much more efficient protection than could otherwise be hoped for. As regards the limits sold in the west of the province he was in the position to say that the prices realized were amongst the best ever obtained in this province and the gentleman refused to sell them at a lower price than he believed them to be worth. (Applause.) The policy of the Government in this connection was in accordance with sound ideas not to dispose of any part of the crown demesne otherwise than for absolutely necessary purposes and at a price reasonably representing the value of the article sold. He had no objection to the resolution and truly hoped it would have the effect of strengthening his hands or whoever might be for the moment discharging the responsible duties of the crown lands department in guarding this valuable asset. (Applause.)

MR. OWENS, M. P. P., Argenteuil, supported the resolution. He took exception to Mr. Little's remarks with reference to the sale of timber limits by the Government, and called his attention to the fact that the amounts offered by the lumbermen were merely bonuses to obtain the license to cut timber, but it should be remembered that duty was paid to the Government upon every foot of timber cut in virtue of this license. (Hear, hear.)

Motion was then adopted.

MR. S. C. STEVENSON moved "that the superintendent of education be requested to address a circular to all the schools of the province, asking them to observe arbor day as a holiday." In moving the resolution Mr. Stevenson said that the surest way to create an interest in the important subject of forestry was by endeavoring to interest the children and train their minds to take some interest in it. In order to attain this end he urged that a circular be issued by the department of public instruction to every educational establishment throughout the province, inviting the pupils to celebrate Arbor Day with enthusiasm, by planting trees in the school grounds or in some convenient place. He also urged that a short paper, suitable to the calibre of the children, should be prepared by the department, showing the value of the climatic effects produced by trees as well as some interesting information regarding arboriculture. Instructions should also be furnished to the children regarding the planting and care of trees. This paper must be in French and English, and should be read by the teacher to the pupils a few days before Arbor day in order that their attention might be directed to the occasion and its objects. He showed how the appearance of the schoolhouses throughout the country could be greatly improved by the judicious planting of trees around them. The speaker also urged that the clergymen, Protestant and Catholic, should be invited to plant trees in the vicinity of their churches. (Applause.)

MR. GIBB said that similar action had been taken in the United States, as may be seen by the wonderfully complete series of maps and statistics of Mr. Sargent, of Massachusetts. If we look to the old world, we find that long ago very minute statistics have been taken by the European Governments of their forest wealth. In Russia (where the climate is most like our own) the department of public domain will tell you that the Government has in Europe 351,000,000 of acres of woods, besides the scrub of the far north, and can show at a glance their expenditure and profits. The department has 762 forest stations, for working the forest in the forest regions, and for planting in the steppe or plain regions. It would seem that a more accurate knowledge of the value of our provincial forests would be of great value.

After further debate, the resolution moved by Mr. Stephenson was unanimously adopted.

**AFTERNOON SITTING.**

There was a very good attendance at the afternoon sitting of the association, which opened at half-past two.

MR. J. O. CHAPMAN, editor of the *Journal of Agriculture*, read an interesting paper on the transplanting of forest trees, and it was resolved that the Government be asked to secure the

publication and distribution of the recommendations contained in it. It was also resolved that circulars and instructions regarding Arbor Day should be forwarded to Mayors of all municipalities in the province, school commissions, school teachers, agricultural societies, &c., &c. Considerable discussion ensued respecting the selection of the date to be recommended to the Government for Arbor Day. It was finally decided to recommend two dates, Tuesday, the 5th instant, for the Western or Montreal district, and Tuesday, the 19th, for the Eastern district of the province.

MR. S. C. STEVENSON dwelt upon the importance of enlisting the assistance of the agricultural societies and colleges of the province to secure the successful observance of Arbor Day. These societies might also raise seeds and seedlings to be distributed next year by the Government.

HON. MR. LYNCH suggested the division of the association and its friends into committees to promote the due celebration of Arbor Day in various parts of the province. He wished the season was so far advanced that members of the association could be taken to the Cove field to see the six hundred trees which had been planted there last year. He hoped that the same good work would be repeated here this year, but much remained with the citizens of Quebec, and he trusted the press would urge the importance of the subject upon the people. The locality in question was the side of a hill forming one of the most magnificent spots in the world, and commanding a view not only of the river, but of the country on the other side, being an aspect of magnificence and unapproachable beauty. It was also historic ground. The Dominion Government had been kind enough to grant permission for the planting of trees, and he hoped that this year 600 more trees would be planted there, next year another 600, and so on until a large extent of land would become beautifully wooded, forming a popular resort for the people of Quebec and for all who may visit the city. What was particularly desirable, however, in the connection was the creation of as much public enthusiasm as possible. (Loud applause.)

REV. E. L. REXFORD alluded to the difference of opinion that existed on the fundamental principle of tree planting, some people holding that spring was the proper time for transplanting trees, and others favoring the autumn. It was again thought by some respectable authority that the phases of the moon had something to do with the matter. People did not by any means agree as to the advisability of cutting the tops of trees transplanted. These differences of opinion were all calculated to confuse people, particularly in the country districts. He thought the best expression of opinion on these subjects should be obtained. He also suggested that means should be adopted for interesting school children in some practical manner in tree planting. Out of the 10,000 children attending public schools in the city of Montreal, it was impossible for one out of a hundred of them to get near a tree on Arbor Day. He further recommended that the matter of agriculture be brought prominently before the Normal schools and teachers' conventions, as a manner of reaching the children.

MR. STEVENSON suggested that the Governor-General, who was a botanist of no mean order, and who had great experience in arboriculture on his estates in England and Ireland, should, if possible, be invited to assist in the celebration of Arbor Day.

A long debate ensued on the motion of Mr. Barnard for the establishment of experimental stations for the planting of different kinds of forest and fruit trees.

MR. CARBRAY was much in favor of the resolution. Though Mr. Gibb had ascertained what kind of trees grew in similar latitudes to ours, in Russia and elsewhere, he believed that nothing definite could be known as to what trees would really thrive here, unless experiments were made in the Province.

MR. S. LESAGE suggested that nurseries should be conducted by the agricultural colleges for the purpose of making the experiments required. So far we have simply been displacing trees, taking them from the forest and planting them elsewhere, but what he desired was that the trees should be raised from seed.

MR. BARNARD was extremely anxious that experiments should be made in the growing of hardy fruit trees under the auspices of the Association, in order that as director of agriculture he might be in a position to reply to the numerous questions he received on the subject.

Hon. Messrs. Lynch and Joly and Messrs. Gibb, Little and others expressed their fear that the association had more than it could do in the matter of forestry without branching off into fruit growing.

The motion was then withdrawn.

**ELECTION OF OFFICERS.**

The following officers were elected for the ensuing year:

PRESIDENT.—Hon. H. G. Joly.  
VICE-PRESIDENTS.—J. K. Ward and L. H. Massue.

RECORDING SECRETARY.—J. X. L'Arault.  
CORRESPONDING SECRETARY AND TREASURER.—J. C. Capais.

HON. W. W. LYNCH moved a vote of thanks to the president, Hon. H. G. Joly, for his valuable services in connection with the cause of forestry, claiming that the success which had been achieved was largely due to that gentleman's efforts. He referred to Mr. Joly's visits to Minneapolis, Winnipeg and Saratoga, in the interests of forestry.

The resolution was unanimously adopted amid applause, as well as a vote of thanks to the retiring president, Mr. Barnard, who declined re-election.

The president drew the attention of the association to the necessity for new legislation to prevent the destruction of woods by fire.

MR. STEVENSON dwelt upon the importance of inducing lumbermen to take a greater interest in the work of the association.

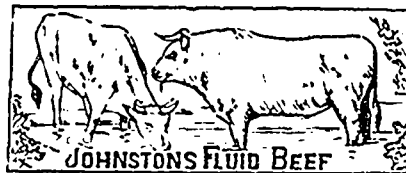
After further discussion the meeting adjourned at 6 p. m.—*Montreal Gazette*

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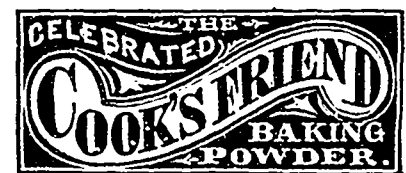
of life which is usually unappreciated until it is lost perhaps never to return, is health. What a priceless boon it is, and now we ought to cherish it, that life may not be a worthless blank to us. Many of the diseases that flow from us, and which make life but a torment, such as consumption (scrofula of the lungs) and other scrofulous and blood diseases, find a complete cure in Dr. R. V. Pierce's "Golden Medical Discovery," when all other remedies have failed. Dr. Pierce's pamphlet on consumption mailed for two stamps. Address: World's Dispensary Medical Association, Buffalo, N. Y.

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

PETERBOROUGH, Ont., MAY 1, 1885.

FOREST FIRES.

WE herewith print for the benefit of our readers a copy of a circular letter addressed by the Crown Lands Department to the limit holders in Ontario. We understand that it is the outcome of an interview which took place last winter, between the Commissioner of Crown Lands and several prominent limit holders, and is said not at all to express the remedies then suggested, in regard to forest fires, by these gentlemen to the Commissioner. It was pointed out, we believe, at that interview, that from May to October being the dangerous periods as mentioned in this circular letter, were also the months of the close season for hunting deer and other game, and that protection to the forests as well as to game might be obtained by simply not allowing the public, other than the employees of license holders and purchasers of land, on the Crown timber domain without a permit, either from the particular license holder or the nearest Crown timber agent. In this way a public record would be obtained of those who had a right to be in any particular locality, and hence the originator of a fire could be easily traced. Any trespassers found without a permit to be liable to criminal action, under a clause of the fire act, which was to be introduced in the form of an amendment. Those most competent to judge believe that by far the largest quantity of valuable timber is destroyed by fires caused by a few men in each section, who follow no other occupation than killing deer at all seasons. If it was criminal for these men to be found, during the close season, on the Government limits with a rifle and without a permit, the double object, we fancy, would be secured of protecting game and timber. The intention, however, of this circular letter is a good one and it would be well for all limit holders to give it careful consideration before committing themselves to the policy it contains.

The following is the circular:—  
"The Commissioner of Crown Lands, feeling the importance of creating some better organization for preventing the destruction of the forest by fire, has approved of a scheme, the principal points of which are herein stated to

you so that you may, should the position of your limits make it desirable, avail yourself of its advantages.

It is proposed that during the dangerous period, say from the first day of May to the first day of October in each year, there shall be placed on such limits as are exposed to danger a man or men who will be empowered and instructed to use every endeavor to prevent and suppress fires in every way possible, and the ranger who is placed in charge of a limit will be authorized to engage whatever help may be necessary to cope with a dangerous fire where prompt action is necessary; these men will be supplied with copies of the "Fire Act" and instructed to post them up in public and conspicuous places, to visit each person resident on the limit and give them, if thought advisable, a copy of the Act, explaining to them its provisions, penalty for its infraction, etc., and to endeavor to enlist their assistance and sympathy to make the Act effective.

The Department will leave the limit holder to suggest the number of men who should be placed on his limit, and as it is of all things necessary that practical bushmen of good judgment and well acquainted with the limit should be selected, he, the limit holder will nominate the man to be placed in charge of the limit and his subordinates, if any; the Department reserving the right to limit the number of men to be employed on any limit and also to reject or remove any man whom it finds unfitted to discharge the duties of the position.

It is hoped that the limit holders will recognize the necessity for recommending men of good judgment and cool temper who while fully discharging their duties will not harass or annoy settlers or others, as, if an animus is created in the breasts of the settlers the scheme will undoubtedly fail to effect the result it expected. Limit holders will be expected to exercise supervision over these men and see that they thoroughly and effectually perform their duties.

With respect to remuneration the Department thinks that the man in charge of a limit should be paid three dollars a day which should cover board and ordinary expenses, and where subordinates are required, that suitable men can be obtained at two dollars per day, which should also cover board and ordinary expenses; the men will be appointed bush and fire rangers and instructed from here so as to clothe them with authority under section 14 of the Fire Act, and a copy of the instructions will be furnished each limit holder.

As the limit holder is reaping a large proportion of the benefit, it is intended that he should bear one half of the cost of men and expenses which may be incurred under this scheme.

The Department will pay wages and expenses and charge to each limit holder his proportion which will be made a charge upon the limit and an account will be rendered at the close of the season when prompt payment must be made.

Should you desire to avail yourself of this scheme you will at once address a letter to the Department to that effect, stating the limits you wish protected, the number of your license for current season, the number of men you would recommend to be employed, and submit a list of those you would recommend for appointment on your limits.

THOS. H. JOHNSON,  
Assistant Commissioner.  
Department of Crown Lands,  
(Woods and Forest branch,) April, 1885.

In the Province of Quebec the 5th and 19th days of May have been set apart as Arbor Day, the former date for the western and the latter for the eastern divisions of the Province. In Ontario the 8th day of May has been proclaimed a school holiday, by the Minister of Education, for the same purpose. In this Province the holiday is confined to rural and village schools.

As will be seen from their advertisement Messrs. Robin & Sadler, manufacturers of belt ing, etc., Montreal, have opened a warehouse on King Street, Toronto, having found it necessary to take this step in order to supply their western customers more promptly, and also to attract the trade of those who found the delay of obtaining goods from Montreal too great.

ARBOR DAY IN QUEBEC.

The following circular has been issued by the Superintendent of Education for the Province of Quebec.

GENTLEMEN.—The Lieutenant-Governor has been pleased to proclaim the fifth and nineteenth days of May next "Arbor Days" for the western and eastern divisions of the Province respectively. This custom of setting apart a special day for tree planting is becoming more general and popular each year in the Provinces of the Dominion and in the neighboring States.

The rapid disappearance of our forests have made it quite clear to all thoughtful men that arboriculture and the conservation of our forests are subjects of national importance. We require an enlightened public sentiment upon this subject, so that the people may feel that the interests of all classes are concerned in the protection and extension of our forests. Of all the agencies which have been used for this purpose no one has awakened such general interest in arboriculture as the annual celebration of Arbor Day as a national holiday for tree planting. This is due in a great measure to the fact that by this means the pupils of our public schools have been interested and enlisted in the good work. The influence of Arbor Day in school, in awakening a just appreciation of trees first among pupils, and through them upon the parents and people at large, is of the greatest importance.

The youth of our country must be instructed upon the value and utility of our forests, and correct sentiments in regard to trees must be implanted in them if the best interests of our country in regard to forests are to be promoted.

The valuable educational influence of arboriculture, physical, moral and intellectual, upon children is of first importance, and for this reason also this subject should engage the attention of those interested in the welfare of our schools.

I desire, therefore, to urge upon school commissioners, trustees and teachers, the importance of doing all they can to make the celebration of Arbor Day interesting, instructive and successful.

The day will be observed as a holiday in all the schools of the province, and school commissioners should do all they can to promote the celebration of Arbor Day by the schools of their respective municipalities.

Teachers should prepare the way for the celebration of Arbor Day, by giving their pupils brief talks upon the value and beauty of trees, pointing out how they beautify the school grounds, the home and the way side, how they absorb and destroy poisonous gasses and dangerous effluvia which may be in or around crowded buildings; how they effect the climate, soil, and productions; how they give out moisture to the atmosphere and retain moisture in the soil and feed the springs and rivers and so conserve our water supply and prevent floods. Thus taught, the pupils will engage in the work of Arbor Day with peculiar pleasure and the plantings and improvements made will be sure to be protected. The school grounds should receive the first attention. Teachers and pupils should work together in planting carefully selected trees, shrubbery and flowering plants, so as to make the school grounds as attractive as the best homes of the pupils. The parents should be encouraged to adorn and improve the surroundings of their homes by planting shade trees. Trees should also be planted by the wayside, where their shade and beauty will be grateful to the traveller, and specially so to the owner and planter.

Arbor Day may thus be made an occasion of real pleasure to pupils, a day of social enjoyment and improvement, if parents and pupils meet on common ground, and young and old share in their efforts to adorn and improve the surroundings of their homes and schools.

I am sure that all those connected with our educational work will gladly co operate with the Government and with the Forestry Association of the Province in their laudable effort to create an enlightened public sentiment upon this important subject.

GEORGE OUMET,  
Superintendent

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Mar. 1885, compared; and also for the two months ending Feb., 1884 and 1885, compared:

MONTH ENDED 31st MAR. 1885.	Quantity Loads	Value \$
Timber (Hewn).		
Russia .....	770	3,975
Sweden and Norway .....	47,797	64,135
Germany .....	7,344	14,458
United States .....	13,404	40,443
British India .....	2,896	38,019
British North America .....	1,035	4,379
Other Countries .....	27,603	27,928
Total .....	100,918	200,213

Timber (Sawn or Split, Planed or Dressed).	Quantity Loads	Value \$
Russia .....	1,856	3,793
Sweden and Norway .....	48,632	107,117
British North America .....	764	1,313
Other Countries .....	27,788	87,051
Total .....	78,441	199,779

Slaves, (all sizes).	Quantity Loads	Value \$
Mahogany (tone) .....	6,687	53,714
Total of Hewn and Sawn .....	170,359	399,992

THREE MONTHS ENDED 31st MAR. 1885.	Quantity Loads	Value \$
Timber (Hewn).		
Russia .....	4,088	11,287
Sweden and Norway .....	76,438	100,320
Germany .....	16,878	36,494
United States .....	24,734	87,414
British India .....	8,425	114,441
British North America .....	1,352	6,330
Other Countries .....	100,641	133,401
Total .....	231,556	494,687

Timber (Sawn or Split, Planed or Dressed).	Quantity Loads	Value \$
Russia .....	7,355	14,561
Sweden and Norway .....	82,623	182,792
British North America .....	12,206	26,038
Other Countries .....	63,490	184,305
Total .....	166,674	407,696

Slaves, (all sizes).	Quantity Loads	Value \$
Mahogany (tone) .....	19,604	171,035
Total of Hewn and Sawn .....	392,235	902,288

LIST OF PATENTS.

The following list of patents upon improvements in wood-working machinery, granted by the United States Patent office, April 14, 1885, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of American and foreign patents, No. 925 F. St., N. W., Washington, D. C.:

- 315,686.—Latho tool rest—O. C. White, Worcester, Mass.
- 315,663.—Saw—C. Richardson, Newark, N. J.
- 315,755.—Saw buck—S. Walter, Dallas City, Ill.
- 315,715.—Saw sharpening machine—L. Bush, jr., Chicago, Ill.
- 315,820.—Saw swage—T. Nownham, Wainwright, Ga.
- 315,539.—Saw swage—A. S. Parke, Bay City, Mich.
- 315,833.—Saw tooth—N. W. Spaulding, San Francisco, Cal.
- 315,502.—Sawing machine, circular—L. Houston, Montgomery Station, Pa.
- 315,513.—Sawing machine—R. E. Kidder, Worcester, Mass.
- 315,509.—Wooden vessels, machine for cutting—W. D. Johnson, Elmore, Ohio.

- PATENTS ISSUED APRIL 21.
- 316,296.—Plane—L. C. Rodier, Detroit, Mich.
- 316,079.—Plane—J. A. Traut, New Britain, Conn.
- 316,166.—Planing machine attachment—H. Lovrentz, Brooklyn, N. Y.
- 316,109.—Planing machine, cross bar shoe for—B. Bean, New Haven, Conn.
- 316,273.—Saw mill dog—D. Lane, Montpelier, Vt.
- 316,299.—Saw mill set works.—W. H. Snyder, Waynesborough, Pa.
- 316,113.—Saw swage—A. Carmichael, La Crosse, Wis.

A Strong Endowment is conferred upon that magnificent institution the human system, by Dr. Pierce's "Golden Medical Discovery," that fortifies it against the encroachments of disease. It is the great blood purifier and alterative, and as a remedy for consumption, bronchitis, and all diseases of a wasting nature, its influence is rapid, efficacious and permanent. Sold everywhere.



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### Quebec Timber Fleet.

The London *Timber Trades Journal* says:— We learn that towards the end of last week a somewhat unexpected general movement took among the Quebec timber fleet, which has been laid up during the winter in the harbors of Greenock and Port Glasgow; and notwithstanding the continued low rate of freight offering, most of them are now being prepared to proceed on the spring voyage and take their chance of a better freight being obtained at Quebec. Within the past few days two or three steamers have, we understand, been fixed at 19s.; and 6d. more has since been offered other owners, but refused.

### The Effect War Would Have.

The imminence of a great war, which is likely to shut out from our markets an entire year's Russian supply of timber, should give a considerable impulse to the home trade, as our Russian supply was equal to about five-sixths of our whole importation from British North America last year; in round numbers, 1,350,000 loads, a large bulk to be stopped from a year's importation of about 6,000,000 loads. The sale by Messrs. Churchill & Sim, on Wednesday and Thursday next, will doubtless benefit by the news, especially as the bank rate of 3½ per cent remains undisturbed as yet. It is not easy to see how any peace can be patched up under the present circumstances, as England must make a bold stand for her Indian possessions.—*Timber Trades Journal*.

### Forest Fires.

WATERFORD, N. J., April 21.—Large tracts of valuable timber, cranberry marshes, and a number of buildings have been destroyed by the forest fires which started yesterday. At Winslow, Camden county, a big fire is raging in a large cedar swamp, and thousands of dollars' worth have been consumed. At Pomona, Atlantic County, thousands of bushels of charcoal and hundred of cords of wood, valued at thousands, have been destroyed. Advice from Williamstown, Gloucester county, state that disastrous fires are sweeping hundreds of acres of growing timber. Several houses are endangered. Great damage has already been done.

A YOUNG man named Harry Hunt was killed by a falling tree in one of Mr. P. McLaren's shanties on April 13th.

Delicate diseases of either sex, however induced, speedily and permanently cured. Consultation free. Book three (3c.) stamps. World's Dispensary Medical Association, Buffalo, N. Y.

### Want an Outlet

A correspondent of the *Toronto Globe*, writing from Vankoughnet, Muskoka region, Ont., says:—"I have seen an advertisement of their being 1,000,000 feet of hardwood lumber of different kinds wanted in Toronto. We would like very much to give them their supply, as we have any amount of black birch and bird's-eye maple, and other valuable timbers that we could cut into lumber and ship to the front if we only had the convenience of a railway. We have amount of railway ties and hemlock bark, etc. We have two or three good mill sites on the Black river, and if we only had the convenience of a railway to connect with it we would be able to do a thriving business. If we had a branch line here from Gravenhurst, a distance of about 14 miles to the Black river, it would be of great value to us."

Bad treatment or stricture often complicates the disease and makes it difficult of cure. The worst and most inveterate cases speedily yield to our new and improved method. Pamphlet, references and terms sent for two three-cent stamps. World's Dispensary Medical Association, Buffalo, N. Y.

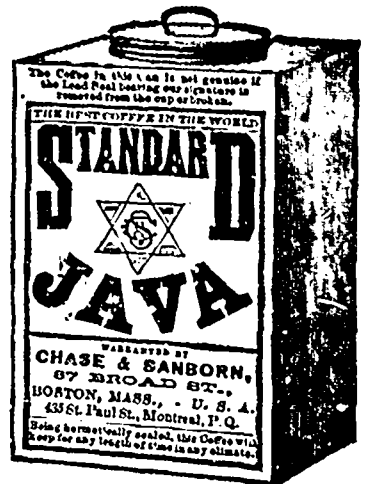
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This book should be read by the young for instruction, and the afflicted for relief. It will benefit all.—*London Lancet*. There is no member of society to whom this book will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut*. Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bullfinch 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 successfully. HEAL THYSELF without an instance of fail.



# NATIONAL PUMP WORKS.

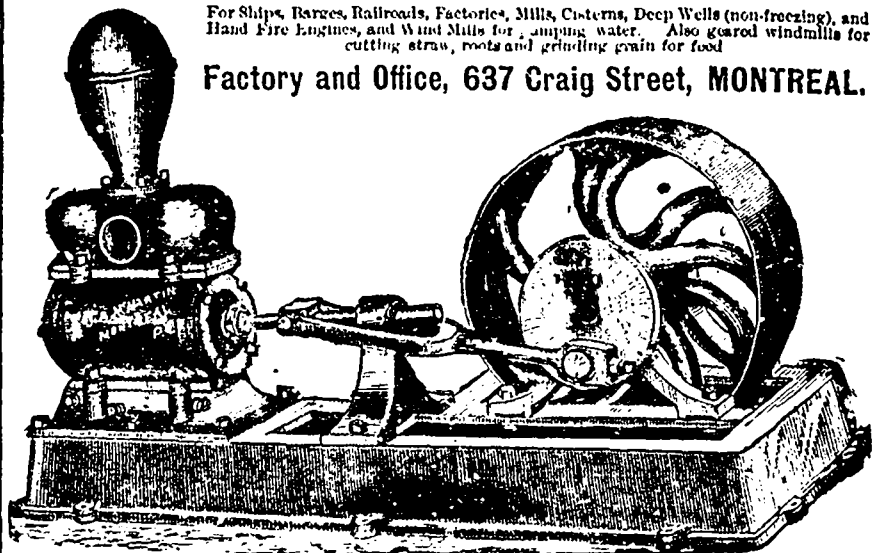
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The above cut shows our Double Acting Horizontal Lift and Force Pump, mounted on a Cast Iron Bed Plate with tight 4 inch flange 18 inch diameter. This is one of the most compact and powerful pumps of the kind yet out, with bed 4 feet long and 2 feet 2 inches, where the pulleys are placed, all being in good proportion. The pump has a guide to the piston rod, and is driven by the connection rod attached to the disc with steel pin and wrought iron connections. The valve seats and valve are made of gun metal, and easily got at by bolts on either side of the pump, so that access to the bottom or top valve can be had without any difficulty. We make two sizes of these pumps, which are adapted for mills, factories or tanneries. We make these pumps with a hitch to drive them direct, when so ordered, and dispose of the pulleys and belt. All enquiries will be promptly answered, by addressing the above, and catalogues of our pumps sent out.

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Our Improved Artificial Ear Drums cure Deafness in all stages. Recommended by scientific men of Europe and America. Write for illustrative descriptive book and testimonials from doctors, judges, ministers, and prominent men and women who have been cured, and who take pleasure in recommending them. They are unseen while in use, comfortable to wear, and make a permanent cure. Address, J. H. NICHOLSON, 7 Murray St., New York.

## ARKANSAS PINE AND CYPRESS.

LITTLE ROCK, Ark., April 6.—The variety of yellow pine found in the forests of Arkansas is of the short leaf description which occupies a position midway between the long leaf pine and northern white pine, and is used all over the south for flooring, weatherboarding, bill stuff and other uses to which lumber is applied. It is clear in color and has a beautiful grain when finished with shellac. It is estimated that there is in this state 40,000,000,000 feet south of the Arkansas river, of this variety of pine, much of which find a ready market in Texas, Kansas, Missouri and Illinois. Its weight (dressed strips) is about 2,300 pounds per thousand. It is free from pitch and softer than long leaf pine. It makes a better floor than white pine, and can be delivered north as far as Chicago, or west to Kansas, for about one-half the cost of white pine. Its durability, strength and other good qualities, must soon make it an active competitor for these purposes with white pine. It is pushing its way into Kansas, Texas, and the north and northwestern markets.

There are three kinds of cypress in the South, white, yellow and black. The variety found in Arkansas is the white; the yellow and black grow in Louisiana and along the gulf states. The white variety is soft, clear grained and light in color. It is used all over the south for ash, doors, blinds and all kinds of finishing lumber. It is also used for shingles. It stands the weather better than white pine, does not warp or twist, and does not shrink or swell after being once thoroughly seasoned. Exposed to the weather it will last twice as long as white pine, makes a better shingle, and better tank stuff, fence posts, etc. I have doors in my house that were made seventeen years ago of this timber (about the first made here), and not a single joint has yet opened sufficient to crack the paint. My outside doors are to day as true and solid as when they were made. It works nearly as easily as pine, but is a little harder on tools, I am told.

This timber grows very tall, straight and thick, in isolated patches, in shallow swamps or lakes, usually in from one to two feet of water. The trees are felled in the water, and cut off in full lengths, and towed to the mill, which is generally on the bank of the brake, hauled up and cut into any length of logs required. There is generally enough timber in one of these brakes to justify putting a mill upon it. Brakes can be found here that contain from 25,000,000 to 100,000,000 feet. This variety of cypress is limited in quantity. There is not probably more than 2,000,000,000 or 2,500,000,000 feet in this state. Louisiana, Mississippi, Alabama, and Florida have large quantities of yellow and black varieties, but little white. Cypress has stayed the importation of white pine here entirely, and gives entire satisfaction wherever used. It has risen in price for local uses from \$10 to \$20 in the last five years, and I fail to see why it should not, in the near future, go to the price of white pine that could be laid down here, say from \$15 to \$25.—*W. in Northwestern Lumberman.*

## AN ARCTIC WOODLAND.

Popular impressions are often far from the truth, and in regard to the Arctic regions they are undoubtedly so. A treeless land would be, in the opinion of most people, the idea which would suggest itself in regard to the regions in question. Yet this, though true, is not all the truth. Within the Arctic circle are found trees often forming considerable, though stunted, forests. In eastern Siberia pines and other trees come down almost to the water's edge; while over all western Siberia, Arctic Russia, and Lapland, the tree limit runs within the Arctic circle; trees extend even to the North Cape in Greenland we find, even in the most southern parts of it, no herbage more worthy of the name of tree than the stunted birch, which, in the more sheltered valleys of that country—equally inappropriately named with Iceland—attain the proportion of little shrubs; and it is not until we come to the milder latitudes of the Pacific that the tree line, which had descended a southerly curve in the cold regions of Central North America, again rises to the north, and until we reach the shores of Behring Strait we find nothing which we can dignify by the

name of trees. \* \* \* The wooded banks of the Yukon touch the Arctic circle, and forests of white spruce are found on the Noatak, a river which falls into Eschscholtz Bay, which infringes on the Arctic circle. In Lapland the spruce ceases at about the 68th parallel, and Scotch fir at the 69th; but in Norway, owing probably to the warm Gulf stream, which sweeps along the coast and into the Arctic sea—at least as far east as Nova Zembla—we find forests of Scotch fir, 60 feet in height, as far north as Altonfjord, and birches, about 45 feet high, in an equally northern latitude. In 70° 28' the hardy Scotch fir still maintains its ground, though the spruce fails a degree or so further south. In the vicinity of Hammerfest, a well known Lapland town, in latitude 70° N., there are dwarf alders and aspens, bird cherries, rasp, and currants. In the Scandinavian peninsula, probably owing to the warmth which a sea, unincumbered, and in addition laved by a current of a higher temperature affords, barley is cultivated as far north as the 70th parallel, the latitude of Disco island on the Greenland coast, and was up to the 65th "in sheltered valleys, where rocks and cliffs reflect the sun's rays with much power."—*Woods and Forests.*

## BEECH TREES AND BEECH-NUTS.

The beech is one of the most valuable and celebrated trees indigenous to the Northern Hemisphere. It is true that the American Beech has not been so widely celebrated in story and song as its European namesake, still, it is in no way inferior, or less worthy of all the praise that has been bestowed in centuries past upon its near relative of the old world. Our American Beech (*Fagus ferruginea*), as found in nearly all of our Northern forests, is a noble tree with an exceedingly graceful habit; for while the main branches are very strong and sturdy, they are always furnished with an abundance of small slender branchlets, that give to the tree a graceful outline, no matter how large or old the specimens may be. The bark of the tree is also somewhat peculiar, it being smooth, with no cracks, fissures, or corrugations, to hold dust or afford lodgement for mosses and lichens. The stem of the beech tree is a solid, firm and smooth column, almost as rigid as marble, and far more valuable than stone. This smoothness of bark extends to the minutest twigs, and even the buds in winter; and the expanded leaves in summer are smooth and glossy. To call the beech a "clean tree" is but faint praise; for, in addition to its neatness in appearance, it is peculiarly free from insect enemies and is seldom injured by these pests. Even the dead trees are not very attractive to the wood-destroyers of the insect kingdom. The beech is also a very hardy tree, thriving in very cold regions to the northward, and its flexible and tough branches withstand high winds well, when planted in exposed situations. It will also thrive in very thin soils, rocky or otherwise, the roots keeping near the surface, and are so numerous that they will penetrate the smallest interstices among the rocks, and seek every spot where nutriment can be found. Any one who has had experience in clearing a beech forest will bear me out in saying, that beech roots will fully occupy all the land within their reach.—*A. S. Fuller in American Agriculturist for March.*

## SAW DUST AS FUEL.

"As utility seems to be one of the characteristics of the day," says a correspondent of our eastern namesake, "It may interest the inexperienced to know how to make that that evergrowing 'pile' (of sawdust) a source of profit. For years I have not wasted any of it, and find its use the saving of a large percentage of wood. Our mill has a 42-inch boiler, 22 feet long, with two return flues. Our cylinder is 12x24, cutting off steam at half stroke, the motion being regulated by a Judson valve. The engine makes 80 revolutions per minute, driving a six foot circular saw making 300 revolutions per minute. The steam blows off at 120 lbs., using green wood and burning all the walnut, oak, poplar and gum dust the mill makes, and easily maintaining the steam at the point named. Sawdust contains more water than any we have; and once I had a fireman who

thought he could not burn cypress, and so he let the pile grow until it frightened him away from the mill, when I took the shovel and in three days caught up.

"Several years' practical work has taught me that sawdust needs a tight fire-front, a strong draft through the grate, wood to prevent it packing, unless the boiler is longer than the usual size, and the chambering alluded to above, in order for the gaseous matter to reverberate and produce a perfect combustion. After our furnace becomes hot the utmost crowding of dust does not show the least sign of smoke at the chimney top, this non appearance is conclusive evidence of perfect combustion. In firing dust never stir it, unless it be with a small rod, to make a road for the flame; after firing half a day without stirring, I have gathered as perfect cinders as from a smith's forge. I have taken the shovel from an inexperienced hand when steam was down to 75 or 80 pounds, and gradually raised it to the blowing off point with little besides dust.

"I once visited a friend who was carting all his dust out from the mill, and on asking the fireman why he did not burn it, I was told: 'It smokes the fire out,' and from the small space underneath the boiler it was quite evident that gaseous matter would be half strangled in 'running the gauntlet' to the outer world. I sketched the plan alluded to and gave my friend the reasons why that must come nearer a producing a perfect combustion. He ordered the mason to re-construct the walls, but he, true to the way he had learned, at first refused, and nothing could convince him of his prepossession but the sight of the living flames rolling over the walls and filling the chambers, and that from the same kind of dust that was said to have smoked the fire out. In two months I saw my friend again, and he said that all the dust went under the boiler with ease; and in that time the slabs, as they were thrown off, had reached the top of the first story of the mill; it not needing them, while before it took all of them. If possible, let some one who has handled the dust shovel show a more perfect way of economy of fuel."—*Wood-Worker.*

## WASTED FORCES.

Those who have enjoyed the pleasure of travel by water both at home and abroad must have wondered at the immense power allowed to run to waste on our larger rivers, which, practically could be made to do more work than is now done by the combined steam power of America.

Among the pinerics of Michigan we have seen since last year began, sufficient power wasted in the onward course of some of the streams used only for rafting, to convert all the logs cut in that State for five years into shavings. A stream running only five miles per hour has a power, which if harnessed and controlled, would baffle our mathematical calculations in estimating the horse power. In fact, we can imagine how many horses it would take, less the friction, to carry from the mouth to the source the aggregate number of gallons of water any stream carries to the ocean, and this would give but a faint conception of its actual value as a motive power if utilized. Again, the crude manner which we use this power in floating logs and rafts of lumber would be augmented by the natural gravity of the load's weight; to illustrate let us suppose a large raft of logs loose in any of the larger northern streams, where the water is running in the channel, how long would the combined belts used to-day in the mills of Michigan hold this raft steady in one place? We anticipate the answer, there, of course, the power is correspondingly great. Another feature, suppose with some smooth line a large raft was attached to a drum, and these forces of nature allowed their natural sway, does any one doubt for a moment that the power thus generated could be estimated by a comparison with a number of horses? No, it would stagger the belief of the best engineers and mill operators; still it must be remembered that no small portion of the stream's force is allowed to pass the raft below and on either side.

Who in his boyhood days has not affixed the little water wheel to the log across the stream and excited his childish wonder at the result? Later, have we not all read of and many of us seen the crude appliances brought into requi-

sition to utilize the force of gravity of a loaded car going down the inclined plane to bring back the empty up the plane for another load, and seen the pressure needed—wasted force—to keep the drum at the top from running too fast? A short time ago what was considered an obtuse, ignorant laborer in the construction of a large bridge noticed the power lost in removing the stone from the river bank down to the water's edge; he arranged an ingenious contrivance attached to the lifting crane, and this power was made to lift the stone bodily to its place; the courses away high on the piers, and to help materially in elevating them to the very top; and some day we will all be astonished that some hower of wood or drawer of water will so harness the forces present in some of our rapid streams, that the timber placed in at the head waters will gradually float downward to market, and by the time it reaches its destination, instead of the rough, ungainly log, will all be worked up by its own gravity and the power of the water in soaking its level alone, into merchantable commodities, the refuse all utilized, and everything so well balanced that by the time the market is reached the last vestige of the wastes will have disappeared, thus disposing of the three great factors now regulating the price of all wooden things, namely, power, transportation and waste.—*Lumber World.*

## Worn-out Boilers.

Whoever said the following, "told the truth": "It would be a saving of life, I think, to oblige everybody to know that steam boilers wear out; that their strength continually decreases. Every day a boiler is used it becomes weaker than the day before. Boilers should be kept clean, though cleaning them does not strengthen them. When a rotten sidewalk goes down with a man, he sustaining serious injuries, damages are demanded and allowed, but when a rotten boiler goes up the case is different. Low water, undoubtedly, the man should have had another pail full of water in the boiler, you know."—*American Miller.*

THE winter has been a hard one upon the stock raisers and holders, but it has been very good for lumbering, the best for several seasons. The snow had fallen and lain evenly. Mr. Robinson and a gang of men went north on Wednesday to the head waters of the Mississippi, in order to commence for Mr. McLaren the drive of timber towards Carleton Place, as soon as the creeks and streams were clear of ice. Mr. McLaren has, it is stated, got out over 200,000 pieces of timber. Mr. Caldwell's cut is not known, but it must be almost as great as that of Mr. McLaren's.—*Kingston Whig.*

## Fire at Collingwood.

COLLINGWOOD, April 20.—Warren, Tobey & Co.'s tannery was destroyed by fire to day. Loss, \$40,000 to \$50,000. Twenty five men are thrown out of employment. Insurance:—North British and Mercantile on building, \$2,724, on machinery, \$1,819, on stock, \$5,457; Phoenix, on building, \$1,092, on machinery, \$727, stock, \$2,181; Royal, on building, \$1,092, on machinery, \$727, on stock, \$2,181; Commercial Union, on building, \$1,092, on machinery, \$727, on stock, \$2,181, and \$4,000 extra in North British, making a total insurance of \$27,000.

## "All Men are Liars."

said David of old. He was probably prompted to make the above remark after trying some unreliable catarrh remedy. Had he been permitted to live until the present day, and tried Dr. Segor's Remedy, he might have had a better opinion of mankind. We claim that no case of catarrh can withstand the magic effects of this wonderful medicine. One trial of it will convince you of its efficacy. By druggists; fifty cents.

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

**Chips.**

A SAGINAW firm purchased 2,000,000 feet of pine logs, recently, at \$3 a thousand.

A LOCAL paper states that the north Ludington Company, this year paid the largest tax of any interest in Menominee county, Mich.

AMONG the orders lately received at the Cadillac, Mich., veneer mill, was one for elm orange boxes, to go to Spain.

ONE day lately, the Montague, Mich., wooden butter plate factory turned out 96,000 plates, one nimble girl doing 15,000 of the total.

THE Grand Rapids & Indians railroad will survey a line into the great tract of pine east of Kalkaska, Mich., early in the spring.

A BIRCH tree, sound to the core, was lately cut at a point south of Houghton, upper peninsula, Mich., that was fifty two inches in diameter.

A PINE tree cut on M. B. Farrin's land, near South Boardman, Mich., made four 12, and four 16 foot logs, and scaled 9,979 feet, board measure.

A PULLEY heated and burst in Baker Bros.' saw mill at Blenheim on April 6th. One piece struck John Graham, a member of the firm, in the eye, completely cutting his eye out.

A PINE tract of 200 acres, in Lake County, Mich., estimated to have on it 5,000,000 feet of pine, was recently sold at \$10,000 or \$2 stumpage.

J. H. LESH & Co., Goshen, Ind., recently paid \$300 for a single black walnut tree. It is said to be the largest ever cut in Elkhart county, and scaled 8,000 feet.

W. & O. J. PHILIPS, St. Catharines, Ont., interested in saw mills, lumber yards, spoke factory and timber limits, have failed. Liabilities \$75,000; assets not ascertained.

ELLIOT Bros' saw mill, Westminster township, Middlesex Co., was burned on April 2nd. A flaw in the furnace was the cause. The contents were also burned, but the lumber was saved. Loss, \$1,000; no insurance.

THE Cheboygan Lumber Company, with mills at Cheboygan, Mich., has about concluded the purchase of 80,000,000 feet of standing pine in the Georgian bay region. It is the intention to cut the timber and have it to Cheboygan to be manufactured.

THE Duluth Herald is responsible for the statement that the log crop in the Duluth district has been curtailed to such an extent that the lumber cut the coming season will be only about 50 per cent. of that of last year.

SEVERAL vessels have been chartered to move square timber from Marquette, Mich., to Gardes Island, O. A large number of sticks have been got out the past winter along the line of the Detroit, Mackinac & Marquette railroad.

DON. J. LEATHERS, of Grand Rapids, Mich., recently sold to the West Michigan Lumber Company a tract of pine in Newaygo county, Mich., comprising two sections, at a consideration of \$50,000. It is estimated that there are 15,000,000 feet of standing timber on the tract, two-thirds of which is pine.

W. L. & H. D. Churchill, of Alpena, Mich., have made arrangements for 13,000,000 feet of logs from Alcona county (Huron shore south), which are to be towed to their mill at Alpena to be sawed. Otherwise, these logs would have gone to Lake Erie ports. This firm expects to keep both its mills going this season, and manufacture 35,000,000 feet of lumber.

WITH respect to lumbering in Westmoreland and Cumberland counties, on the isthmus joining New Brunswick and Nova Scotia, the Chignecto Post has the following:—"The outlook in business circles in Baie Verte and its surroundings is somewhat flattering; lumbermen have got out a large quantity of logs, perhaps more than in any winter before. Milton Anderson has out some 1,300, and is about commencing to cut them up into deals. D. E. Casey & Son, 4,000, R. D. Wood and C. Prescott some 6,000, much of which will be made into hooks for lobster factories along the coast. Copp Bros., Baie Road, have out some 10,000 logs, being made into deals and boards. Henry Oulton, has out some 2,000 and a number of other persons have smaller lots, which will amount to several hundreds, and the deal market has advanced."

**Catarrh—A New Treatment.**

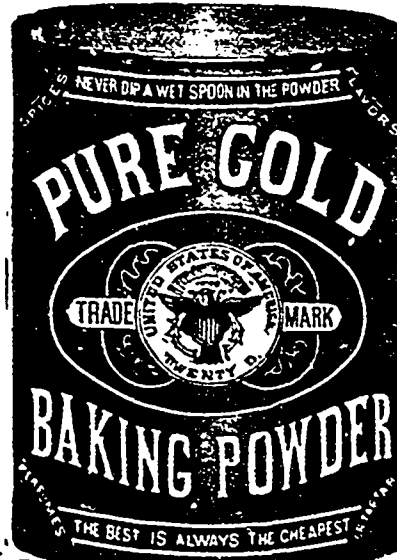
Perhaps the most extraordinary success that has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not one per cent. of the patients presenting themselves to the regular practitioner are benefited, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure. The majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star*, 17122.

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**LUMBER MERCHANTS**  
And Shipping Agents.  
**OSWEGO, N. Y.**

**HENDERSON BROS.**  
**LUMBER AND TIMBER.**  
Building & Bridge Timber Sawn to Order.  
Pine, Spruce and Hemlock Lumber by the Cargo.  
Steam Saw Mills, Box Factory and Yards—342 to 350 William St., and 130 St. Constant St., Montreal.  
Steam Saw Mills, L'Assomption, P. Q.  
P. O. Box 804. 17121

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Collect and Ship them to be  
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BEFORE THE SPRING OPENS.  
**DO NOT WASTE**  
Your Money on Buying new, when the old ones will do. We pay Freight one way.  
**SHIP THEM TO-DAY**  
—TO THE—  
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Agents Wanted Everywhere.

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WHOLESOMENESS,  
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FAIRPORT, N.Y., and TORONTO, ONT. 17123

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**USE ONLY**

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Lace Leather, American Rubber and Cotton Belting, etc., always on hand 17120



Market Reports.

TORONTO.

From Our Own Correspondent.

APRIL 24.—The advent of fine weather has had the effect of stimulating trade in a truly wonderful degree, and now buildings are started in all quarters of the city, and the universal impression is that work for all mechanics will be abundant, and the retail yards will have nearly all the orders to fill which they will be able to send out.

Our bay is not yet free of ice, but there is sufficient open water to enable vessels to get to the N. & N. W. R. R. docks, at which the brig Jessie Dunnington is now being loaded by Messrs. Christie, Kerr & Co.

Table listing lumber prices for Toronto, including Mill cull boards, Shipping cull boards, Scantling and joist, and Cutting up planks to dry.

MONTREAL.

From Our Own Correspondent.

APRIL 25.—There is no change in the general situation of trade, the summer business has not yet begun although there is a little more going out, but it is not expected that large quantities will be moved until navigation is fairly opened.

Table listing lumber prices for Montreal, including Pine, 1st quality, Pine, 2nd, Pine, shipping culls, and Spruce.

CORNWOOD.

Business is very quiet and stocks large enough to do nearly all summer, prices are steady and unchanged, although tamarac is dearer in pro-

portion to other woods. We quote at the railway station or cartage:

Table listing lumber prices for Toronto, including Long Maple, Long Birch, Long Beech, and Tamarac.

SHIPPING.

Prospects are good for a large business being done this summer, and we hear of a number of vessels having already been chartered for the River Platte, at \$13 to \$13.50.

LIVERPOOL MARKETS.

The uncertainty which has existed for some time as to the result of the present political complications has caused great quietness in the lumber trade for the past month.

SPRUCES DEALS.—Several parcels of St. John, N. B. (yarded) were offered by auction, but only a few lots sold, viz.:—3x7 at £5 10s. to £5 12s. 6d.; 3x9 at £6 2s. 6d. to £6 7s. 6d.; 3x11 at £6 5s. to £7 5s.; also a cargo of Miramichi: 3x7 at £5 2s. 6d. to £5 12s. 6d.; 3x9 at £5 10s. to £6 10s.; 3x11 at £6 5s. to £7.

QUEBEC WOOD GOODS.—A number of sales are reported to have been made on contract, and it is understood that most importers have now filled their requirements for spring shipment.

BOSTON.

The Journal of Commerce of April 25th says: The milder weather has been favorable for trade and an improving business is reported, although it is not yet very large.

CANADA PINE.

Table listing lumber prices for Boston, including Selects, Dressed, Shelving, Dressed, 1sts., 2nds., Dressed Shippers, Dressed Box, and Sheathing.

WINNIPEG.

The Commercial of April 25th says:—Although there has been a moderately active demand for lumber during the week business is not yet in that active state it should be in at this season of the year, and this may be attributed to the generally unsettled state of matters in trading circles.

ALBANY.

Quotations at the yards are as follows:—

Table listing lumber prices for Albany, including Pine, clear, Pine, fourths, Pine, selects, Pine, good box, and Spruce.

OSWEGO, N.Y.

From Our Own Correspondent

No change in quotations. The ice is still very heavy in front of the harbor, and navigation is not likely to be opened before May 1st.

Table listing lumber prices for Oswego, N.Y., including Three uppers, Picking, Cutting up, Fine Common, Common, Culls, Mill run lots, Sidings, selected, 1 in., Mill run, 1x10, 13 to 16 ft., Shippers, Mill run, 1x10, Selected, Shippers, Mill run, 1 & 1 1/2 in. strips, Selected, Culls, 1x7 selected for clapboards, Shingles, XXX, 18 in. pine, Cedar, Lath, No 1, and No 2.

BUFFALO.

Table listing lumber prices for Buffalo, including Uppers, Common, and Culls.

TONAWANDA.

Table listing lumber prices for Tonawanda, including Three uppers, Common, and Culls.

LONDON.

The Timber Trades Journal of April 11th says:—There is a very fair chance of business improving now that the Government dock yards are active, and the withdrawal of many of the leading Atlantic liners from the passenger trade for conversion into armed transports will undoubtedly come to the assistance of freights.

The consumption in pine goods, to judge by the relative proportions of the stocks of the 1st of March and those now under notice, seems to be maintained. Battens, however, of this last description, do not appear to be much inquired for, and we note there are now in the Surrey Commercial Dock Company's hands some 84,271 pieces, as against 58,000 that were there 12 months ago.

The most marked reduction is, however, on the stocks of prepared flooring boards, which, it will be remembered, were so oppressive at the back end of last season. Not taking account of the vessels now discharging, we find when the list was made up on the 31st of last March there were in the Dock Company's sheds 3,581,819 pieces of flooring, against 3,649,781 pieces that were in store on 31st March, 1884.

In fact, it is somewhat surprising that Swedish shippers have not already raised their prices;

but we understand they are so fully impressed with the belief that England will yield to Russia, and consequently no war take place, that they are disinclined to advance prices without they are sure of being able to maintain them—more so as the London market presents such an impassive attitude.

Reverting once again to the outlook, the indications are towards a revival of trade. The present rise in freights and insurance will react favorably on values generally, and when once the London trade does make a sign, the change in the aspect of affairs will not remain long in doubt.

LIVERPOOL.

The Timber Trades Journal of April 11th says:—The resumption of business after the Easter holidays has not been marked by any increased activity in the market, the uncertainty attending the course of political affairs apparently being as intense as ever, and exerting effects as depressing as any experienced since the trouble began.

The statistics of the import, consumption, and stock of timber, &c., in Liverpool at the end of last month, as shown in the table, show how limited the trade is at present. Compared with the corresponding month of last year the total quantity of square timber taken into consumption is less by one-half, whilst in deals, flooring, &c., there is little difference to speak of; but as Liverpool is essentially the market for square timber, the diminished demand for this description is severely felt, especially as stocks of all kinds are ample.

Fortunately the import is lighter than usual, and this relieves the market in some degree from the necessity of making forced sales, which were so prominent a feature the early part of last year.

The freight market is stiffer again, with few ships offering, owners of sailing vessels having evidently come to the conclusion that with the present low rate of freights offering, especially for Quebec, they have nothing to lose by waiting, and in the event of war breaking out they would be able to demand increased rates, as the employment of large quantities of steam tonnage for transport services would relieve the overstocked market of the present glut of steamers.

LEITH.

The Timber Trades Journal of April 11 says: The arrivals this week are a little more numerous, including a cargo of pitch pine, one of Memel redwood, and four cargoes of deals and battens. The strike among the ship joiners has come to an end, after lasting for some weeks, thus allowing the few contracts that are on hand to be pushed forward.

The imports from Quebec will be very moderate this spring, waney yellow pine being still held in considerable quantities in this district. Trade still remains in a very sluggish condition, joiners and builders only buying sufficient for their immediate wants; the arrival of new goods may, however, bring about a little briskness.

Last Tuesday Messrs. Park, Dobson & Co. held their usual annual sale. A large company turned out, chiefly composed of country buyers, although town element was by no means lacking. A large quantity of stuff changed hands, very fair prices being realized. Several sales are announced, the first taking place on the 14th inst.

GLASGOW.

The Timber Trades Journal of April 11th says:—A statement of stocks on hand at Clyde ports is appended. The consumption during the past quarter of the various descriptions of Quebec log timber specified below amounts to



15,372 loads, ascertained by comparison with the stock on hand at 31st December last, there having been no arrivals from Quebec in the interval. Of Quebec deals the quarter's consumption has been 2,079 standards, pitch pine logs, hewn and sawn, 7,600 loads, and pine deals 770 loads.

A public sale, as noted above, was held at Greenock on 2nd inst., at which there was a good company, and transactions were of considerable importance, about 600 logs changing hands, besides parcels of deals.

**AUCTION SALE.**

On 2nd inst., at Greenock, Messrs. Singleton, Dunn. & Co., brokers:—

Quebec waxy boardwood— 41 to 50 c. ft. av. per log 36	Per c. ft. 1s. 10d. to 1s. 11d. 1s. 8jd.
Quebec yellow pine— 5 to 74 c. ft. av. per log 49 29	1s. 1jd. to 1s. 2jd. 1s. 0jd. 1s. 0jd.
Quebec red pine— 49 c. ft. av. per log 40 35 30	1s. 3d. & 1s. 3jd. 1s. 1jd. 1s. 1d. 11jd.
Quebec birch (20 logs)— 25 c. ft. av. per log	1s. 1jd.
Quebec oak (2 logs—170 c. ft.)— Hewn pitch pine— 100 c. ft. av. log 45	2s. 1d. 1s. 2d. 1s.
Sawn pitch pine— 40 c. ft. av. per log	1s. 1jd.
Quebec 2nd spruce deals— 11 ft. 9x8 10 " 9x3	9d. 8jd.
Quebec spruce deals— 14 ft. 11x3 12 " 12x3 12 " 11x3 12 " 7x3 10 & 11 " 7/12x3	10jd. 9jd. 9jd. 8jd. 8d.
Quebec 4th pine deal ends— 6 to 8 ft.	5d.
Mirbireh pine deal ends— 8 to 8 ft.	6jd. & 7d.

**LAWSON'S CYPRESS.**

In a considerable collection of young evergreens, none is more satisfactory, in every respect, than Lawson's Cypress (Cupressus Lawsoniana). The pendulous branches have a remarkable feathery grace which belongs to no other tree, while the foliage is of the deepest green. This cypress is a native of Northern California and Oregon, where it reaches the height of one hundred feet or more. It was discovered in 1854 by Mr. William Murray, who named it in honor of the Messrs. Lawson, of Edinburgh, Scotland, to whom he sent the seeds. The tree is known on the Pacific Coast as Oregon cedar and white cedar, and is valued for its timber, which has a strong, fragrant odor. The wood is compact, white and very easily worked. Lawson's cypress is remarkable for the manner in which it varies from the seed. There are more than a dozen named varieties in the catalogues, differing in habit and stature, in the depth of green of the foliage, and in the markings of white and yellow. Some of those varieties are, if possible, more beautiful than the type. In the neighborhood of New York

city, this tree has proved perfectly hardy. How far north of this it can be planted with safety, we are unable to say; but it is worth while to experiment with it when the winters are not unusually severe. In cold localities, it should be planted in rather poor soil, in order that its growth may not be continued too late in the fall. The cones in this species are about the size of large peas, and are borne in great profusion. As an ornamental tree, it may be planted wherever evergreens are required; whether solitary or in groups. It is especially suited to cemetery planting, and in England has been employed in evergreen hedges, which are so common, and so ornamental in that country of shrubs and vines.—*American Agriculturist.*

**PLANTING EVERGREENS.**

A deciduous tree, the buds of which have started, is always a risky thing to handle. With evergreens it is different. They transplant better after vegetation has started and the terminal buds begin to swell. This is one reason why evergreens furnished by nurserymen with other stock early in the season, often fail. They have necessarily been dug too early, exposed perhaps to chilling or drying winds during the packing, and, though fresh and green in appearance when received by the planter, make no start after setting out, and gradually turn brown and die. It is much better to order evergreens to be sent separately from other trees and later in the season, say during May or even June, if the season is backward and the new shoots have not made much growth. They should be fresh dug, quick packed and soon received. The tender point about an evergreen is its root. If once dried, it seldom recovers. It is very important, therefore, that the roots should be carefully protected from sun and wind. If possible, take a cloudy or showery day for handling evergreens. If the right conditions do not exist, keep the roots constantly wet and rolled up in matting. If there are a great many to be handled, as for hedging, keep them trenched in moist soil, removing only a few at a time.—*American Agriculturist.*

The Campbellford Herald says:—The latest addition to the machinery of Messrs. Gilmour & Co's. saw mill at Crow Bay, is a lath mill which was put up last week by Mr. J. H. Vrooman. The premises are now in good order, and in the mill there are now in running order, a circular saw having a capacity of 10,000 feet per day, slash saws, a double edger, and the lath mill just added. Mr. Louttit, the manager, has made the old premises almost new, and everything in good trim.

A meeting of Canadians resident in New York was held in that city on Thursday night for the purpose of forming a Canadian club. A committee was appointed to procure articles of incorporation and to take other necessary steps. A considerable amount was also subscribed by those present.

• • • Premature decline of power in other sex, however induced, speedily and permanently cured. Consultation free. Book for three letter stamps. World's Dispensary Medical Association, Buffalo, N. Y.

**LIVERPOOL STOCKS.**

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool on April 1st 1884 and 1885, and also the Consumption for the month of Mar. 1884 and 1885:—

	Stock, April 1st 1885.	Stock, April 1st 1884.	Consumption for the month of Mar. 1885.	Consumption for the month of Mar. 1884.
Quebec Square Pine.....	241,000 ft.	361,000 ft.	45,000 ft.	90,000 ft.
" Waxy Board.....	9,000 "	28,000 "		
St. John Pine.....	20,000 "	32,000 "	0,000 "	1,000 "
Other Ports Pine.....	81,000 "	69,000 "	2,000 "	8,000 "
Red Pine.....	41,000 "	70,000 "	1,000 "	2,000 "
Pitch Pine, hewn.....	564,000 "	289,000 "	87,000 "	152,000 "
" Sawn.....	605,000 "	691,000 "	204,000 "	184,000 "
Planks.....	72,000 "	58,000 "	15,000 "	30,000 "
Dutch &c. Fir.....	43,000 "	40,000 "	7,000 "	31,000 "
Sweden and Norway Fir.....	43,000 "	38,000 "	1,000 "	22,000 "
Oak, Canadian and American.....	188,000 "	267,000 "	15,000 "	25,000 "
" Baltic.....	148,000 "	164,000 "	46,000 "	75,000 "
Elm.....	8,000 "	13,000 "	1,000 "	0,000 "
Ash.....	12,000 "	10,000 "	2,000 "	3,000 "
Birch.....	30,000 "	20,000 "	8,000 "	8,000 "
East India Teak.....	78,000 "	50,000 "	20,000 "	30,000 "
Greenheart.....	32,000 "	15,000 "	10,000 "	18,000 "
N. B. & N. S. Spruce Deals.....	82,000 "	82,000 "	17,000 "	27,000 "
" Pine.....	22,000 stds.	10,247 stds.	1,944 stds.	1,520 stds.
Quebec Pine & Spruce Deals.....	604 "	2,160 "		
East Red Deals, &c.....	3,613 "	7,620 "	1,200 "	997 "
Baltic Boards.....	2,700 "	4,272 "	401 "	367 "
" prepared Flooring.....	95 "	60 "	12 "	00 "
	3,247 "	6,293 "	753 "	1,992 "

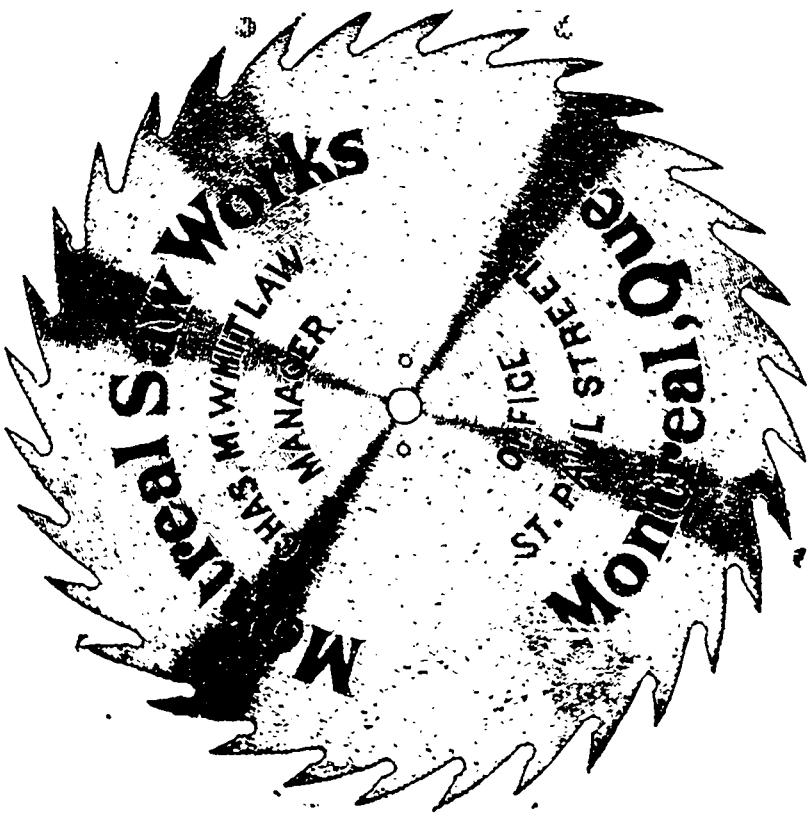
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TOP, DRAG, CROSS-CUT AND BILLET WEB, PIT,  
ICE, AND ONE MAN CROSS-CUT SAWS,  
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BAND SAWS, BARREL AND HEADING SAWS, EMERY  
WHEELS, GUMMERS AND CUTTERS FILES,  
RUBBER & LEATHER BELTING, SWAGES, SAW SETS.**



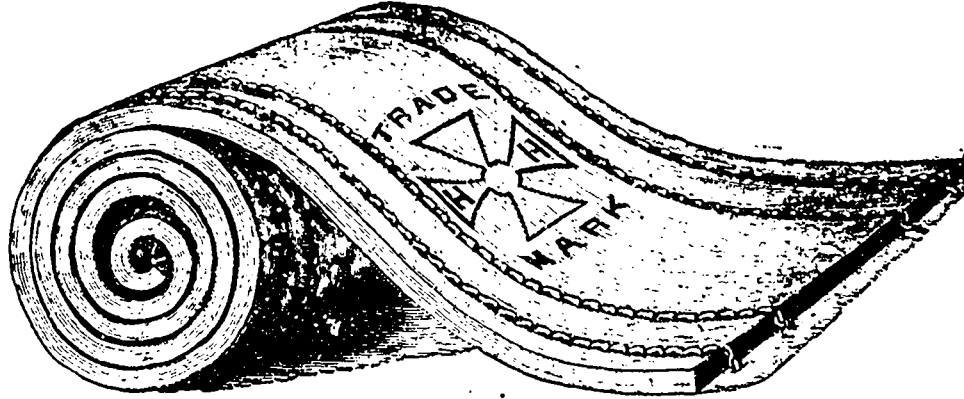
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## Patent Stitched—Steam Power Pressure Stretched—Oak Tanned

**TESTIMONIAL.**  
*Mr. Gould & Sons, CRT Mills,*  
 Nov. 13th, 1884.  
 HARRIS, HEENAN & Co.  
 DEAR SIR.—Your Patent Sewed Belt has been in use in our "City Mills" for some time. We are thoroughly convinced of its superiority over any belt, American or Canadian, we have used in our experience of over 35 years. It stretches little, and gives so little trouble, that compared with riveted belting, the sewed belt saves double its price in time and labor saved. We heartily recommend it to manufacturers as the cheapest and most satisfactory belt in the market.  
 Yours respectfully,  
 W. C. MARSHALL,  
 Foreman City Flour Mills.



**TESTIMONIAL.**  
 F. BENTY & Co., CANAL HORSE SHOE AND  
 NAIL WORKS, MONTREAL, 16th Nov. 1884.  
 Messrs. Harris, Heenan & Co., Montreal.  
 I have pleasure in recommending the belting manufactured by Messrs. Harris, Heenan & Co. of this city. After thoroughly testing it, I find it greatly superior to any belting that has come under my notice and fully equal to all they claim for it, and certainly without an equal for cross or double belting.  
 CHAS. R. ELLACOTT,  
 Supt. H. S. & H. N. Dept.

# LEATHER BELTING!

*The Best, therefore the Cheapest, Belt in the market.  
 Replaces, when used, all others.  
 More Pliable and Durable, especially at the splices.*

*Stretches but little, always retains its original width.  
 Superior for Cross or Double Belts.  
 Runs straight and true, does not start at the laps.  
 Single equals medium double.*

25 per cent Stronger, 33½ More Lasting, and 12½ Heavier, than any other Leather Belt.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. NORMAN, Esq.,  
 DEAR SIR,—I have experienced considerable benefit from your Appliances. I feel stronger and better every way.  
 Yours truly,  
 OTTAWA, September 3rd, 1883.  
 R. E. HALLIBURTON.

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

A. NORMAN, Esq.,  
 DEAR SIR,—Soon after I commenced to use your Electric Appliances they opened my bowels, cured my cough and cold, relieved my head, and considerably relieved my catarrh in consequence. The discharges from my head and chest are now easy, and I feel altogether better. My digestion has improved, my stomach is less sour and windy, and I am less troubled with lascivious and vivid dreams. I had previously tried almost all the advertised patent medicines without deriving any good.  
 Yours truly,  
 PETERBOROUGH, October 16th, 1884.  
 J. GREEN.

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

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

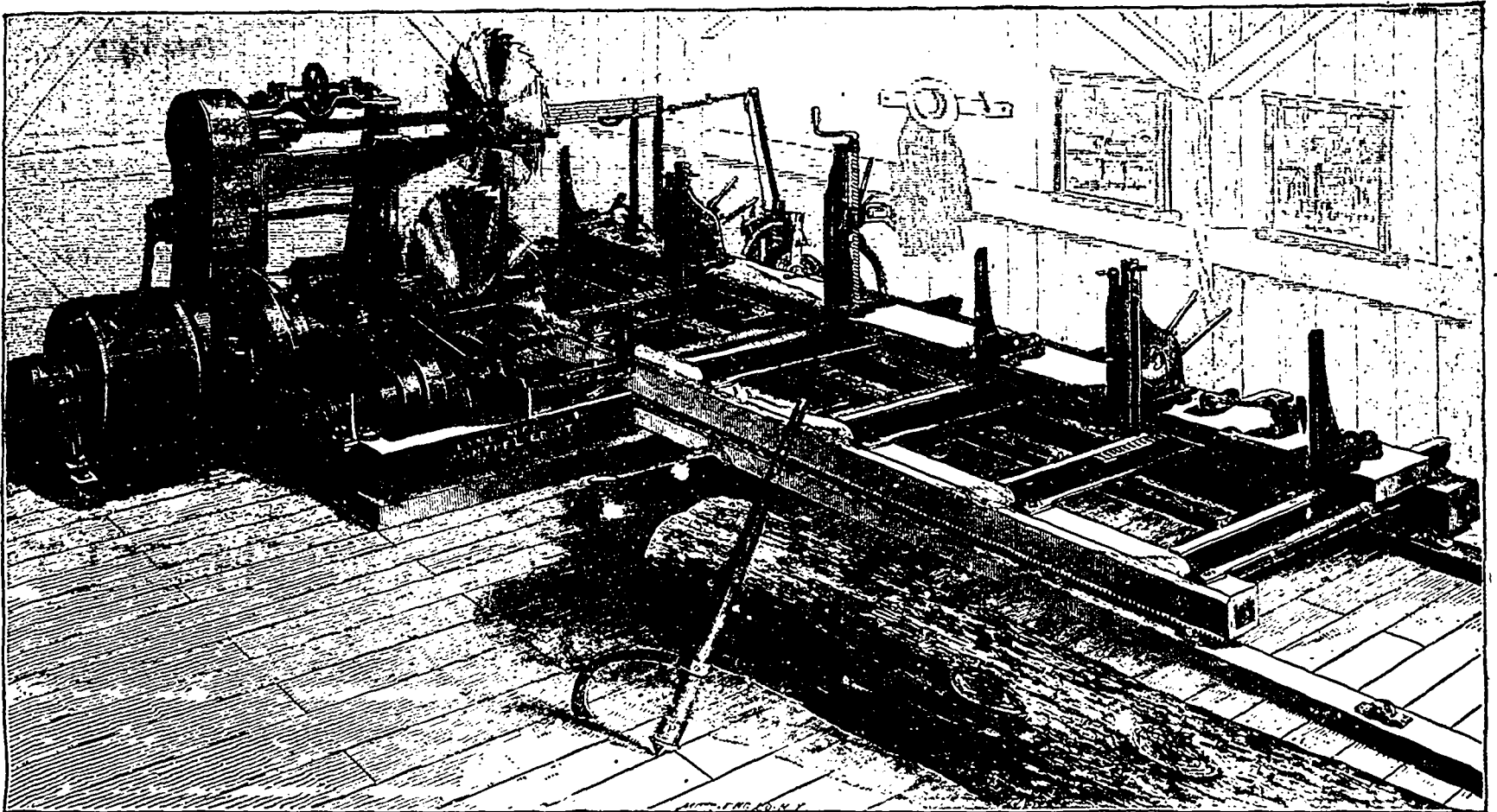
A. NORMAN, Proprietor, 4 Queen Street East, Toronto.

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MANUFACTURERS OF LANE'S CELEBRATED

## CIRCULAR - SAW - MILLS



Circular Saw Mills,  
Saw Mill Set Works,  
Double and Single Traveling Bed  
Planers, Shingle Bolters,  
Bed Timber Planers,

Clapboard Machines,  
Clapboard Planers,  
Stationery Bed or Roll Feed  
Planers,  
Drag Saw Rigs,

Shingle Machines,  
Lath Machines,  
Double and Single Power Feed  
Edgers,  
Mill Supplies, Etc., Etc.

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**LANE MANUFACTURING CO'Y, MONTPELIER, VT.**

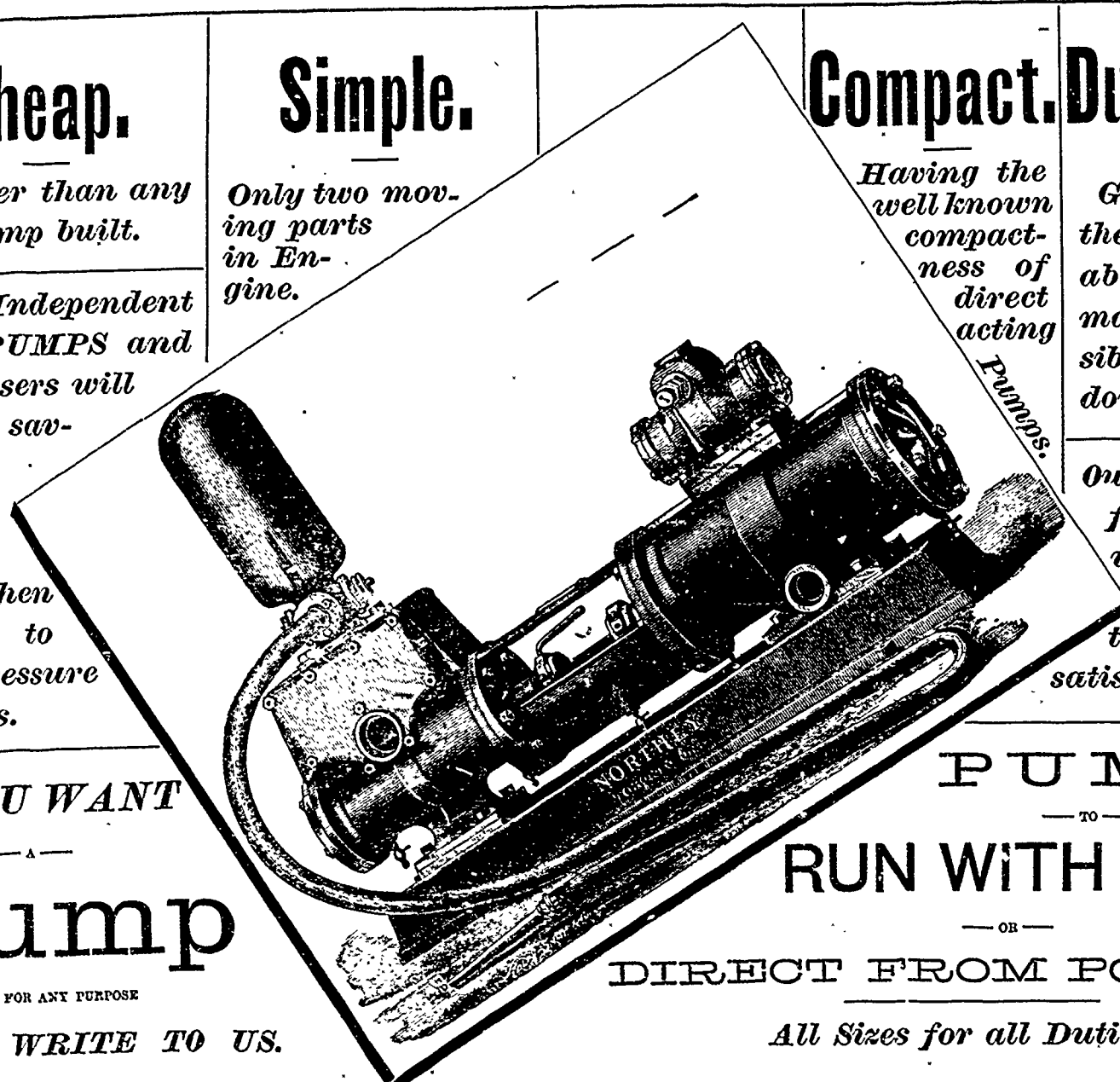
# NORTHEY & CO'S STEAM PUMPS, TORONTO, ONT.

*Pumps for Fire Protection a Specialty.*

## SAVE INSURANCE.

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

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

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**Pump**

FOR ANY PURPOSE

WRITE TO US.

PUMPS

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TO

RUN WITH BELT

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OR

DIRECT FROM POWER

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*All Sizes for all Duties.*

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

WE INVITE CORRESPONDENCE ON ANY POINT CONNECTED WITH PUMPS.

SEND FOR CIRCULAR AND STATE YOUR REQUIREMENTS.

# NORTHEY & COMPANY,

Corner FRONT & PARLIAMENT STS.,

TORONTO, ONT.



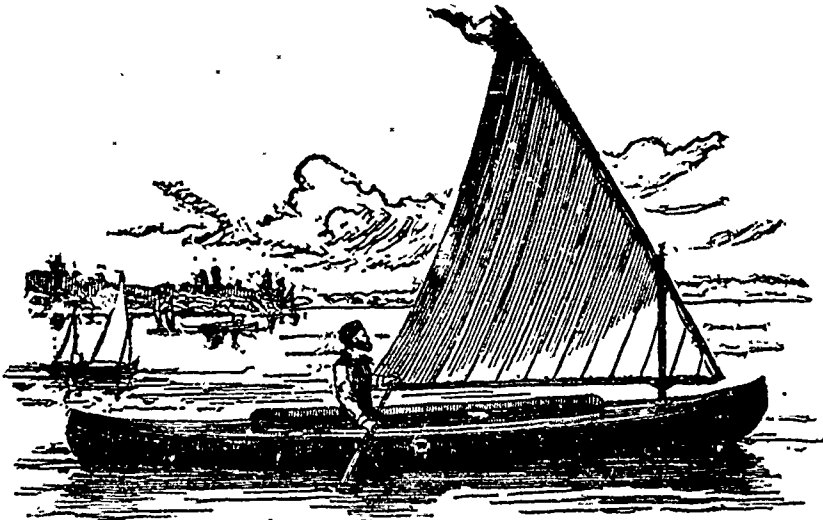
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PETERBOROUGH, ONTARIO,

Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

## CANOEES

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



Gold Medal, London Fisheries Exhibition, 1883.

J. Z. ROGERS,

Send 8 cent Stamp for Illustrated Catalogue. President and Managing Director

Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

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Manufacturers and Wholesale Dealers in Machine and Illuminating Oils.

## Our Celebrated "Lardine" Brand

Is Unexcelled by any other Machine Oil on the Market.

## MILL MEN WILL SAVE MONEY!

By using "LARDINE." Wears equal to Castor Oil and **ONLY COSTS HALF THE PRICE.**

CYLINDER And other Oils, all of splendid quality always in Stock. Prices, etc., on application to

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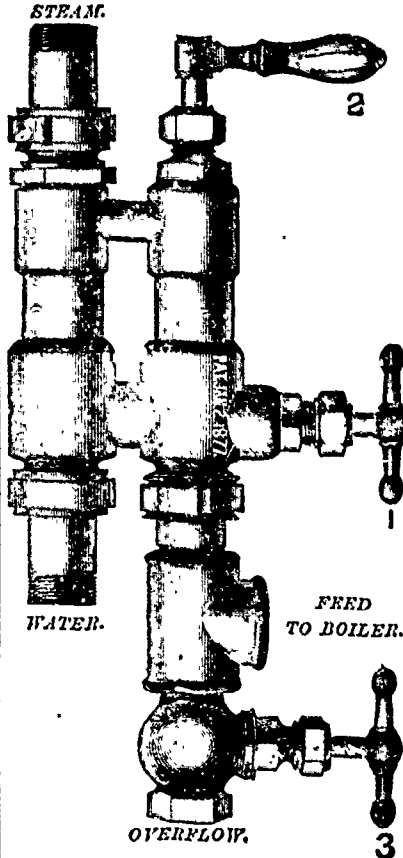
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## SLATE & GRAVEL ROOFER

MANUFACTURER OF AND DEALER IN

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

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# The Hancock Inspirator

Best Feeder known for Stationary, Marine or Locomotive Boilers.

## The Injector Perfected!

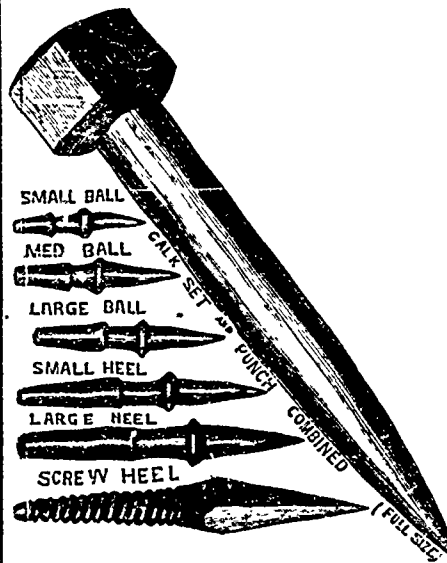
All sizes lift water 25 feet. No adjustment required for varying Steam Pressures.

Over 70,000 Now in Use.

MANUFACTURED BY THE  
**Hancock Inspirator Co'y**

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MONTREAL, P.Q. - - CANADA

Manufacturers of Inspirators, Ejectors, and General Jet Apparatus. 1911



# LUMBER DRIVERS' CALKS

Our CALKS are made with small trip hammers from the best quality of steel and tempered in oil. The quality and temper can be tested by driving them into a bar of wrought iron.

These calks are now used by all the principal Drivers in Maine and New Brunswick. Kept by dealers in Lumberman's Supplies.

**T. McAVITY & SONS,**  
ST. JOHN, N.B.

25 Samples and Price Lists sent by mail on application. 12

# HUGH GIBSON,

MANUFACTURER OF

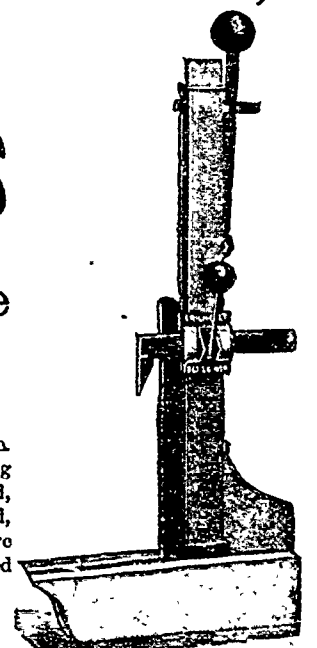
KNIGHT'S PATENT "EXCELLSIOR"

## SAW MILL DOGS

### The Sawyer's Favorite

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

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. These Dogs cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.



Manufactured by HUGH GIBSON, CHATHAM, EXCELLSIOR DOG.

# The William Hamilton Manufacturing Co'y

(LIMITED),  
 MANUFACTURERS OF  
**SAW MILL AND GENERAL MACHINERY**  
 PETERBOROUGH, ONTARIO.

## Our Saw Mill Engines

*Are made strong, neat and durable, knowing well the ever varying strain they are subjected to in driving a Saw Mill.*

## IRON AND STEEL BOILERS

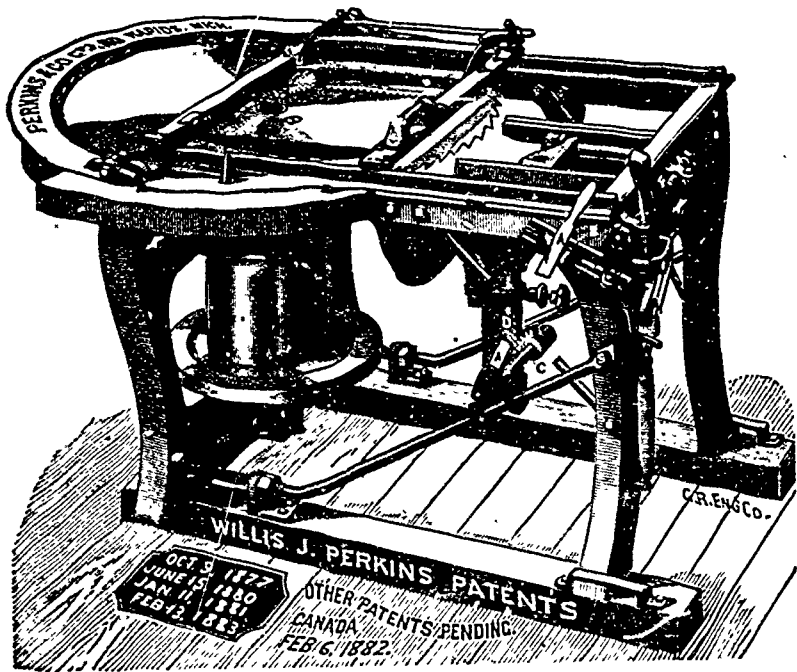
*of the Best Material and workmanship.*

We wish again to call the attention of our Canadian Lumbermen to our First Class IMPROVED SAW MILL MACHINERY, Heavy and Light Circular Mills; our Pat. Twin Circular, with Steam Rack or Rope Feed for Slabbing; Iron Oscillating Gang Mills of the most improved designs; besides our Patent Improved Long Cylinder Steam Feed. We would call attention to Cunningham's Oscillating Twin Engines for Feeding Long Carriages with Rack or Rope; our Patent Wrought Iron Jack Chain with Short Trucks; Heavy Wrought Iron Refuse and Sawdust Chains; Trimmers and Slab Cutting Tables; Lath Mills and Bolters; Lumber Markers; Trout's Patent Automatic Log Counter, to count the Logs as they come into the mill; Covel's Patent Saw Sharpener; Saw Swages and Improved Bench for Dressing and Hammering Saws; Perkins' Patent Shingle Mills; Bolters; Sappers; Jointers; Drag Saws; and Packers. We also forge a very superior ANCHOR for Lumbermen.

We are now introducing to those requiring Small Mills our IMPROVED SEMI-PORTABLE MILL, got up strong and durable, and are now adding to the many Machines for cutting Lumber. MILNE'S IMPROVED HEAVY BAND SAW for cutting Lumber out of large logs. The small carfe these Mills take out in using a No. 18 Gauge Blade, is a very important point in saving Lumber, besides the small amount of power required to drive it, making it a favourite in sawing lumber—capacity from 25 to 30 thousand per day.

We are prepared to submit plans and specifications, together with any information our many years of close application to the Saw Mill Business may have suggested to us; also when required to enter into contract for supplying the machinery and all material complete.

Communication from anyone intending to build Saw Mills solicited.

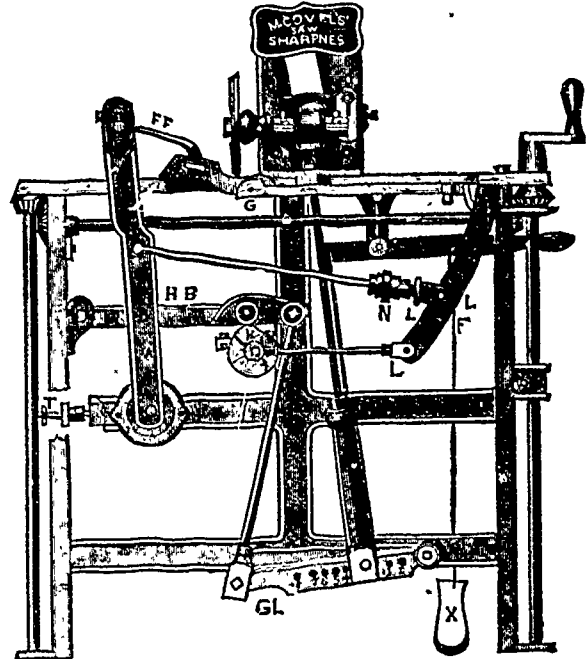


## GRAND TRIUMPH WILLIS J. PERKIN'S DROP TILT

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 price of the whole machine every season by increase of quality and quantity cut.

## OUR SPRING STOCK OF

**The M. Covel Patent**

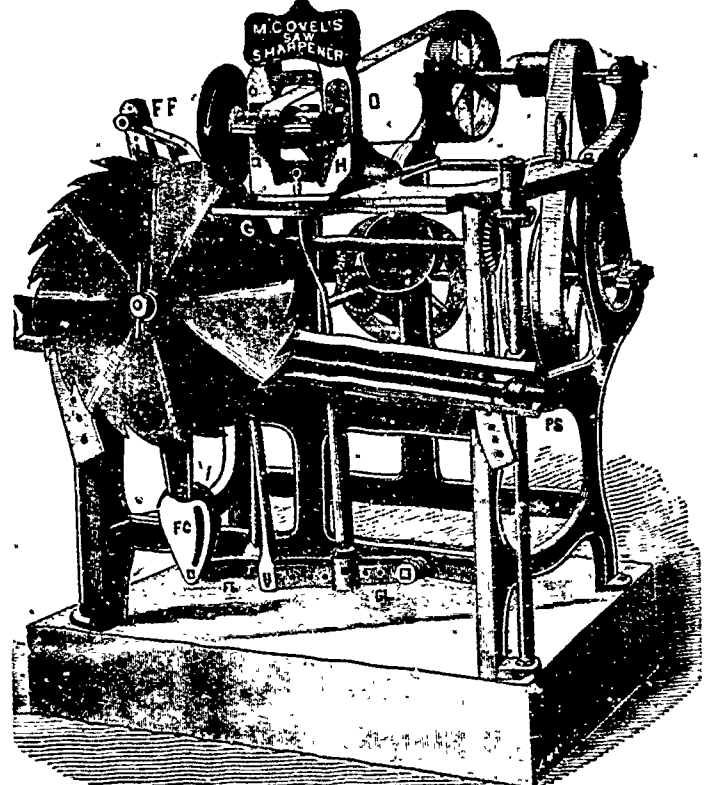


**SAW SHARPENER**

**IS NOW READY FOR SHIPMENT.**

*They are now so well-known to the Lumberman, that their utility requires no comment.*

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



The Wm. Hamilton Manufacturing Co., Peterborough, Ont., Sole Manufacturers and Agents for the Dominion.

SEND FOR PRICE LIST AND CIRCULAR.

# "POCONO" AND "PARADISE."

So many of our Mill Men and practical Sawyers have formed their opinions as to the quality of TANITE EMERY WHEELS for SAW GUMMING by a trial of one class only—our old and well-known CLASS 2 wheels—that we deem it necessary to call attention to the above comparatively new classes. All Mill Men should understand that there is no absolute and accepted standard as to Saw Gumming Wheels. The preference for one or another make is as much a MATTER OF TASTE as is preference for cheese, or wine, or music. Most of our competitors make but one class of Saw Gumming Wheels. We make FOUR, and there is about as great a difference among these four classes of Tanite Wheels as there is among the wheels of different manufacturers. It is quite probable that some who failed to be satisfied with our Class 2 may find some one of the other classes exactly what they want. It is equally probable that some who have been regular and well satisfied users of our Class 2 or 3 Wheels may be still better pleased with our "POCONO" or "PARADISE." We suggest your sending an order for four wheels, one each of Classes 2, 3, "Pocono" and "Paradise," in order that you may settle the question which does suit you best. We are furnishing the "Pocono" largely, and the demand is largely increasing. For the "Paradise" there is but a light demand, but it comes from experienced men. We also make a Special Class to suit the requirements of the AUTOMATIC SAW GUMMING MACHINES so largely used in the North-West.

THE TANITE CO., STROUDSBURG, PA.  
MONROE CO.,

# ST. CATHARINES SAW WORKS!

R. H. SMITH & CO.,

MANUFACTURERS OF EVERY DESCRIPTION OF

ST. CATHARINES, ONTARIO.

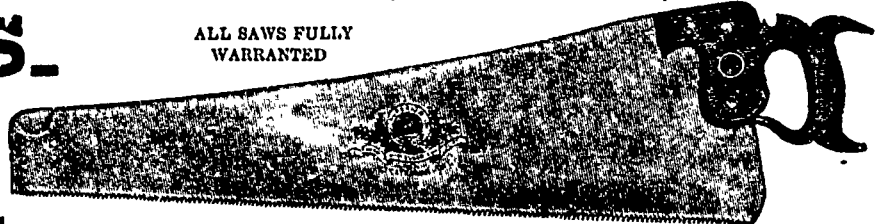
## SAWS.

ALL SAWS FULLY  
WARRANTED

Sole Manufacturers for the Dominion of  
Canada of the

### "SIMONDS" SAWS.

All Our SAWS are now made under the "SIMONDS" PATENT PROCESS.



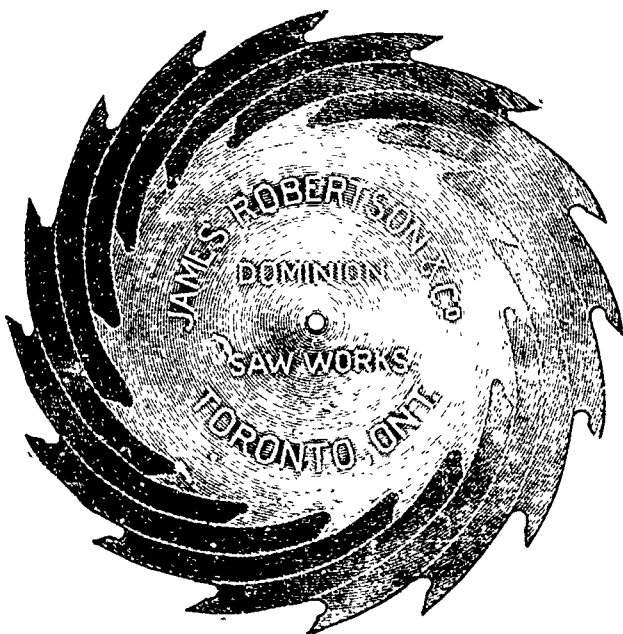
# Dominion Saw Works!

JAMES ROBERTSON & CO.

253 to 267 KING ST. WEST, TORONTO, ONT.

MANUFACTURERS OF SAWS

Circular, Shingle, Gang, Cross Cut,  
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## THURBERS ROYAL Anti-Friction Babbit Metal

IMPORTERS AND DEALERS IN

Band Saws, Emery Wheels, Files,  
Saw Swages, Rubber Belting, Saw Sets,  
Saw Gummers, Leather Belting, Iron Pipe, &c.

EVERY SAW FULLY WARRANTED.  
Prices on Application.