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NO. 12.

READY-MADE HOUSES.

The ready-made house business has been mentioned in these columns several times, for the reason that it is a growing industry, and one that will eventually consume a large amount of lumber. The inquiries regarding them are numerous. A gentleman visited the *Lumberman* recently who wanted from twenty-five to fifty houses for a colony that is about starting to Dakota. Such houses for the people settling in that territory, and often in other sections, are just what is needed. In many parts of Dakota it is impossible to buy lumber, and often when lumber can be obtained the services of a carpenter are hard to secure. A ready-made house can be shipped to its destination and erected by any man of ordinary ingenuity. It saves all bother of running around the country after building material and men to put it together. A gentleman called at the office of this paper a few days ago who wanted a house to set up on a lot in the city limits. He could rent the lot during the summer for a small sum, and thus avoid paying big rent, and at the same time have a house of his own to live in that could be handily moved whenever it was desirable to do so. A late inquiry from Philadelphia was made regarding ready-made houses for export, and the same day there came letters of inquiry relating to the same subject from West Virginia and New York. These letters, and hundreds of others, show that the ready-made house business is not carried on extensively enough to meet the demand. There is no good reason why a manufacturer of knock-down houses should not use 100,000,000 feet of lumber yearly in this city alone.—*Northwestern Lumberman*.

BEECH CHARCOAL.

The *Northwestern Lumberman* says:—The value of beech continues to come to the surface. While never esteemed of great importance among the numerous American hardwoods, it has held a high place in foreign countries. It is reckoned in Germany as next to oak in value, and about on a par with Scotch pine. It is preferred there for wagon stock, woodenware, etc. It makes thoroughly odorless butter-tubs. Beech is also an excellent charcoal wood. Thousands of tons of beech charcoal are consumed in European distilleries annually, and distiller's charcoal needs to be a very superior article. Charcoal from beech is also a superior fuel for iron smelting. Some retorts in use for 10 years in Germany, for making wood vinegar are thus described:

The retorts are simply boiler-like iron cylinders three feet in diameter and nine feet long, horizontally placed in ovens like common flue boilers. In front is the door for charging, at the back the opening for the gases to escape into the condenser. Each cylinder contains a basket made of iron bars, for the purpose

of quickly withdrawing the charcoal into an iron box, which, to effect gradual cooling, is made air-tight by the use of clay. There are 24 retorts in use, which produce yearly at least 1,200 tons of beech charcoal. The wood used is made three feet long, and all dimensions, oven stocks and roots are used—the latter give the same quantity of distillates, but require longer time for charring than the ordinary cord-wood. Each retort is charged with about one-half cord of split wood. Duration of process, 18 to 20 hours, (formerly 12 to 14 hours with less favorable results); temperature about 482 degrees Fahrenheit. The cooling requires five hours. Each two retorts have one fire-place; coal, saw-dust saturated with tar, and all the gases resulting from the process, which cannot be condensed, are used for firing. One cord of beech wood weighed 4,092 pounds, and yielded in the average, 966 pounds of good charcoal, or 23.6 per cent. in weight, the small braize not included. And since one bushel of 2,748 cubic inches of coal weighed 20.38 pounds, one cord yielded 47.39 bushels. In the coalings in millers the average result obtained in the same district, and with the same wood, was 41.3 bushels per cord, or 1,094 pounds, which brings the weight of the bushel to 26.5 pounds, braize included. These comparative results, extending over a number of years, prove that the specific weight of charcoal made in retorts is very much below that made in millers, whilst the yield in volume is in favor of the retort.

NEW ENGLAND FORESTS AND WEATHER.

The accounts of the Maine logging are accompanied with lamentations over the drought which the State has suffered for nearly a year, lowering the wells and lakes, and in some cases robbing manufacturers of their water-power. The connection between the destruction of the forests and decrease of rain seems not to occur to the thrifty and usually far-seeing Down-Easter, and if there is any fear that thousands of men in our northern woods are living off their children's children, it is certainly not expressed. The season's cut is over, and there is now being floated down the Penobscot some 150,000,000 feet of logs, while the Kennebec adds 120,000,000, the Aroostook 70,000,000, the Machias basin 30,000,000, the other sources of log crop supply of the state swelling the amount to about 580,000,000 feet, to say nothing of the ship-timber harvest. Some 10,000 men and 2,800 horses and oxen are required to do the cutting and transporting. If those logs averaged two feet in diameter, and could be placed end to end, they would reach over 36,000 miles, or about once and a half round the earth. One of the beneficial effects of the ancient "forest courts" of England and the governmental supervision of forest lands in some of the continental countries is that the destruction of trees was made a grievous offence against the

laws, and this was of inestimable service to agriculture. In many portions of New England (for nowhere have the forest trees been properly protected), it is no uncommon thing to hear old inhabitants refer to dry gullies where in their youth a goodly stream of water used to flow, and unless this matter is better regulated by the authorities and not left to the feeble efforts of village improvement societies and sentimental people of the woodman-spare-that-tree variety, many of our towns and manufacturing will suffer more and more for lack of abundant water, the danger from spring floods will be increased, while the farmers will be visited more frequently than they are now with long succession of rainless days and damaged crops. It has been frequently demonstrated in New England that waste lands appropriately set with trees will yield a profit of from \$6 to \$10 per year; but, owing to a want of system in tree-planting, such as prevails in portions of the West, our hills are being rapidly disrobed and our resources wasted.—*Springfield Republican*.

A BRIDGE TWENTY-ONE MILES LONG.

On Sunday a party, composed mainly of railroad officials and contractors interested in the building of the New Orleans and North-eastern railroad, took a trip across Lake Pontchartrain for the purpose of examining the great trestle work now in course of construction. The entire length of the trestlework work when completed will be twenty-one and a half miles. This distance comprises thirteen and a half miles from People's avenue canal to the point, five and three-quarter miles across the lake and two and four-tenth miles from the north shore. All the piling along the southern shore, with the exception of about one mile, has been driven and this division will be completed by July 1. Of the piling in the lake two and a quarter miles and one mile of the work is completed.

The trestle on the north shore has been finished some time and the rails are laid nine miles, or to Pearl river. The trestlework is all constructed after the same plan, except that the cross-ties are further apart in the approaches than in the bridge proper, and that the timber used on the latter is all cross-sited, the description of the bridge will answer for the other work.

This structure, which probably will be the longest of the kind in the United States, will also be one of the most substantial. Experts in railroad building pronounce the sections already finished the most perfect specimens of trestle construction they have seen. The piles average 60 feet in length and are driven about 40 feet. In each bent there are four piles and the bents are 15 feet apart. The caps of the piles are 12x14 inches, and the stringers are 6x16 inches, and three of them on each side laid on edge.

The cross ties are only four inches apart, and on them are bolted stringers, which act as guard rails. The ties form a secure decking to the trestlework, upon which the wheels of a car could run without danger of leaving the bridge on account of the guard rails.

The trestlework, from beginning to end, is one of the grandest undertakings connected with railroad building in the south. Some idea of its magnitude may be formed from the statement that the quantity of lumber required, outside of the piles, is over 15,000,000 feet. There will be 8,161 bents, of four piles each, or 32,644 piles.—*New Orleans Picayune*.

SAVE THE HARDWOOD.

A local correspondent at Long Lake, Grand Traverse region, Mich., states that farmers in his section, though they are clearing land rapidly, do not slash the timber down in windrows and burn it up to get it out of the way. They are pursuing a much wiser course. They are making saw-logs of all that is available for that purpose, and fence rails and wood of the residue. The correspondent alluded to, wisely pleads with his neighbors to continue on in the good way of economy, "for the time is coming in the near future," he says, "when these majestic maples will be as it were gold mines to the owner." This advice is encouraging as showing that the farmers of that part of Michigan are awakening to the value of their timber, and that the slaughtering and destructive method sometimes pursued in clearing land is to be changed to a better one. A wanton waste of timber in that section of Michigan, so near to Lake Michigan, and the great markets of the treeless prairie states, would be simply the most inexcusable folly.—*Northwestern Lumberman*.

Squatter Sovereignty.

The *American Lumberman* of New Orleans says:—"Squatter sovereignty" is a persistent enemy to our magnificent pine forests, and its rule is everywhere found in the shape of thousands of trees girdled and left to decay around thriftless and abandoned homes, hundred of which are found throughout the pine lands of the South. The vandals generally remain long enough to destroy what they can of what is valuable, and then move to some other section to repeat their work of devastation, an evil as far reaching and as pernicious in its effect as the forest fire. Both are evils which should as far as possible be cured by prompt and proper legislation.

The *Ottawa Citizen* says:—The brisk trade done in shingles just now is not confined to Ottawa. The Galletta shingle mill on the Mississippi, owned by Mr. James Sheen, has been running to its fullest capacity since early in April, and is receiving custom orders faster than it can fill them.

SOMETHING ABOUT WOOD BENDING.

From a lecture delivered a few months ago by H. G. Shepard, of New Haven, Conn., on the principles of wood bending, we extract the following: If I wished to bend a stick and have it remain in position and keep its shape the best, I should put the heart on the inside, for the reason that the tendency of the wood is to bend from the heart; but when I have a difficult piece of bending to do, like a corner piece, that requires a great deal of upsetting, I invariably put the heart on the inside, for the reason that the heart of the stick will admit of more upsetting and end pressure without giving way, wrinkling or anything of the kind. That is the way I use the heart of a stick. When I wish a piece to remain in a certain shape, then I put the heart on the outside, because the tendency of the stick will be in the direction in which it is bent.

As to the peculiarities of bending, after a piece of wood is bent its character is almost entirely changed. It is wonderful how it is changed, and by that change it is better fitted for any use, I claim, than it was before. Bending makes the wood heavier; it is pressed together, and the same bulk of wood weighs more than it did before. Another peculiarity is that when it is thoroughly dry, it is stiffer than the same sized piece of wood, that is alike every other way in regard to grain. It will admit of more strain, and move less out of its position than if unbent. On this account, it is better fitted for carriage making than sawed pieces. I have taken two circles, one sawed out and the other bent, both of the same character of wood and as nearly alike as I could get them; I placed the concave sides together and put pressure on the ends to bring them in contact. They are subjected to equal strain. I found that the bent piece had perceptibly more influence over the sawed one, than the sawed piece over the bent one.

A piece of timber that has been steamed, whether it is bent or not, has its stiffness increased. It is more brittle than it was before, and, for some uses, it will not do as well; and yet there is a quality of timber that the steaming process and the kiln-drying process affect very much the same; they both cook the gum in the timber and make it brittle and stiff. There is a grade or class of hickory that is benefited by being steamed or kiln-dried for use as spokes or whiffletrees. There is a kind of hickory that never becomes stiff by a natural process of drying, and one of the desirable qualities of a spoke, rim, or whiffletree is stiffness as well as strength; you take that hickory, and it is the very best we have, and steam it, and it is better fitted for these purposes than it was before. It is difficult to tear apart a piece of bent wood; the fibres are interwoven, one with the other. We do not perceive the change on the outside, but when we come to split the stick open, we find that its character is entirely changed.

WOOD ON EXHIBITION

A New York daily paper gives an interesting account of the valuable collection of woods belonging to the Museum of Natural History of that city. This collection has occupied several years in making and was presented to the museum by Morris K. Jesup.

At present the Jesup collection and the specimens already in possession of the museum represent about six hundred logs, most of them woods from the forests of North America, and those that are particularly valuable to the worker. The specimens are all representative trees of their family, and show a section six feet long, carefully selected and handled, so that even the bark and the tender fungi which affect it are preserved. The woods represent every State in the Union; and with them are samples of seeds, foliage, fruit and flowers, while near at hand, and in most of them, are the insects, injurious to their growth. The preparation of such a collection is not merely a matter of sawing wood and piling, as many would suppose, but requires no little scientific knowledge. The wood is, of course, received green, and when kept in a warm room, cracks, and the specimen is spoiled. To prevent this, much ingenuity has been displayed by those interested. By boring a hole in the heart of the tree from the exposed

section, room was allowed for the pressure following the process of seasoning. This was found satisfactory, but previous to this a number of fine specimens were cracked. As it is essential to builders and others interested to know the shrinkage, etc., of various woods, measurements were made of all specimens before seasoning, so that by referring to the diagram accompanying each log the shrinkage is seen, with other interesting information as to the growth of the tree in every year. This is determined by the growth-rings. In a section from a tree called the Pardo of India, the growth line is shown in a remarkably manner, being one and seven-eighths inches wide, for the growth of a single year.

The seasoning process completed, the specimens are ready to prepare for exhibition. The idea is to have every log represent every possible treatment that wood is susceptible of, and, undoubtedly, the experiment made will place within the reach of the builder many woods hitherto considered unavailable. Each log is sawed down through the centre about half way and then cut off, and half of it is polished. Thus the bark of the tree is seen, the grain, polished and unpolished, in vertical and horizontal sections. Accompanying the logs are watercolor paintings of the foliage, flower, fruit, etc., in size and coloring, and with them a collection showing the economic value other than for building purposes, namely, the various gums, resins, tar, pitch, turpentine, bark for tanning, the cork, the medicinal properties, etc. Some of the logs are of great size and beauty. The largest is a white ash, nearly 46 feet in diameter, and about 170 years old. The museum also possesses a specimen of one of the giant trees of California, which, however, can not be placed on exhibition on account of the lack of room. An interesting specimen is seen in the honey locust of Minnesota, in which the bark is a mass of sharp thorns nearly five inches in length. The yucca is a tree lily, with a trunk two feet in diameter, and composed of a spongy, string-like mass of fibres, so that even cutting with any regularity is impossible. The tree is extremely tough, and, since it has been received has at various times thrown out sprouts, a process which, if continued in the cases, will more than meet the wishes of the custodians, and take the place of the colored drawings. In a fine specimen of the spruce from the Rocky Mountain country are seen innumerable perforations, each one containing an acorn, the work of a wood-pecker, which thus lays up its winter supply, encouraging the growth of grubs, which are called for later on. Many of the acorns are so firmly driven in that it is almost impossible to get them out.

One of the most ancient specimens in the lot is a spruce from the same locality. It is about twenty-five inches in cross section, the concentric circles telling the story of over 400 years. This wood is one of the most valuable. The nut pine, whose nuts are eaten by some of the Indian tribes, is a little over half the number of inches in diameter, but nearly as old. A buttonwood, 170 years old, California redwood, and a number of others are equally interesting and valuable. Take it in all in all, this collection is perhaps unsurpassed by any of its kind in the world, and is of great value alike to the student and the practical wood-worker.—*The Lumber World*.

PACIFIC COAST LUMBER INTEREST

Californians, not content with forcing their way to the front rank as wheat shippers, are beginning to turn their attention to lumber, and are seeking markets where their different varieties of native and Pacific coast woods are likely to be appreciated. Redwood, fir, black walnut, cedar and white pine are available in unlimited quantities, having stood for ages unaccustomed to the assaults of the hardy and persistent woodman; and it is with a view of introducing these and many other varieties of finishing woods, that capitalists intend entering the field as competitors in eastern and foreign markets. Redwood has been in use here for some time, but builders generally are not fully acquainted with all its merits. It is used for many purposes, rough as well as fancy work. It is last- ing, worked up either into shingles or for paneling purposes with a high polish. Recently a

shipment was made from San Francisco to Glasgow of Washington Territory red fir, cedar and black walnut, and an assorted cargo of woods followed to London.

The scarcity of the lumber supply in many portions of Europe offers an excellent opportunity for Pacific coast shippers, and with their known energy it would not be surprising to see, at the expiration of a few years, shipments of lumber making from San Francisco and North Pacific ports to Europe as frequently as wheat goes now. At the present time shippers are not fully posted as to the requirements of European consumption, the cargoes forwarded thus far being of an experimental character, simply with a view of ascertaining the tastes. The ventures made in the way of shipments to Panama and other South Pacific ports, have met with such encouragement that the trade of Montevideo and Buenos Ayres in white pine is now viewed with some jealousy. Australia is buying largely in the San Francisco market for building purposes, and the demand is rapidly increasing. Canada and the West, keep a good lookout for your trade, or some fine day you may wake to the fact that instead of a prospective famine in lumber, it may turn out a feast with a surplus to spare.—*Lumber Trade Review*.

LUMBER IN WINNIPEG.

The Winnipeg Times of June 5th, reports the following discussion in the City Council

ALD. G. M. WILSON.—What amount of lumber has been purchased since the commencement of the year altogether?

ALD. OVENS—I bought about five hundred thousand feet myself. I understand Parr bought 150,000 feet, I don't know on whose authority. If he did it on his own responsibility I think he should be made to pay for it. I find that we have purchased already nearly three million feet of lumber 2,700,000 feet, I think. This is going it pretty fast. The cost of the lumber will be something like \$67,000. It is impossible for the finance committee to raise ways and means for an expenditure going on at this rate. The cheques issued the other night for lumber amounted to \$16,000, and there are \$49,000 yet to be paid. The chairman of the board of works informs us that they have discharged a large number of men, but I find the pay sheet last month amounted to \$12,000.

The Mayor stated that the exact amount paid for lumber would be \$82,697.

ALD. BURMIDGE asked the chairman of the board of works who had bought this lumber, outside of the one million five hundred thousand feet purchased from Macdonald.

ALD. OVENS—Part was purchased by contract—part by Parr. The board of works authorized me to buy lumber.

ALD. G. M. WILSON said the Council had no idea how much lumber was being bought.

As a result of this discussion a motion, by Ald. Fortune and Brydon was carried, rescinding the resolution authorizing the board of Works to purchase what lumber it required.

TIME TO PLANT.

Two provinces—Ontario and Quebec—have, at the same time, passed laws for the encouragement of tree planting. These laws are chiefly directed to planting on road sides. This limited scope of their direct action must not discourage us; for there is reason to hope that the effect of the example may extend much further. The planting of the road sides with well selected shade trees will of itself change the whole aspect of the country; and what is done there, farmers may soon learn to do along the fence rows. Not only would the scenic effect be pleasing; the ultimate pecuniary results may be made very acceptable.

Some of the best trees and the most valuable, including some nut varieties, are not suitable for road sides. Robbing them of their wealth injure the trees and cause a new form of the small boy—and big boy, too, it is to be feared—nuisance. Government bounty to tree-planting is a justifiable thing, where the only advantage to be got is a public one, where no one will be authorized to cut down and appropriate the trees to his own use. For the same reason, the bounty must stop short of the encouragement of private planting. Here the motive to plant must be found in some form of individual com-

ensation; increased beauty of surroundings or the hope of ultimate profit.

The list of trees to which the public bounty is, by the Ontario law, extended, is altogether too limited. Other than our own forest trees deserve encouragement, in this particular. The want of variety in shade trees, even in cities, is a standing reproach. The easily grown horse chestnut and the maple form the chief stock of these trees. The plane tree and the Linden tree of continental Europe are specially deserving of encouragement, and there are other varieties now neglected, well worthy of a trial. Our Canadian forests are rich in the variety of their trees; and where nature has pointed out the way, it is safest to go. But even here, the limitations of natural growth may be greatly extended by cultivation; and varieties not native to the soil may be added with advantage.

In Quebec, "arbor day" got a good send off. There was an official coronation, which deserved to fix the event in the public mind. The birth of the Ontario law was not emphasised in a similar way, or in any way; and its existence is scarcely felt or generally known. The new law will, when its provisions are fully known, give an impetus to planting on the road sides. And the example will become contagious. That there will be much planting *en bloc* is doubtful. Few persons are likely to be moved to plant even the most valuable trees, say the black walnut, that a future generation may hope to reap, thirty-five years hence, a harvest of \$15,000 or \$20,000 an acre, or even twice as much. The fashion may change; it must change for want of material to work upon, and when walnut cannot be got for furniture some other wood must be substituted. Walnut may become the more valuable, from its rarity; but in thirty-five years, it will be almost in danger of being forgotten. Though the growth of this tree, in separate plantations, of large extent, is not likely to be undertaken, there are many spots in which it may be dotted over a farm, without any risk of loss and a very good chance of exceptionally large profit. It is a beautiful tree, and after a few years will pay its way with its crop of nuts.

The first thing to be done is to awaken public attention to the desirability of planting; and this done, the folly of selecting poor trees will soon be understood. In Ontario, we have been cutting down trees for a century; in Quebec more than twice as long—though it must be confessed very slowly at first—and now the time to plant has come. Let us recognize the necessity and act accordingly.—*Monetary Times*.

FOREST FIRES.

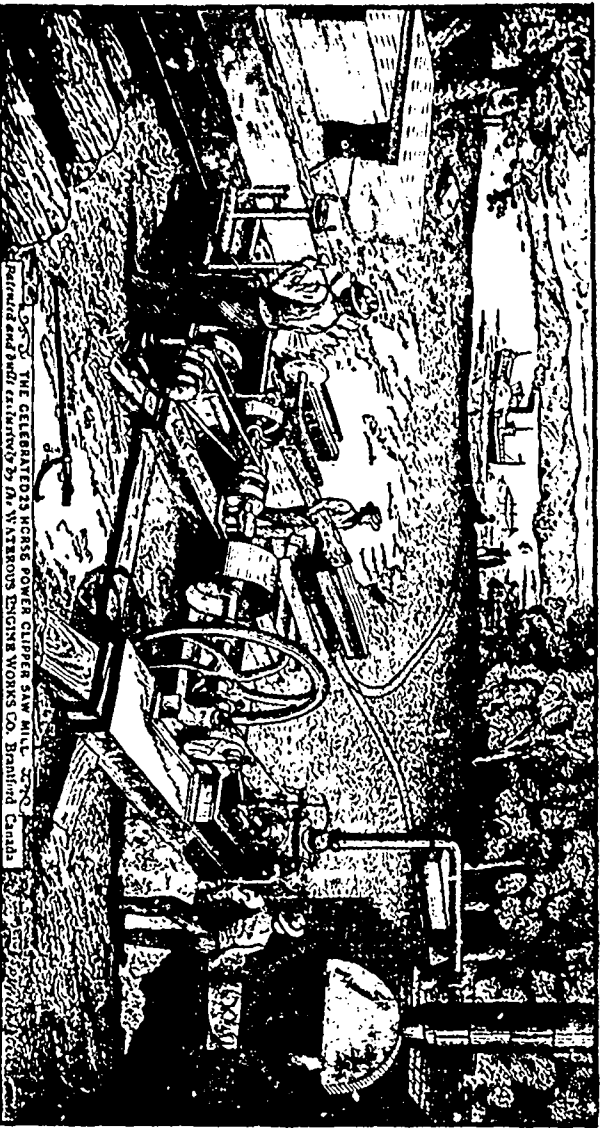
Threatening forest fires are reported in Wisconsin, and the Great Western mine on the upper Menominee was endangered a short time since. A fire near Crystal Falls mine also threatened the Stevenson and Curry mine locations and burned numerous wood piles. Michigan has thus far escaped any destruction from this source this year, but as the dry season approaches, when everything in the woods, especially where lumber operations have been conducted, becomes as inflammable as possible, as it is in a favorable condition to feed any flame which may be started carelessly or otherwise, it behooves the utmost caution on the part of settlers, land lookers, hunters, and others, in order to avoid any disastrous results such as were visited on some portions of the state in 1880. The memorable lessons on those dark days in the history of the state, it is to be hoped will serve as a sufficient warning against any carelessness in the future. An ounce of prevention is worth a pound of cure, and all persons engaged in the woods, or who "camp out" over night should see to it that camp or other fires are fully extinguished and not left to be fanned into a blaze by the passing breeze, and perhaps spread devastation, ruin and death to an unlimited extent.—*Lumberman's Gazette*.

On Thirty Days Trial.

The Voltaic Belt Co., Marshall, Mich., will send Dr. Dye's Celebrated Electro-Voltaic Belts and Electric Appliances on trial for thirty days to men (young or old) who are afflicted with nervous debility, lost vitality and kindred troubles, guaranteeing speedy and complete restoration of health and manly vigor. Address as above.—N.B.—No risk is incurred, as thirty days' trial is allowed.

Semi-Portable and Portable Direct Action and Belted Saw Mills!

TEN DIFFERENT SIZES.

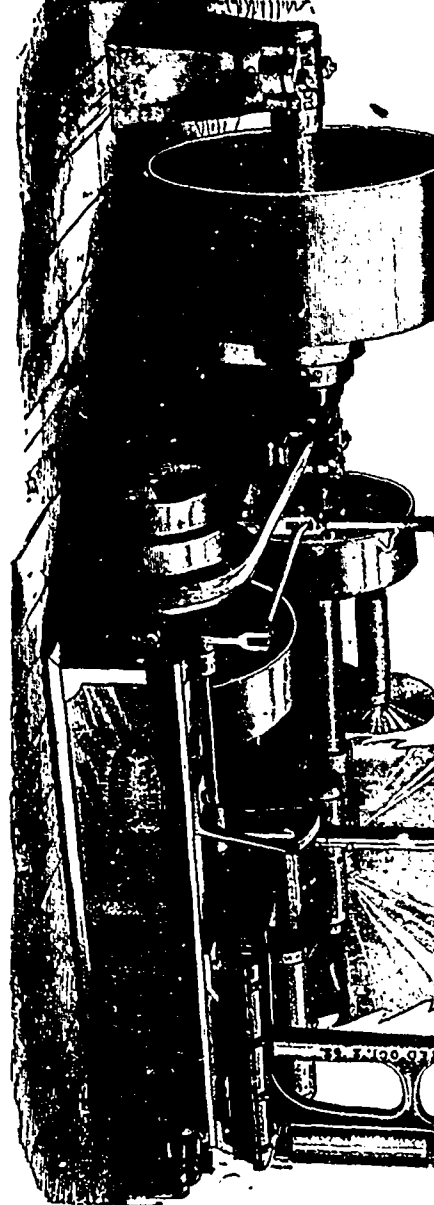


THE CELEBRATED POWER GRIPPER SAW MILL. Patented and built exclusively by W. WATKINS ENGINE WORKS CO. Brantford, Canada.

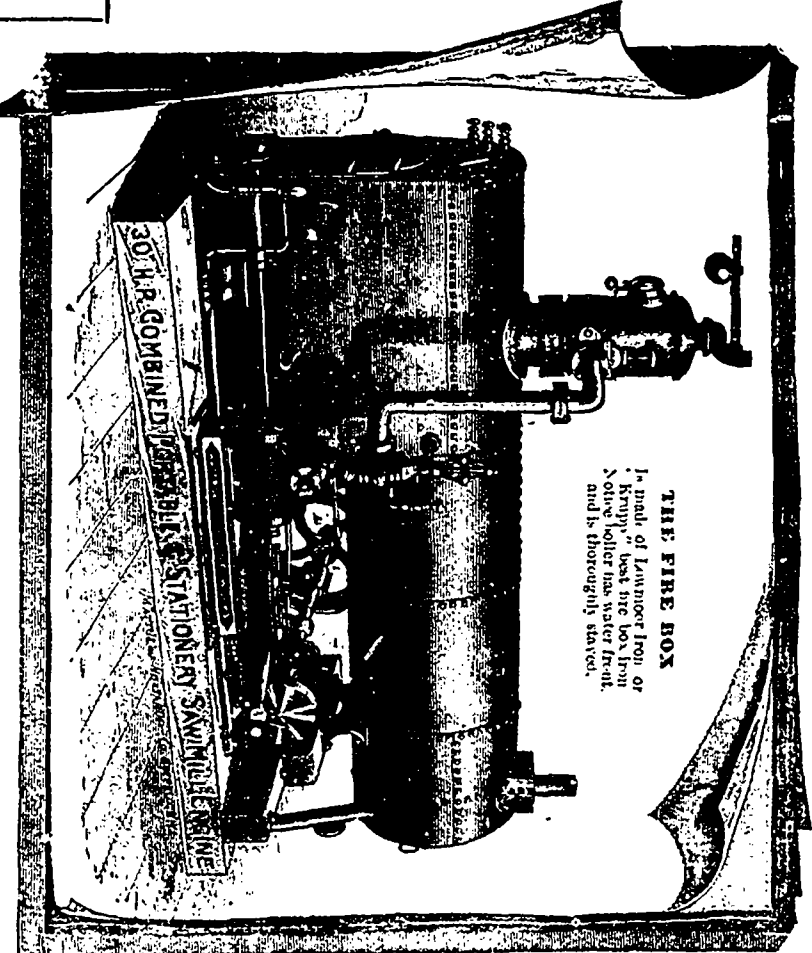
Above cut represents Our 25 H. P. Patent Direct Action Mill which we guarantee to cut 8,000 to 12,000 feet of lumber per day of ten hours, and to be the most efficient, economical and durable mill built in America, and will saw lumber cheaper per thousand than heavy large size belted or gang mills. For over a quarter of a century the leading pioneer mill of Canadian settlers. Especially constructed for hard work.

IMPROVED SAW FRAME

Dating 4 to 12 inch Firebrons; Steel Mandrels; Reservoir Oil Boxes; Double Leather Feed Belts from 2 1/2 to 6 inches wide, takes 72 inch Saw and under. CARRIAGES to cut any length desired, for slabbing or stack purposes, ship yards, etc.; Ratchet or Gauge, a Pricer Set Works Eagle Claw Dogs, Tiger Dogs, Keenest Attachment, and special features.



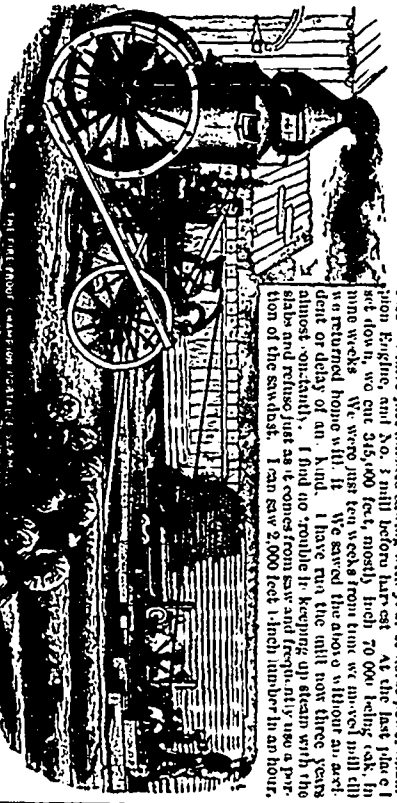
This Cut represents the Engine furnished with Nos. 8, 12, 16 and 18 Saw Mills.



THE FIRE BOX. In made of Lumber from our Knapp's best fire box iron. Other boiler has water front and is thoroughly stayed.

Champion Portable Saw Mills

12, 16, and 20 H. P.



George Bore writes as follows: "St. Ann, Ont., July 27th, 1882. I have just finished existing with your 20-horse-power Champion Engine, and No. 5 mill before harvest. At the last place I set down, we cut 315,000 feet, mostly half 70 000 feet in three weeks. We were just ten weeks from time we moved till time we returned home with it. We saved the whole without an accident or delay of an hour. I have run the mill now three years almost constantly. I find no trouble in keeping up steam with the staves and rakes just as it comes from saw and frequently use a portion of the sawdust. I can saw 2,000 feet 12-inch lumber in an hour."

The following are a few who have bought these mills:

- Canada Pacific R. R. Co.
- (1) B. Hall & Co., Quebec
- Honington Land & C. Co. Sherbrooke, Que.
- (2) Sorel R. R. Co., Que.
- Cochrane Ranche Co. Bow River, A. W. T.
- Nor. West Milling and Mining Co. Bow River, R. V. T.
- Toronto and Nor. West Colonization Co. Near Brandon.
- Morton Dairy & Farming Co., Turle Mountain.
- Allen Gann, Ottawa.
- Geo. Parley, Ottawa.
- Michigan Native Copper Co., W. W. Stewart, Montreal.

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LUMBER IN AGRICULTURAL IMPLEMENTS.

The total annual consumption of lumber in the manufacture of agricultural implements in Chicago, amounts to about 20,000,000 feet. Of this about 7,000,000 feet are pine. Three-quarters of the remainder is ash, the great staple. Oak is the factor of next importance, but it is not used to the same extent that it is in the wagon making industry, where it commands a higher place. Hickory, maple, elm, white-wood and basswood, and Norway and white pine are the other kinds of lumber employed.

There are several reasons why ash is preferred, universally, in this line of work. It combines numerous features of general adaptability, hardly found together in any other wood. Its stiffness, durability, freedom from knots, ease in working, and some other facts worthy of consideration are urged in its favor. While white oak is a tough and strong wood, it is more expensive and not so readily obtained in large quantities, and at the same time it is considerably heavier than ash; and lightness, in connection with strength is a combination sought for. There seems to be hardly a purpose, where substantialness is a requisite, outside of building, for which ash is not peculiarly adapted, and preferred. It fills the bill perfectly in a great many particulars of manufacture, and the industrial world is watching a diminution of supply with much concern and regret. Ash is the chief element, in the lumber direction, of all agricultural implements, with a possible exception or two. It is generally admitted that the stumpage supplies of ash are getting sadly reduced, and that Ohio and Indiana are pretty well denuded in some sections. While a preference may be had for that growing in these states or in Michigan, there seems to be but a small choice in the matter, for good ash grows in several states. Illinois produces some, and a good article is obtainable from Arkansas, and elsewhere. While some woods vary materially in different states, to a large extent ash is ash, and requires no pedigree to recommend it. White ash is the only variety that suits the maker of agricultural implements. He will use neither black nor gray ash, if he knows or can avoid it. Black ash, while disliked, is at the same time, where a good article is obtained, a very serviceable wood, and would answer the purpose very well, though inferior to white ash. It is asserted that sometimes black ash is mixed in with other ash, and the manufacturer does not always discover the difference. Yet there is a common prejudice against it.

The office of hickory is sufficiently well known, and in the making of agricultural implements it is used where its peculiar characteristics make it especially desirable. Maple is employed chiefly where a smooth surface is required, and, though sometimes used for the frame work and strong parts, in place of ash, it is not nearly so good. Its durability is less, atmospheric contact affecting it more seriously. Its proper place is regarded to be under cover. On the other hand, ash, oak and hickory, are of noted excellence in withstanding exposure. Rock elm is used for neck yokes, whiffletrees, etc. It has an inclination to get out of shape, under the influence of the weather, which makes it less desirable than some other woods. Whitewood and some basswood is used for such purposes as rollers, and where inch lumber is required, and principally in the making of harvesters, reapers and mowers. In the latter machines, considerable Norway pine is used in the platforms and bottoms. An immense amount of white pine is also consumed in constructing boxes in which to pack the machines, which, because of their large size and the necessity for thorough protection during transportation, sometimes of long distances, must have an unstinted supply of lumber.

One reason why more oak is not used in the industry is that a good article is in such demand for wagon making, and so readily taken, that it commands a price that makes it decidedly less economical in the manufacture of implements than ash, which is nearly as durable and fully as good in other respects.

The force of circumstances all the time has a tendency to reduce the amount of lumber required in the making of agricultural implements. The fact that the desired lumber is

continuing to become scarce, and that in implements great strength and durability are required, is leading to a policy and an effort toward using as little lumber as possible. That is, iron and steel are put in wherever it is possible, the great study being to secure the same amount of strength with the minimum weight. Iron plow-beams are now largely made instead of wood, an item in itself. A firm in this city is now trying to make a steel wheel adaptable, where formerly it was cast wood. There are other details in which the same result is sought.

A large amount of thick lumber, and considerable inch stuff are used in the agricultural implement industry, and generally the best lumber is required. There are in Chicago three large concerns, two making harvesters, reapers, mowers and binders, and one making plows and cultivators, who consume all the lumber so employed in this city, with the exception of scattered thousands that go to small repairing establishments. Jobbing depots for the distribution of such goods are, however, numerous, and some of them do an immense business. Implements are handled from the manufactories scattered over the country, east and west. The home manufacturers mentioned have large establishments, one of them consuming alone 10,000,000 feet of lumber annually.

Retrenchment is an important thing in manufacture, and these consumers apply the theory rigidly to their lumber purchases. They aim to buy just what is wanted, as any sagacious business man might be expected to, as advantageously as possible. Their bulk supplies come mainly direct from where produced, and are generally cut to order. Yes, so large is the consumption, and the requirement in case of shortage so urgent, that the city yards secure considerable trade from that source, because they are apt to have very desirable dry lumber that cannot be drummed up in the country in a hurry. The buildings of the two harvester firms cover acres of ground, and either of them employs in busy seasons from 1,000 to 1,500 men.

Kiln drying is regarded as detrimental to the virtue of the lumber, which must necessarily be submitted to considerable grief after it is put into a machine, and large stocks are kept in pile at the yards of the manufacturers. About a year's supply of dry lumber is kept ahead, and from 4,000,000 to 7,000,000 feet are usually in stock. Both the concerns mentioned have large piling grounds, extensive docks, good railroad facilities, and own or lease saw mills, hence enjoying all the advantages securable by the shrewdest lumber dealer. They each consume from 30,000 to 50,000 feet of lumber daily during a season of brisk operations. One of these establishments made about 30,000 implements last year, and the other went ahead of that record. About 100 feet of lumber go into a mower, 350 feet into a reaper, and 500 feet into a harvester, including waste. The plow and cultivator works mentioned, though a large concern, uses only about 1,500,000 feet of lumber annually.

Felloes are generally secured already shaped from bending factories, but one concern in the line mentioned, in this city, has facilities for this work. An apparatus has been rigged up in a shed that answers every purpose, and yet, might be considered a somewhat awkward contrivance. It was originally an old sorghum mill, but it never caused the saccharine liquid to meander from the succulent sugar cane with any more expedition and facility than it wraps the ash around into the required form. Steaming the wood makes it thoroughly pliable, and all that is required is sufficient force expended in the right direction, to get a piece of timber in the proper form. The device in question has a strong wooden block affixed to a large iron wheel, the former having a notch at one point of the circumference so as to permit a piece of stuff to wind around it without lapping. A piece of ash 1 1/2 inches and 10 feet long is placed between the block and a band of strong sheet iron, and as the machine is started both the timber and the band wind firmly around the circular block. The band holds the lumber in place, and keeps the outer surface from breaking. About a six horse-power engine is applied to the contrivance, and a single revolution is made for each felloe. To save time and

effort, the felloe is immediately placed inside an iron rim in shape to go on a machine. Very few felloes are spoiled, and only in the case of bad lumber. A piece of bent wood will dry in a few hours, in the open air, and it is then fast in position, barring a tendency to yield a little. A smaller felloe is bent by being screwed to a form. In the process of bonding the wood simply stretches outwardly, and is compressed inwardly, with reference to the surface, doing the former more readily than the latter. Most articles are bent on forms. Several kinds of wood can be bent, but maple is one of the woods little adaptable in that way. Where the timber is heavy, a very thorough steaming and adequate power must be secured. In heavy work where it was once the plan to saw the material into shape, mechanism has been devised by which the stuff can be forced into any required form, even to the heavy timbers used in ship-building.—*Northwestern Lumberman.*

DYING SPRUCE.

BANGOR, Me., May 10.—I have seen nothing of the assumed rapid destruction of spruce by borers, about which so much has been said, but I have heard of the timber dying in large districts on the Miranichi, in New Brunswick, and on some branches of the St. John, the Aroostook, Fish River, and Allagash, in northern Maine. But, from all I have heard, the borer does not attack young or thrifty trees; so, whether the dying of the timber is the effect of borers, or the borers an effect of the dying timber, I cannot say. No doubt the death of an old tree in decrepitude may be hastened by borers, severe drought, or other causes. Generally, where the spruce is old and about all of an age, and about ready to die of old age, the borers are said to kill as much as three-fourths of it in spots, in some localities. We have seen nothing of this yet on the Penobscot, or any of the Maine rivers except the Upper St. John. On all these rivers the aged spruce has generally been culled out, and the forest now consists almost entirely of comparatively young and thrifty, growing trees. I have heard of no borers in these localities, and do not believe that it will pay any class of insects or their larva to attack any such thrifty forest. Our Maine forest will be forest a thousand years from now, because the land is worth more to raise wood on than for any other crop. The Pilgrim Fathers and their descendants cleared, plowed and cultivated a million of acres in New England that is now forest. So we have to take good care of our forests and manage them properly, and it is our policy to cut and market all the decaying, decrepit trees—pine, spruce, hemlock, etc.—to save them from death by worms, rot, heavy winds, droughts, and the natural death from old age. We do not generally have any trees cut smaller than 14 inches at the stump; nor do we generally cut in any one year more than one-tenth of the wood growing on an acre of land. These reports of the general dying of timber are no doubt much exaggerated. On townships that I am familiar with on the St. John where much of the timber is reported dead, the soil was poor, the growth thin, and the trees rather small and short-bodied; and generally what spruce trees there were scattered here and there in the forest of pine, cedar, birch, beech, maple, fir, juniper, etc., were past their prime, not growing at all now, and always had been of very slow growth. Much of the forest is worthless—small, though ancient, fir—like what we find on the foothills of our mountains, while there are very few young spruce under 12 inches at stump. From all I can learn, most of the reports of damage by the borers come from such lands as these.

Henry M. Prentiss.

THE MATERIAL AND MANUFACTURE OF CANES.

The manufacture of walking stick and umbrella handles is an industry in which a great deal of capital is invested. The material is as various as can well be conceived of. The Chicago Times recently had an article on the subject, from which we extract:

Many are of imported woods, some from the tropics, China, and the East Indies. The celebrated Whongee canes are from China, where

they are well known and celebrated for the regularity of their joints, which are the points from which the leaves are given off, and the stems of a species of *phyllosincha*, a gigantic grass, closely allied to the bamboo. The orange and lemon are highly prized, and are imported chiefly from the West Indies, and perfect specimens command enormous prices. The orange stick is known by its beautiful green bark, with fine white longitudinal markings, and the lemon by the symmetry of its proportions and both prominence and regularity of its knots.

Myrtle sticks possess also a value, since their appearance is so peculiar that their owner would seldom fail to recognize them. They are imported from Algeria. The rajah stick is an importation. It is the stem of a palm, and a species of calamus. It is grown in Borneo, and takes its name from the fact that the rajah will not allow any one to go out of the country unless a heavy duty is paid. These canes, known as palm canes, are distinguished by an angular and more or less flat appearance. Their color is brownish, spotted, and they are quite straight with neither knob nor curl. They are the petioles of leaf stocks of the date palm. Perhaps the most celebrated of the foreign canes are the Malacca, being the stems of the Calamus scepter, a slender climbing palm, and not growing about Malacca, as the name would seem to indicate, but imported from Stak, on the opposite coast of Sumatra. Other foreign canes are of ebony, rosewood, partridge or hairwood, and cactus, which, when the pitch is cut out, presents a most novel appearance, hollow and full of holes.

The manufacture of canes is by no means the simple process of cutting the sticks in the woods, peeling of the bark, whittling down the knots, sandpapering the rough surface, and adding a touch of varnish, a curiously carved handle or head, and tipping the end with a ferrule. In the sandflats of New Jersey whole families support themselves by gathering nanno berry sticks, which they gather in the swamps, straighten with an old vice, steam over an old kettle, and perhaps scrape down or whittle into size. These are packed in large bundles to New York city and sold to the cane factories. Many imported sticks, however, have to go through a process of straightening by mechanical means, which are a mystery to the uninitiated. They are buried in hot sand until they become pliable. In front of the heap of hot sand in which the sticks are plunged is a stout board from five to six feet long, fixed at an angle inclined to the workman, and having two or more notches cut in the edge. When the stick has become perfectly pliable, the workman places it on one of the notches, and, bending it in the opposite direction to which it is naturally bent, straightens it.

Thus sticks apparently crooked, bent, warped and worthless are by this simple process straightened; but the most curious part of the work is observed in the formation of the crook or curl for the handles which are not naturally supplied with a hook or a knob. The workman places one end of the cane firmly in a vise, and pours a continuous stream of fire from a gas pipe on the part which is to be bent. When sufficient heat has been applied, the cane is pulled slowly and gradually around until the hook is completely formed, and then secured with a string. An additional application of heat serves to bake and permanently fix the curl. The under part of the handle is frequently charred by the action of the gas, and this is rubbed down with sandpaper until the requisite degree of smoothness is attained.—*Scientific American.*

A TREE MADE FAMOUS.

A correspondent of a New York paper says: "An incident of early days on the Delaware is always recounted with pleasure by the old inhabitants, and as they vouch for its authenticity it must be true. In 1786 Simon and Franklin Westfall, of New Jersey, took the contract to furnish the government with a white pine tree, which was to be of extraordinary size, as it was wanted for the main mast of a war frigate about to be built. They were to receive \$100 for the stick. They hunted the Delaware valley from the Neversink to its head waters, but were unable to find the tree which

would answer the specifications of the contract. At last, when they were about to give up the search, they came upon a pine which they believed would suit. It was on an eminence in Pike County, near the present village of Mast Hope, and three miles from the river at Big Eddy. Upon measuring the tree they found that it was too short by 10 feet. Upon digging at its root, however, they discovered that the tree ran straight down in the earth, and they succeeded in excavating the lacking 10 feet. The tree was felled, hauled to the river, and floated to Philadelphia, and became the mainmast of the frigate Constitution, "Old Ironsides," and carried the American colors in all the glorious victories won by that vessel in the war of 1812."

MANITOBA LUMBERING.

It is stated in a recent issue of the *Winnipeg Sun*, that no less than seventy-eight million feet of lumber has been cut during last winter by the various firms operating in that article in Winnipeg. This quantity has not been all cut in Canadian territory, one firm cut about 7,000,000 feet of lumber in the vicinity of Ottertail Lake and River in Minnesota during the winter. This will be floated down in the course of a couple of weeks to the mill at St. Boniface. Another company cut 10,000,000 feet in Minnesota in the Clearwater River district. This lumber will be floated down the Red River, and sawed at Winnipeg. The total mentioned is arrived at thus:—

	Feet.
Rainy Lake Lumber Co. cut.....	14,000,000
Rainy Lake Lumber Co. had on hand.....	7,000,000
J. R. Sutherland & Co. cut.....	7,000,000
Dick & Banning, L. Winnipeg.....	3,000,000
Dick & Banning, Lake of Woods.....	10,000,000
Mr. Ross, at Whitemouth, cut.....	3,000,000
Schneider & Schneider cut.....	3,600,000
Keowatin Lumber Co. cut.....	12,000,000
Winnipeg Lumber Co. cut.....	15,000,000

These figures give a total of 73,600,000 feet. The *Sun's* total at 73,500,000 is arrived at by adding 5,000,000 feet which Dick & Banning have arranged to purchase in Minnesota. The conclusion is reached by that journal that "the supply this year will exceed the demand, which is reported to be not so large as it was last year. The price of lumber, too, is reduced this spring, only \$25 per thousand feet being asked for lumber which last spring brought \$32. The class of lumber cut this year has been very superior, as there were many complaints last year of the lumber not been very good. Nearly all the mills have already been set in operation, and in a few weeks newly sawn lumber will be shipped into Winnipeg in large quantities.

THE OLD STORY.

A great fire at Grotton Pond, 23 miles from Montpelier, Vt., on May 10, originated by burning brush in the woods. Besides spreading through the timber, it burned the depot of the Montpelier & Wells River railroad, the water-house, 400 cords of woods, a large steam mill, several tenement houses and stores, 200,000 feet of dressed lumber, 400 cords of bark, a lot of barrels, 58 ox sleds, 3 car-loads of hay, 23 freight cars, burned out several families with their live stock, the people taking refuge on the pond in boats and on rafts. The mill property was owned by Alvah T. Baldwin, of Wells River. His loss is \$100,000, with little insurance. After destroying the mill property, the fire ran along the railroad and burned Peabody station. The territory along the track for six miles is laid waste, the timber, buildings, fences and all improvements being swept away. The loss to the railroad is estimated at \$25,000. John Morso was seriously burned. Mr. Baldwin, proprietor of the mill, was forced to take refuge in a brook that ran under the railroad.—*Northwestern Lumberman.*

MONTREAL NOTES.

The *Gazette* of June 1st says:—The local trade in both hard and soft woods has been considerably checked by the constant wet weather, but no material modifications have occurred in prices except for laths, which have declined since our last report 50c. per 1,000 to \$1.50. This figure allows a shrinkage of \$1.50 per 1,000 since the new make came in. Last year they fell to \$1.35. There is some export demand for

ash. The old stock of hardwood is well cleaned out, but the new wood is too green to handle. Last season's high prices occasioned a large cut, and an over supply this year is anticipated. Regarding the export trade, we noticed liberal shipments of deals to British ports, steamer freights being quoted at 65s. to 67s. 6d. for Liverpool and Glasgow and 67s. 6d. for London. The South American lumber trade has up to the present exhibited no life, and we hear of only one charter to the River Plate this season, and that was made some time ago, at \$13.

WINNIPEG NOTES.

The *Winnipeg Commercial* says:—Although building operations are increasing a little in the city, the amount of work going on is by no means commensurate with the immense piles of lumber in many of the yards. The supply is far in excess of the demand in the city, and country requirements are scarcely up to expectation. Dealers will undoubtedly find a market for all their stocks, but to judge from present appearances they may have some time to wait. There has as yet been as little cutting in prices as possible on the one hand, and on the other builders are making their wants supplied from the cheapest source. Holders of large stocks will probably suffer in some degree on account of the reduction in freight rates, by which dealers are now able to reduce prices of lumber from \$2 to \$3 per thousand feet.

VALUABLE WATER-POWER.

It is contended, in the *Winnipeg Free Press*, that the water power at Rat Portage is equal to 300,000 horse power, superior to that of Minneapolis of which we have heard so much. That journal gives a list of the lumber mills at and around Rat Portage, with the cutting capacity of each:

	Feet per Day.
Rainy Lake Lumber Co. (H. Sutherland & Co.)	
Mill at Fort Frances do	50,000
Mill at Rat Portage do	100,000
Winnipeg Lumber Co. (Jarvis & Bertridgo)	75,000
Bulmer, Bailey & Co.	80,000
Keowatin Mills, (D. L. Mather)	75,000
Dick & Banning	50,000
Hunter & Co.	100,000
Contractor's mill, (Vermillion Bay)	15,000
The American Co.'s new mill will cut	100,000

Total, nine mills..... 615,000
The paper making interest will be represented by two mills under construction and to be in operation during the coming summer. The country affords an immense quantity of material for the manufacture of pulp. Locations for grist mills have been surveyed with a view to building whenever the through route to the East has been opened for traffic. One of these locations is owned by Hesproff & Co., of Winnipeg, another by D. H. McMillan, and one by Minneapolis firm. The Hudson's Bay Company own the finest location of all, and intend some day erecting a mammoth grist mill on their property.—*Monetary Times.*

Advice to Mothers.

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

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The editor of the *Grand Rapids Sachem* says:—"We are usually sparing in our encomium towards patent medicines, but observation and enquiry has satisfied us that the preparation of Messrs. T. Milburn & Co., styled 'Burdock Blood Bitters,' as a blood purifying tonic is worthy of the high reputation it has established among the people."

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THE CANADA LUMBERMAN is filed at the Offices of MESSRS. SAMUEL DRACOT & CO., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont. JUNE 15, 1883.

CONSIDERABLE timber planting is being done in Unatilla county, W. T. Walnut, ash, boxelder, maple, white oak, and other trees flourish in that region.

THE Ashland Lumber Company, of Ashland, Wis., recently sold two cargoes of white pine deals to be shipped to Liverpool, England, by the Welland canal.

THE total lumber cut of Wisconsin and Minnesota last year exceeds four billion feet, representing the growth of 1,250 square miles. This is the largest cut in the history of the North-West.

THE men engaged in driving the Swift river, in Maine, were discharged, and 5,000,000 feet of logs were hung up—probably for the season, it was thought, but recent rains have started the drive in good shape.

THE American Lumber Company, with mills at Dollarville, intends to ship 21,000,000 feet from St. Ignace, Michigan, this season. The company's mill at present cuts 80,000 feet a day, and its capacity will be increased to 100,000.

It is whispered in New York that a "corner," prominent in which are English capitalists, have bought the largest remaining tracts of black walnut lumber and expect to drive the rates high. In other woods the prices are very low.

THE Brandon correspondent of the Winnipeg Commercial says:—Mr. Grigg, of London, is about to build a large saw mill near the Brandon flour mills, he is the owner of large timber limits in the Riding Mountains, and he intends to do a large lumber business here.

AN Ottawa despatch says:—Large quantities of square timber are being shipped by rail to Quebec. It seems probable that before many years the bulk of the upper Ottawa cut will be marketed in this way. At present the freight rates are somewhat in excess of the cost of driving, but as soon as a sufficient number of properly constructed cars are placed on the line better rates will probably prevail.

THE Belloville *Intelligencer* says that about 300,000 feet of timber will be brought here this summer from Lakelford and Midland, over the Midland Railway, provided the streams which float the timber do not become so low that the drives cannot reach those places.

A KINGSTON despatch of June 5th, says:—During the last week there were discharged at Garden Island 180,000 feet of square timber, 100,084 pine staves, and 51,090 West India staves, which at the present market value would be worth the snug little sum of \$247,000.

IN buying wood-working machinery, the very best rule for guidance is that good old one, "the best is the cheapest." It don't pay to buy cheap materials or cheap workmanship, and cheap machines generally mean both of these. Cheapness is apt to prove an expensive investment in the long run.

A Montreal despatch says:—The deepening and widening of the Grenville and Carillon canals has been the means of stimulating a great increase in the traffic this season. Formerly barges carrying only 130,000 feet of lumber could pass through, whilst now vessels with a capacity of 400,000 feet can easily pass through.

A curious instance of the durability of oak recently came under our notice in an advertisement which announced a sale of old timber, taken from the bell-loft of St. Michael's Church, Heighington, Durham, the wood being about 450 years old. It is curious, after being in use during so long a period, that this oak should again come under the hammer for public sale.

WOOLLEN tooth-picks are now considered to be one of the necessary adjuncts of the hotel dinner table, and many of those persons who have occasion to use them have doubtless, more than once, wondered where they all come from. In the small town of Sebec, Piscataquis county, Maine, U. S., there is a factory which employs from 12 to 15 girls, and eight or ten men, and turns out daily a two-horse load of this little wooden implement. A thousand cords of poplar and birch wood are annually consumed at the factory.

AN Ottawa despatch says that large quantities of square timber are being shipped by rail to Quebec via the Canadian Pacific Railway. It seems probable that before many years the bulk of the Upper Ottawa cut will be marketed in this way. At present the freight rates are somewhat in excess of the cost of driving, but as soon as a sufficient number of properly constructed cars are placed on the line better rates will doubtless prevail. The first raft of the season has passed through the Chaudiere slides. It contained 94 cribs and is owned by Messrs. A. and P. White, of Pembroke.

MESSRS. Grigg & Macgregor are building a saw mill at Brandon. It will have a capacity of 10,000 feet a day to start with, afterwards to be increased, as the necessities of the business demand. The limit on Swan river comprises 32,000 acres, two-thirds of which are reported as heavily timbered. Unfortunately there is a portage of ten miles in order to reach the Assiniboine, the Swan flowing into the Winnipegosis; but once the business gets thoroughly established it is intended to construct a tramway to facilitate the transportation. It is estimated that the portaging with teams will cost about three dollars per thousand feet.

THE trees most valuable for the manufacture of wagon wheels are given as follows:—Black locust, rock elm, white oak, white birch, white elm, white gum. Black locust is placed first in the list, because of its great durability, and its having a solid compact fibre. It shrinks very slightly, only one-third as much as white oak, and less than any other in the list. It is susceptible of a high polish. The only objections to it as its extreme hardness, and the fact that glue does not readily adhere to it. In localities where wagons are constructed to carry all weights from one to fifteen tons it has stood the test when all others failed.

THE Oshkosh *Northwestern* says:—The Webster Manufacturing Company recently purchased an immense tract of hardwood land, containing 43,000 acres, about 50 miles from St. Paul, for which they paid in the neighborhood of \$300,000. The St. Paul company are going to run a branch of their road through it. The Webster company will at once build two large mills, a hub and spoke factory, and a barrel factory on the tract. It is expected that the timber will more than pay for the land, and the land itself, when cleared will be of immense value, it being of good quality and well located. No doubt they will make a mint of money out of this mammoth deal.

To give ordinary wood the appearance of the most beautiful specimens of walnut, adapted to the very finest cabinet work, the wood must first be thoroughly dried and warmed, then coated once or twice with a liquid composed of one part by weight of walnut peel, dissolved in six parts of soft water by heating it to boiling point, and stirring. The wood thus treated is, when half dry, brushed with a solution of one part by weight of bichromate of potash in five parts of boiling water, and, after drying, is rubbed and polished. The color is thus said to be fixed in the wood to the depth of one or two lines, and in the case of red beech or alder, for instance, the walnut appears the most perfect.

ENGLISH PROSPECTS.

The *Timber Trades Journal* says:—Up to the end of April our table gives the following results as to the following places enumerated:— London has imported less than last year up to April 30th by.....23,130 loads Liverpool.....7,427 " Hull.....14,039 " Grimsby.....11,454 " Hartlepool.....8,614 " Newcastle.....12,110 " Gloucester.....1,620 " Lynn & Wisbech.....4,717 " Total.....86,011

short imported compared with the first four months of last year by only nine per cent, some of them not by any means first-rate, and many others might be added, but the difference is not sufficiently significant to be worthy of notice individually. On the other hand, some ports have essentially exceeded their last year's business up to the same date; but these are chiefly great depots for pit-props and mining timber, such as:—

Cardiff, which is in excess.....11,294 loads Newport, still more so, with.....14,302 " Swansea.....2,145 " Portsmouth, which imported very short last year.....1,422 " South Shields.....6,695 " Total in excess.....35,659 "

of last year; but as we stated in our remarks on the Board of Trade returns, May 12th, the whole shortage at the end of April, was about 127,000 loads behind last year. Nor do our reports since then indicate any increase in the rate of importation likely to have any considerable effect in reducing the figures ascertained as the quota of arrears up to that date. On the contrary a deficiency may be counted on also in May, in comparison of May 1882, unless the last week of it should be on a more plentiful scale of import than those that are already behind us. Nor can any established fact be more calculated to reassure the home trade than this of very moderate importation up to date, and if in June it be found that the supplies do not increase by comparison with last year, the trade will probably be considered in a very healthy condition, which is only a short step from prosperity. The only thing it has to fear is the pressure in the money market, which is liable to cause the country banks to restrict their business, and turn away paper they were accustomed to discount, and this is apt to cripple the trade of their respective neighborhoods, and cause prices to cooling, as sellers desirous to realize are in such cases more plentiful than buyers anxious to lay in stock.

This is the cloud no bigger than a man's hand, that may by and by assume portentous dimensions, or it may blow over and leave trade to flourish without interruption. Money regarding its usual equilibrium in this country and America—nor is it yet seriously

disturbed—a good fall trade may be safely predicted for those importers of timber goods who choose to limit their transactions to the customary requirements of the connection they have established around them, and fortunately at this time there is not much disposition manifested to enter into unadvised speculations, on the chances of what may turn up.

HOW TO SEASON LUMBER.

The *Journal of Commerce* says:—This is a subject of more than ordinary interest to all lumbermen and manufacturers just now on account of the constantly increasing demand for lumber. With but few exceptions either in Canada or the United States lumbermen have all exceeded their previous cut, and still the demand keeps pace with the production. This demand is kept up by the rapid development of the country, with which it is found difficult to keep pace. These rapid changes induce entirely new methods of business, and lumbermen realize that the old system of piling their lumber in their yards from one to two years, waiting for the wind, sun and rain to make the product marketable, is unprofitable and behind the times. They are consequently introducing the modern dry kiln and planing machines. Long shipments by rail are impossible unless the product is shorn of all superfluous weight. Sawings, edgings and trimmings can be more profitably used as fuel at the saw mill than by adding their weight to a consignment of lumber destined to a distant dealer, who will not pay as much for the rough as he would for the dressed. The same is equally true of the moisture contained in green or half dry lumber. No lumbermen can make it profitable to pay freight on water, and every thousand feet of green pine contains over 1,000 pounds of moisture that can easily be expelled by a few days' treatment in a modern dry kiln, which will leave the lumber in better condition than if seasoned in the open air, and much more acceptable to the customer, for the new process seasons the lumber thoroughly and without injury, which is not always the case with weather seasoning. Lumbermen and manufacturers unacquainted with the new dryer will probably doubt the practicability of drying lumber on a large scale for shipping purposes. It is a fact, however, and there are at least two hundred lumbermen in the United States that are taking their lumber green from the saw and drying with great profit for shipping and manufacturing purposes, and the system is being rapidly adopted by prominent companies in the Dominion. The kilns are usually placed in such a position that the lumber can be loaded on the cars of the kiln at the saws, and pass from them through the dry kiln and on to the dressing mill without further handling. Steam saw mills can use their exhaust steam as a heating medium, and mills driven by water power can have a boiler put in at small expense. The results attained through the medium of these dry kilns is astonishing. Elsewhere will be found the amount saved in freight, which is a large item on long shipments. Add to this the increased value of the lumber, as well as interest and insurance saved, and it will be found a first-class investment. On another page of this Journal will be found a cut illustrating these modern dryers, of which Mr. A. F. Barron of Montreal is patentee and builder for the Dominion.

THE WESTERN LOG CUT.

A dispatch from Brainerd, Minn., May 29th, says: By the returns of interested parties from a tour of inspection of the timber wilderness on the Upper Mississippi to-day the first authoritative reports are received of the cut of the winter and the progress of the drive. These make the following summary: The logs of eight out twelve large operators, are hung up under various circumstances, and cannot get out without great rains; some not even then, as it is so remote, and the men have given up and gone home. The winter's cut of Blake Bros. of Minneapolis, 27,000,000, is among these, being hung up in Balsom Brook, and in Prairie River. The aggregate of logs thus hung up is 25,000,000 feet, which is one-fourth of the average crop which comes past Brainerd in the Mississippi annually. The rafts hung up or in jams in the tributaries are estimated at 80 miles;

which includes, however, the Canadian logs in Big Fork River, which flows northward. In one Mississippi tributary, Swan River, there is a jam of 35 miles with 40,000,000 logs in it, which cannot get through without rain. It is also found, after all, that the cut was larger last winter than has been generally believed, but less is likely to get to market, so there is really a shortage. The whole region is found to be full of cruisers spotting fat lands for the next land sale at St. Cloud in August.—*Lumberman's Gazette.*

THE CALIFORNIAN SUPPLY.

The State Mineralogist of the state of California estimates the quantity of lumber cut each year in California and shipped eastward at 70,000,000 feet. Cord wood is sent in about an equal quantity. The heaviest drafts on the mountain timber have been for Nevada use. The Comstock lode alone required 1,000,000,000 feet. Notwithstanding this cutting, the replenishing goes on, and no fears are felt for a lack. The Truckee river and the region around Lake Tahoe have been resorted to most for timber of any regions of the state, but they represent, it is stated, but a small fraction of the timber bearing surface of the mountains—say 20,000 acres, out of a total of several million acres of the main summit of the Sierra Nevada range. Estimates claim that there is timber enough on the eastern slope of the mountains, between Hope Valley and Beckwith Pass, to supply Utah and Nevada for half a century, without taking into account the reproduction that is in progress.—*Lumberman's Gazette.*

Forest Fires.

The *Lumberman's Gazette* of Bay City, Michigan, in its issue of June 6th, says:—In our last issue we alluded to the great danger from forest fires, because of the inflammable material left in the woods where lumber operations had been conducted, and urged extra caution and vigilance on the part of the land lookers, hunters and settlers alike in order to avoid a repetition of the terrible disaster of 1880. Since then we have heard of fires raging in the woods quite extensively in Iosco, Roscommon and other counties, and a considerable amount of destruction of property resulting. The soaking rain of Sunday, however, if it reach that far north, has probably settled for the present all danger in that direction. But the necessity for extra precaution will be quite as urgent again in a very short time, and the vigilance should not be in the least relaxed. Another week of hot weather and a cloudless sky will again make the danger as apparent as ever. Let the suffering and devastation of 1880 be a warning to every person who has occasion to use a fire in the woods during the summer months, in order to avoid a like casualty.

Montreal Notes.

The *Montreal Gazette* of June 8th, says:—The local trade in lumber has shown an improvement upon that of the week previous, and prices at the yards remain about the same. A fair number of orders have been filled ex-barge, arrivals are assuming larger proportions, and the season's supply of both hard and soft woods will no doubt be in excess of that of last year. As regards the export trade, there is very little doing yet on River Plate account. Deals, on the other hand, have been shipped liberally to U. K. ports, nearly every steamer taking out her complement. Further engagements have been made for deals at 67s. 6d. to Bristol Channel, some owners asking 70s., but we understand that 67s. 6d. is the fixed rate at present.

Southern Lumber.

The shipments of lumber by rail from southern points to the west and east is assuming large proportions. Railroads which penetrate the pine regions of Georgia have learned that the transportation of lumber brings solid and substantial returns, and what was at first looked upon as a secondary business, to supplement the gross returns on more valuable traffic, is now considered too valuable to be hampered with excessive freight charges. In fact, the solid roads in the state are those which handle the bulk of the timber and lumber. Following in the wake of the roads of the Northwest they offer every

inducement and facility to the manufacturer to get his patronage. This is the only course that our roads can constantly pursue, as the lumber trade cannot expand unless the markets are placed within easy reach. To encumber it at the outset is a pernicious policy. This is a lesson which some of the roads in the south may learn in time; but the sooner they learn it the better.—*New Orleans American Lumberman.*

A FURIOUS GALE.

St. JOHN'S, Que., June 6.—This section of the country was this evening visited by one of the fiercest storms seen in years. About 3.45 a terrible rain from the south-west set in, the wind blowing a gale. Shortly after, hailstones as large as marbles began to fall, and continued for several minutes. In an incredibly short time the torrent flooded the streets, the drains being insufficient to carry off the extraordinary amount of water. Several cellars under the principal stores on Richelieu street were flooded, causing much damage. The streets in several places were completely blocked by trees which had stood the storms of thirty and forty years, but to-day succumbed. Piles of lumber were blown from the wharves into the river, and the lumber yards lost heavily, the lumber being blown hundreds of feet and broken to atoms. Fences were blown over in all directions. The gable end of the brick brewery and the iron roof of Mrs. Dewar's store and dwelling were blown off. The rain poured through the wooden covering of the latter in torrents.

The Kennebec Output.

SKOWHEGAN, Me., May 29.—The figures now in show the total cut of logs on the Kennebec river the past winter to be 120,000,000 feet; there being on Moose river 43,000,000 feet; on the Dead river, 40,000,000; and on the Moosehead lake region 37,000,000. To the above must be added at least 5,500,000 feet of old logs left over on the Moose river. The main river from Moosehead lake is driven by Millikon & Sturges at 34 cents per thousand; last year, driven by the corporation, it cost about 49 cents. The driving on Moose river within corporation limits, has also been let by the thousand, the price from the bridge to Moose Lake being thirty-five cents per thousand. Heavy rains recently entirely changed the out look for the stream drives, and, with one or two exceptions, they will all get out. On the upper waters of Moose river they have had the best of success, making the cleanest drive that has been known for a number of years.—*North-western Lumberman.*

Important to Lumber Shippers.

A joint circular signed by the general freight agents of the Ontario roads has been issued, giving special direction about the shipment of lumber. All cars may be loaded to their full capacity at carload rates, any excess over that up to 2,000 pounds will be charged pro rata, but if the excess be over 2,000 pounds the whole of the overload will be charged for at fourth-class freight rates, and the companies reserve the right to remove the overweight at the expense of the owner. Forty-eight hours will be allowed in which to unload cars after their arrival in yards, after which time consignees will be required to pay demurrage charges. When cars are ordered to the Toronto esplanade twenty-four hours will be allowed from the time the car is placed on the switch, and as there is no room on the esplanade the consignees will be required to unload from yard sidings within forty-eight hours after arrival.

Causes of Fires.

The census investigation showed that in Massachusetts, during the year 1880, 52 forest fires were set by sparks from locomotives; that 40 spread from carelessly burned brush heaps; that hunters caused 37; that 19 careless smokers dropped their lighted cigars or burning ashes from their pipes, and so caused disastrous conflagrations. In three instances the origin of forest fires is ascribed to the burning of charcoal, and in only eight cases to malice. It appears, then, that the railroads are responsible for the greatest number of these fires, and that the remainder may be generally traced to sheer carelessness. As a first step toward checking

this evil, railroad corporations should be compelled to provide their locomotives with spark consumers. Another act is needed to compel the collection and burning during the winter in which the trees are cut of every part of them not carried away.—*N. Y. Lumber Trade Review.*

Scarcity of Water.

The *Northwestern Lumberman* says:—The news from Maine is not of an encouraging kind. The scarcity of water in the streams used for logging is very low, and it is feared that many logs will be hung up. A gentleman from that state, who is well posted in the products, estimates that the log crop of the Penobscot would reach about 150,000,000, the Kennebec 120,000,000, Aroostook county 70,000,000, the Machias Basin about 30,000,000, and the cut of the entire state nearly 600,000,000 feet. There is now a fear among the logging men that the drives will not allow of bringing the output to the mills and coast. The lumbermen of Maine would welcome heavy showers even if they have to come with heavy thunder and a sprinkling of cyclones. The work of king the logs during the past winter has employed something like 10,000 men and 3,000 horses and oxen.

THE *Mail* of June 12th, says:—Rates are reported as being firmer at this port, with a slight upward tendency. The lumber figure of \$1 to Lake Ontario ports was so very low that vessels hardly cared to take in such cargo, but as there is a slightly increased demand for vessels to carry this class of freight, it may be that in a day or so a raise in the figures towards the opening price of \$1.25 will be reached.

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Young, Single or Married, Energetic, Sober, Self-reliant Men, thoroughly accustomed to manage and run on Direct Action Saw Mills. Two wanted immediately; three years engagement; good wages, expenses and board. Write stating what mills have run, references and wages wanted.

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The Waba Creek Steam Saw Mill, situated on the Madawaska River, one mile from Arnprior. Capacity of Mill, Fifty Thousand Feet of Lumber per Eleven hours. Capacity of Booming Pond, Thirty Thousand Logs. Has Sidings through piling grounds connected with main line of Canada Pacific Railway. The Mill is in good repair, having only run a short time, and is well found in all appliances required to run it to the above capacity. There is also a good water power connected with it from the Waba Creek, and good stabling, barn, boarding house, and other buildings. For information, price and terms, apply to John Robertson, 531, St. Joseph Street, Montreal, or to James McCuan, Arnprior, who will show intending purchasers the whole property, or to
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Logs, Lumber, Store Goods, &c
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Eighty-Five Square Miles (54,400 Acres) of Limits, Good Pine, First-Class Water Power, Large New Water Mill, Steam Mill, Store and Dwellings.

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THE PLAYED OUT DELAWARE.

A correspondent writing from Deposit N.Y., to the New York Times says:—"The lumber business has been the mainstay of the Delaware and its tributary valleys for 120 years, but the onslaughts of the woodmen have been so persistent and force, especially during the past quarter of a century, that it is believed the present season will see the almost total exhaustion of the lumber supply. The Delaware lumber region embraces a large portion of Sullivan and Delaware counties, N.Y., and Pike and Wayne counties, Penn. Ten years ago the average quantity of lumber sent to market by rafts on the Delaware alone amounted to 100,000,000 feet, nine-tenths of which was hemlock. In 1870 Wayne County's supply of lumber was over that amount, 30,000,000 feet of which was shipped by rail, and the remainder by water. The spring frochet of the present year has been an unusually favourable one for the running of lumber, but the quantity rafted and run from all the regions has not exceeded 20,000,000 feet. Of this amount about one-third has been forwarded by one operator, William Holbert, of Equinunk, Wayne county. The rest was cut principally in Sullivan and Delaware counties. The rail shipments will amount to about one-half the above amount, and are made over the Erie, Delaware and Lackawanna, and New York & Oswego Midland railroads. To secure even this comparatively small supply the country has been scoured from far and near. Pine, which was once the staple product of the Delaware region, was exhausted many years ago. When the first settlers came into the valley the whole region was a dense pine wilderness, and for 70 years the hemlock was left untouched, not being considered of any value. Lumbermen still in the business hereabout remember when the very best quality of pine was manufactured and rafted to the Philadelphia markets and disposed of at \$9 per thousand, while now it must be imported for home consumption and six times that price paid for it. In those days there were no circular saw-mills, but only primitive upright mills here and there in the forest. The first circular mill was erected in the Delaware valley, about 35 years ago, and others were quickly introduced until there were scores of them at work, some of them capable of manufacturing 50,000 feet of lumber a day each. The result has been the rapid exhaustion of the forests, until there is but a small area of the original timber standing, and that is in the hands of a very few individual operators.

"The work of cutting away the timber on the headwaters of the Delaware, on the West Branch, was prosecuted with such vigor that it has been many years since rafts have been run from above Walton, and the number run from that point has been very small. The East Branch drains what was ten years ago the almost primitive wilderness of Sullivan and Delaware counties, but which is now a field of stumps, or tracts of second rate timber. The work of exhaustion has not been allowed a day's cessation, although during the past 10 years, with the exception of 1881-2, the price obtained for hemlock was barely sufficient to cover the cost of production. This seemingly suicidal policy on the part of operators, they claim, was to no small extent forced upon them by the fact that the bark on immense tracts of timber land was purchased by tanners, who had the privilege of felling the trees and peeling the bark, which they did as they needed it. The timber once felled and peeled, it was necessary for the lumbermen to utilize it, as a year's lying in the woods would decrease its value. The destruction of the hemlock forests has also affected the tannery interest, so that many of the largest establishments of the kind in this region have been abandoned for want of bark. A few years ago Wayne county was the second largest leather producing county in the Union, and had the largest tannery then in the world.

"When the lumber business was at its height in the Delaware region not less than 10,000 persons were employed as choppers, sawyers, teamsters and raftsmen, and most of the towns and villages owed their support, if not their existence, to the industry. None even one-third of that number are now required to carry on the business, and many settlements are almost deserted. Fortunately, the land once occupied

by the forest is capable of being turned into the finest of grazing farms, and it is being utilized by those who can no longer depend on the lumber for support."

SAW MILLS OF CANADA.

The census enumerators have returned 5,390 saw mills in operation in 1881, the location by Provinces being as follows:—Ontario 1,761, Quebec, 1,729, Nova Scotia 1,190, New Brunswick 478, P. E. Island 165, Manitoba 37, British Columbia, 27, the Territories 3.

The hands employed were as follows:—In Ontario 10,816, of whom 69 were women and 8 girls under ten years. In Quebec 12,461 hands, of whom 37 were women, and eight girls. In New Brunswick 7,176, of whom 20 were women and eight girls. In Nova Scotia, 4,160 hands, of whom 34 were women. In P. E. Island 419, British Columbia 404, and the Territories 44.

The following is the statement of the annual wages, value of raw material and value of the products of these saw mills, by Provinces:

	Yearly wages.	Raw material.	Products.
Ontario	\$3,681,225	8,985,797	10,029,075
Quebec	2,237,191	5,101,234	10,612,649
N. Brunswick	1,213,023	4,355,733	0,632,920
Nova Scotia	619,480	1,446,855	3,094,137
Manitoba	203,190	513,168	885,173
B. Columbia	202,420	223,901	650,321
P. E. Island	63,262	127,194	210,153
Territories	10,600	43,802	95,318
Grand total	\$8,146,000	20,793,389	33,600,632

Shingle making is not included in this table—the Provinces standing as follows in the product of the shingle mills:—Ontario \$454,803, New Brunswick \$128,714, Quebec \$98,130, Nova Scotia \$69,344, P. E. Island 10,406, British Columbia \$5,597. The art of shingle making was either not understood or remained uncultivated in Manitoba and the Northwest up to 1881. Doubtless in the manufacture of lumber of all descriptions great strides have since been taken in that quarter.—*Montreal Herald.*

PROTECTING THE TIMBER.

Nothing could be more gratifying to those gentlemen who have labored so assiduously for years for forest protection and culture, than the efforts which are being made in the different states in behalf of their favorite theory, the practicability of which is doubtless to be attested within the next decade. The drift of public sentiment is getting to be decidedly in favor of the protection of the timber of the country, and also in favor of forest culture, in order to replace as much as possible that of which the country is being denuded to such a serious extent, and in many cases by such lamentable methods. Our national and state legislators also are becoming interested in the subject to an appreciable degree. But the subject is one of such vastness and magnitude, the returns to be derived pecuniarily, appearing so far in the dim vista of the future, the task of such herculean dimensions, the sentiment of such slow growth, because of seeming impracticability and almost insuperable obstacles, that nothing short of unbounded faith, indomitable will, unmeasured perseverance, courage, determination and zeal, would have continued the work in the face of such opposition as has been encountered by the advocates of this measure, both in the United States and the Dominion of Canada. Indications, however, point unmistakably to the fact that their zealous and unselfish efforts are in the not very distant future to be rewarded by the highest and most gratifying of all remuneration,—success. The Canadian government, as well as the legislatures of several states, have already by favorable legislation inaugurated practical measures in behalf of both forest protection and culture, which are already prolific with such grand results, as must be in the highest degree satisfactory to those gentlemen who, through the press and forestry congresses, have been instrumental in inducing the legislation referred to. The Minnesota legislature has taken an advance position on this question and passed two bills, the result of which will be watched with exceeding interest, as they embrace the protection of the present standing timber, and forest culture as well. A synopsis of these two measures recently appear-

ed in the *Lumber World*. One provides that every person who shall plant prairie land with any kind of forest trees, except black locust, and keep them in a thrifty, growing condition for the period of six years, shall receive three dollars per year for each acre of grove so planted. Persons planting forest trees along the public highway will be paid two dollars annually for each half mile so planted. Not less than 2,700 trees to the acre must be planted, of which at least 1,800 must be maintained in a healthy, growing condition, during the first two years after planting, and at least nine hundred must survive the whole period of six years. Trees along the highway must be planted not more than eight feet apart, and maintained in a healthy, growing condition for four years. The second act appropriates five thousand dollars to be paid to the Minnesota State Forestry Association to be by them expended in the promotion and encouragement of tree planting in Minnesota, by means of distributing a manual of directions for planting and cultivating forests, procuring lectures and addresses on the subject by persons skilled in that science, and disseminating the same through the public press; collecting information on the best methods of forest culture from persons in the state who have been successful in the same; by experimental cultivation of varieties of forest trees which are supposed to be adapted to this climate, or by procuring and distributing seeds and cuttings for the same, and generally to aid and encourage tree planting by any other means which they may think advisable. A portion of the money may be expended in measures for the protection of the forests already growing in the state, by publishing information as to the best manner of preventing forest fires, and otherwise protecting them, with directions for the proper thinning, replanting, etc., so as to produce systematic care of the woodlands of the state and their profitable use.—*Lumberman's Gazette.*

IMPORTANT SALE OF LUMBER.

The *Montreal Gazette* of May 26, says:—"The auction sale of lumber held yesterday morning for account of Messrs. Henderson Bros., who have to remove from their yard on William street in consequence of the Dominion Government having decided to build new basins on the Lachine Canal—and are now calling for tenders for the same,—drew a large audience, most of the buyers being outsiders. The sale was conducted by Mr. William H. Arnton in a remarkably able manner, not a single dispute having occurred during the whole sale, which lasted from ten o'clock (10 a. m.) until half-past six o'clock in the evening (6.30 p. m.), when it was adjourned until next week, due notice of which will appear in the papers. The following are the prices obtained, a large number of lots of each having been sold; the prices, though not high, are considered fair. Every lot put up was sold without any reserve. The total amount of the sale will foot up about \$40,000.

PINE.—3 inch pine, 14 to 16 feet, at \$9 per M board measure; 1½ inch pine, 14 to 16 ft, at \$17 per M board measure; 3x4 inch pine, at \$12.50 per M board measure; 2 inch pine, plank, at \$16 per M board measure; 1 inch pine, plank,

at \$16 per M board measure; 2 inch pine, but-tens, at \$9 per M board measure; 3 inch pine, sidings, at \$9.50 per M board measure; 1½ inch pine, extra, at \$24 per M board measure; 1½ in. pine, extra, at \$18 per M board measure; 3 in. pine, wide, at \$10.50 per M board measure; 3x4 inch pine, scantling, at 12c. each; 2 inch pine, prepared, at \$14 per M board measure; 1 inch pine, prepared, at \$24.50 per M board measure; 3x4 inch pine, at \$20 per M board measure; 3x3 inch pine, at \$15 per M board measure; 1 inch pine, prepared, at \$18 per M board measure; 2 inch pine, extra, at \$23 per M board measure; 1½ inch pine, extra, at \$31 per M board measure.

SPRUCE.—2 inch spruce, prepared, at \$20 per M board measure; 1½ inch spruce, at \$9 per M board measure; 1½ inch spruce, prepared, at \$13 per M board measure; 1 inch spruce, at \$11, 1 inch spruce, prepared, at \$5.75 per 100 pieces; 2 inch spruce, plank, at \$11.50 per M board measure; 3 inch spruce (11 inch wide) at \$9 do.

Hemlock, tamarac, basswood, cottonwood and red pine—2 inch hemlock, \$9 per M feet, board measure; 1 inch hemlock, \$7 per M feet, board measure; 3 inch tamarac, \$15.25 per M feet, board measure; 1 inch basswood, \$15 per M feet, board measure; 3 inch cottonwood, \$7 per M feet board measure; ½ inch basswood, \$8.75 per M feet, board measure; 1½ inch red pine, \$13.75 per M feet, board measure; 2 inch red pine, \$14.25 per M feet, board measure; 1 inch red pine, \$14 per M feet, board measure.

Hard Woods.—Black walnut, 1 inch, \$15 per M feet, board measure; hard maple, 2 inch, \$24 per M feet, board measure; birch, 2 inch, \$16 per M feet board measure; maple, 3 inch, \$23 per M feet, board measure; maple, 3x4 in. \$23 per M feet, board measure; hardwood, 3x4 inch, \$20.50 per M feet board measure; hardwood, 2 inch, \$15 per M feet, board measure; hardwood, scantling, \$20.50 per M feet, board measure; ash, 1 inch, \$12.50 per M feet, board measure; oak, ½ inch, \$16 per M feet, board measure; oak, assorted, \$20 per M feet, board measure; ash, 2 inch, \$13 per M feet, board measure; oak and ash, 1 inch, \$15 per M feet, board measure; butternut, 1 inch, \$18 per M feet, board measure; cherry, 1 inch, \$19 per M feet, board measure; oak, 2 inch, \$23 per M feet, board measure; oak, 2 inch, \$23.50 per M feet board measure.

THE *Lindsay Warler* of June 1, says:—"The Gilmour drive is already in Pigeon Lake. It contains 18,000 logs and 600 pieces of square timber, out on the Galway limits and brought down Nogey's creek. These limits have been worked for a number of years, and appear to be inexhaustible.

THE *Ottawa Free Press* says that Mr. E. B. Eddy seems determined to keep in advance of all competitors. To make room for the large product of his new mills, he has added the extensive grounds surrounding Currier & Batson's old mill to his piling ground, and has a tram way running direct from the mills to the wharves on the east side. This is the finest piling ground around Ottawa.

LIVERPOOL STOCKS.

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool on April 30th, 1882 and 1883, and also the Consumption for the month of April, 1882 and 1883:—

	Stock, April 30th, 1883.	Stock, April 30th, 1882.	Consumption for the month of April 1883.	Consumption for the month of April 1882.
Quebec Square Pine	123,000 ft.	103,000 ft.	50,000 ft.	68,000 ft.
Waney Board	124,000 "	167,000 "	10,000 "	7,000 "
St John Pine	8,000 "	3,000 "	2,000 "	1,000 "
Other Ports Pine	40,000 "	28,000 "	2,000 "	5,000 "
Rod Pine	20,000 "	22,000 "	115,000 "	254,000 "
Pitch Pine, hewn	615,000 "	451,000 "	227,000 "	160,000 "
Sawn	652,000 "	451,000 "	28,000 "	27,000 "
Planks	61,000 "	70,000 "	—	—
Dantzig, &c. Fir	25,000 "	103,000 "	—	38,000 "
Sweden and Norway Fir	12,000 "	8,000 "	7,000 "	—
Oak, Canadian	171,000 "	243,000 "	30,000 "	21,000 "
" Planks	163,000 "	95,000 "	66,000 "	42,000 "
" Baltic	20,000 "	60,000 "	1,000 "	—
Elm	27,000 "	37,000 "	2,000 "	8,000 "
Ash	—	13,000 "	2,000 "	1,000 "
Birch	40,000 "	42,000 "	23,000 "	39,000 "
East India Teak	67,000 "	83,000 "	14,000 "	13,000 "
Greenheart	133,000 "	28,000 "	8,000 "	6,000 "
N. B. & N. S. Spruce Deals	9,813 stds.	7,032 stds.	3,076 stds.	3,012 stds.
Pine	870 "	305 "	—	—
Quebec Pine & Spruce Deals	6,130 "	4,769 "	1,071 "	1,075 "
Baltic Deals	3,647 "	2,229 "	318 "	160 "
Boards	312 "	60 "	28 "	—
Boards Flooring	7,487 "	4,860 "	1,431 "	1,333 "

Chips.

THE *Monetary Times* has a special supplement devoted to "The paper trade of Canada." Among its valuable information are details showing the great importance and the rapid growth of the manufacture of wood pulp.

A DESPATCH from Duluth of May 26, says:—The schooner *Dot* has arrived from Midland, Ontario, with 800,000 feet of lumber for Winnipeg. She reports lots of ice near Sault Ste. Marie. She was fourteen days coming.

THE *Belleville Intelligencer* says a quantity of timber in Sidney has been purchased by Thomas Buck and is being brought here by wagons, each one of which used carries 126 feet. The lumber will be rafted here and will make about three drams.

THE *Northwestern Lumberman* says:—Some very heavy square timber, for the Canadian market, that was hung up on the St. Regis river, in northern New York, for an entire year, were latterly floated down to the St. Lawrence on the spring rise.

It is proposed to have an International Forestry Exhibition in Edinburgh next year. The Highland and Agricultural Society are to cooperate, and have subscribed £100 to the guarantee fund. Canada should be well represented at the Exhibition.

THE largest specimen of wood that has thus far been received by the Central Park Museum, New York, is a section of white ash, which is 46 inches in diameter, and 82 years old. A section of sycamore, or buttonwood, is 42 inches in diameter, and 71 years old.

THE Oakland Manufacturing Company, Gardner, Me., consumes annually 1,500,000 feet of hardwood, and 2,000,000 feet of spruce and pine in the manufacture of gutters, moldings, broom handles, spring bed stock, slats, etc. During a busy time 40 hands are employed.

A TRIAL was recently made at Williamsport, Pa., of gas made from wood. It gives a soft light, and is about 30 per cent. cheaper than ordinary gas. Any kind of wood except oak, can be used in making the gas, which is manufactured by a portable and easily managed apparatus.

THE Plovna correspondent of the *Napanee Beaver* says:—Mr. George Hick's circular saw mill, a few miles up the creek, is now in operation. The erection of the mill and machinery is entirely the work of Mr. Hicks and his sons, and the building reflects great credit on their workmanship.

A KINGSTON correspondent under date June 1st, says:—Wm. McRossie has received an order to ship 1,500,000 feet of pine timber to Syracuse and Albany. The lumber will be brought in by the Kingston & Pembroke Railway and shipped via Oswego. The rate across the lake is 85c.

AN Ottawa despatch of June 1, says:—Lumber shipping continues brisk. All the American boats are now loading at the advanced rates. It is thought that there will be an unusually large cut of deals for the English market this season. Several English buyers are at present in the city. Prices remain unchanged.

THE *Winnipeg Commercial* of May 22, says: The demand for lumber during the week has been a little more lively, but otherwise the trade remains in the same condition as last week. Prices as formerly continue to be fixed pretty much according to arrangement between the contracting parties. Money is reported to be very close.

DESTRUCTION is threatening the fine pineries of Lincoln county, Arkansas, in the shape of a peculiar caterpillar, which feeds on the foliage, and are in such huge numbers as to strip the trees entirely of their needles, giving them the appearance of being dead. This being the first instance known of any kind of worm that would feed on the foliage of the pines, speculation is rife as to the result, some maintaining that it will kill the trees, while others think they will not be materially injured. Those owning fine pineries are quite interested on the subject, and fear the destruction of their trees. The worm drops to the ground after having stripped the trees, and dies where it falls, and neither hog nor fowl will eat them.

AN Indiana lumberman asks, what will prevent heavy ash and oak from checking? The ends of hardwood logs for export are covered with a coat of paint to prevent them from checking, and the same treatment would be applicable to logs or timber not for export. To prevent the sides of plank from checking they should be properly piled and protected from the rays of the sun.

A DESPATCH from Eau Claire, Wis., dated May 27th, says:—Up to date the large amount of 120,000,000 feet of logs have been rated at the Beef Slough works, near the mouth of the Chippewa, and towed by raft boats to Dubuque, Iowa, Burlington, Iowa, Clinton, St. Louis, and other prominent places on the Mississippi. There remains in the works 60,000,000 feet of unrafted logs, and a force of 600 men are engaged in rafting and brailing at present.

A LARGE elm tree growing at Norwich, Conn., is over 70 years old, and the limbs are 30 feet from the ground. It stands alongside a house, the chimney of which has been swept away by the overhanging branches, while the tree has raised and moved the house one foot by the force of its growth. A similar instance has occurred at Nassau, New Providence, one of the Bahama islands. A cotton silk tree growing there has obtained such mammoth proportions that it has actually lifted a large government building.

THE *Monetary Times* says:—The quantity of timber imported into Great Britain for the first four months of this year compares as under with that of the same period last year:

Months.	Heav Timber.	Sawn Lumber.
1883.....	408,733 loads.	370,460 loads.
1882.....	460,600 "	452,210 "

There is thus a decrease of between fourteen and fifteen per cent. in the quantity imported this year. The decline was most marked in April, being over twenty-five per cent.

To remove the unpleasant taste which is frequently observable from new wooden vessels is a thing difficult of accomplishment. The *Breeding World* says that the simplest plan, and one that will succeed in most cases, is to seal them thoroughly several times in boiling water, then dissolve some pearl-ash or soda in lukewarm water, adding a little lime to it, and wash the inside of the vessels well in the solution. Afterward scald them several times thoroughly as before.

If the block pavement is carefully swept every day, it does not need much watering, yet it is the practice of some of the drivers to put as much water on the clean block surface as used to be found necessary before the blocks were laid. It should be needless to remark that when the dust is gathered by the new patent process, it is with the intention that the dusting service shall nearly suffice. To deluge the wooden blocks with water in addition, is not only unnecessary, but injurious.

THE *Timber Trades Journal* of May 19, under the head of Glasgow, says:—As regards Quebec goods the trade apparently are waiting for fresh importations, when it is to be expected that larger companies will be attracted and give prices a decided start upwards. Meantime the market is not buoyant. Recent deliveries of deals from Yorkhill yards here show little difference in quantity compared with same time last year. The number of deals delivered last month was 69,826 pcs., and in April, 1882, 64,333 pcs. Since the beginning of the present month deliveries have been lighter than usual.

THE *Timber Trades Journal* of May 19, says: More birchwood is being imported here this season than we have noticed in previous years. Messrs. Forslund & Co., a firm who have contributed much to the extension of this trade, are not only importers, but in many instances the shippers as well, cutting down the wood on the other side, preparing, shipping, and finding a sale for it here upon its arrival; most of it is being sent into Lancashire and Derbyshire, where it is put to suitable use by the cloggers, brushmakers, and bobbin manufacturers of these counties. The arrivals of the past week have been much fewer than usual, and their absence has caused the quietness occasioned by the holidays to be all the more apparent; the only imports consist of two or three cargoes of props and a steamer from Pillau with sleepers.

THE Morris correspondent of the *Winnipeg Commercial* says:—The saw mill at Morris has been overhauled and is now in readiness to commence the season's operations. Large quantities of lumber are being imported into Morris this spring, from which it appears that building operations are to be carried on briskly during the summer.

THE *Chicago Tribune* says:—Lumber vessels are experiencing considerable trouble in entering and leaving east-shore ports, occasioned by the shallow condition of the harbors. At White Lake the water is only nine feet in depth, and the captain of a steam barge arriving here yesterday, reports having grounded several times when leaving Montague. The captain of the propeller *Lawrence* also states that he has encountered difficulty at Charlevoix and Frankfort on account of the bottom being too near the surface.

It is mentioned, in advocating the white willow as a profitable tree for planting, that one is growing at Stockbridge, Mass., which measures 22 feet in circumference four feet from the ground, while its branches extend 50 feet. In England the willow often grows to a height of 60 to 60 feet in 20 years. There it is much esteemed, because the wood is light, very tough, takes a good finish, and will bear more hard knocks than any other wood. It is used for floats to steamer paddle-wheels, brake blocks on cars, cricket bats, turning purposes, planking, vessel furniture, ox yokes, wooden legs and shoe lasts.

THE *Northwestern Lumberman* says:—Prospects for clean drives are growing brighter every day. Copious rains have followed the dry weather in some sections, and many of the hung up logs have started down stream. In eastern Michigan the improvement is very marked. On a few of the Wisconsin and Minnesota streams they do not expect to make much headway until the June rains come, but it is possible that the rain of yesterday (Wednesday), that had the appearance of being general, reached them. There is not, at present, any indications that the drives, on the whole, will not be very successful.

THE Wyovale correspondent of the *Barre Northern Advance* says:—Times are busy about our little village. The mills are all running full blast. Mr. Bolding's mill has run for three years, winter and summer without cessation. During last winter Mr. Bolding supplied the Canada Southern Railway with about 500,000 feet of bill timber, most of it 45 feet long. He has also shipped a quantity of lumber from Penotanguishone to Prince Arthur's Landing, and as soon as the vessel returns will ship another cargo. It is his intention to run steady while the limits last. Mr. Dymont's new mill is now running under the management of Hogan Bros.

THE East Templeton correspondent of the *Ottawa Free Press* says:—The hemlock bark concern is in full blast now, having over 100 men busy in the woods, and anticipate getting out 1,000 cords at least, and the season for stripping it appears only lasts about six weeks, hence they will have to look lively. The men are all camped out and are a fine lot of quiet fellows, happy at their avocation. The last drive this season is Messrs. Edwards', of Rockland. They are still in the lakes, but are pushing along rapidly. The quantity of lumber brought down the Blanche is larger this year than usual. The quality of the logs is very good but small in the average.

THE *London Timber Trades Journal* says:—Twenty five vessels of all sorts, carrying timber goods, must be counted as a very moderate week's arrival for the month of May. Seventeen were steamers, and several of these brought only small instalments of fancy woods, adding but a trifle to the stocks in hand, a cargo or two of flooring, with a sufficiency of sleepers, staves, and lathwood, and the customary supply of doors and other joinery, by the regular liners from New York and Gothenburg. Teak, mahogany, and pitch pine also, each contributed a cargo or two, and the rest were mostly vessels laden with building wood, including one cargo from St. John, N. B., apparently on Liverpool account. But at all events the London supply for the week cannot be in any manner considered excessive.

SHORTAGE OF LOGS.

Every few days the announcement is made that some of the mills on the rivers are compelled to cease operations for the want of logs. This is the fulfillment of our predictions made several weeks ago, and which was as inevitable at that time as at the present. As the season progresses the announcement of stoppages will be even more familiar than at present, and the inevitable result must be a material reduction in production because of the shortage of logs. The 300,000,000 shortage in the Tittabawassee boom at the close of last season, with the large number of logs which are being held back by low water in the tributary streams, cannot but have their effect on the result of the season's cut, and those valley papers which have been to the trouble of figuring up a cut on the Saginaw river greater than that of last year, without any shadow of foundation for such an estimate, and which have not the honesty even now to retract the statement, and in a measure repair the injury, which their falsehoods or ignorance is producing, are deserving of only the utmost contempt, and of course, while they maintain silence, it cannot be expected that their aping copyrighted reprint at Chicago will do any better than they do themselves. — *Lumberman's Gazette.*

Suggested by a Wasp Nest.

A man named Keller is alleged to have been the first discoverer of the process of wood grinding for pulp. The peculiarity of the structure of the wasp's nest suggested the idea that possibly wood could be substituted for rags in making paper. He experimented with saw-dust to no purpose. Wet grinding next suggested itself. This idea was brought into service by means of an old grindstone, and wood pulp was the result. He made a sheet of paper in four hours by straining the pulp through a cloth and leaving it pressed between the leaves of a book till dry. Keller built a rude grinding apparatus, taking no one into his confidence but his wife, and after encountering the vicissitudes which usually beset the path of an inventor, was finally possessed of a mill, which was sold for debt.

Convincing Proof.

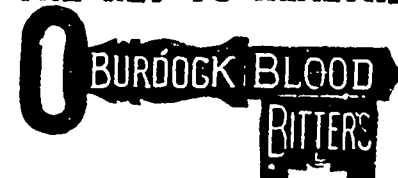
Having suffered from rheumatism for a long time I was induced to try your Arnica and Oil Liniment. The first application gave instant relief, and now I am able to attend to business, thanks to your wonderful medicine.

I am yours truly,
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To Henry, Johnsons & Lord, Montreal.
Arnica and Oil Liniment is sold by all Drug gists.

NEVER ALLOW IT.—Never allow the bowels to remain in a torpid condition, as it leads to serious results, and ill health is sure to follow. Burdock Blood Bitters is the most perfect regulator of the bowels, and the best blood purifier known.

A WONDERFUL CHANGE.—Rev. W. E. Gifford, while pastor of M. E. Church, Bothwell, suffered from chronic dyspepsia so badly as to render his life almost a burden. Three bottles of Burdock Blood Bitters cured him.

THE KEY TO HEALTH.



Unlocks all the clogged avenues of the Bowels, Kidneys and Liver, carrying off gradually without weakening the system, all the impurities and foul humors of the secretions; at the same time Correcting Acidity of the Stomach, curing Bili-ousness, Dyspepsia, Headaches, Dizziness, Heartburn, Constipation, Dryness of the Skin, Dropsy, Dimness of Vision, Jaundice, Salt Rheum, Erysipelas, Scrofula, Fluttering of the Heart, Nervousness and General Debility; all these and many other similar Complaints yield to the happy influence of BURDOCK BLOOD BITTERS.

Sample Bottles 10c; Regular size \$1.

For sale by all dealers.
T. MILBURN & CO., Proprietors, Toronto

Market Reports.

TORONTO.

From Our Own Correspondent.

JUNE 9.—Considerable lumber is still passing over our docks here, the same fleet of vessels being kept going, some of which bring return cargoes of coal, but there is no disguising the fact that the quantity of lumber to be moved over the N. & N. W. R. R. this season will not be as large as in former years, owing largely to the fact that in consequence of the late starting up of the mills this spring, a considerable portion of the total cut will not be fit to move before the close of navigation. This will be the case with regard to shipments from Port Hope and other points, as well as from this port.

The car load trade is somewhat disturbed by the combined action of the various roads in regard to excess weights, and other matters affecting the wholesale trade. Heretofore considerable lumber passing over the Midland system has found its way to the adjoining municipality of Parkdale, passing over a portion of G. T. R. R., and into the yard owned by the C. V. R. R. Co., for which service dealers have hitherto paid the sum of \$2.50 per car, and for which service, although it may be said to be within the city limits proper, the extortionate sum of \$5.00 is now demanded, and in some cases the time occupied in sending a car of lumber the three miles alluded to would be amply sufficient to take it to Liverpool, England. This state of things tends to hamper the trade, and can only result in loss to the Midland Railway Co., as in future the lumber needed for consumption in Parkdale will come over the N. & N. W. R. R., whose track passes directly through Parkdale. The gist of the whole matter is, that huge monopoly the Grand Trunk Railway Co. wishes to control or absorb all the smaller railway systems, and where they fail in this respect they place every obstruction possible in the way, but like all such attempts it must sooner or later end in mortification and failure to themselves.

Trade from the retail yards is fairly active and prices of bill lumber quite firm, in fact retailers are compelled to stand stiff on prices, being forced into that position by mill men who invariably decline to cut bill stuff unless dealers come up to their figures, and in order to give retailers a living profit on dimension lumber it should rule fully \$1.00 per M higher from the yards. Lath continues exceedingly scarce, and former figures firmly maintained. Cull lumber is only in moderate demand owing to speculative building having nearly come to an end, which will ultimately prove a blessing to the city, even if it is a blessing in disguise.

Table listing lumber prices: Mill cull boards and scantling \$10 00, Shipping cull boards, miscellaneous widths 14 00, cantling and joist, up to 16 ft. 14 00, 18 ft. 15 00, 20 ft. 15 50, 22 ft. 16 50, 24 ft. 17 50, 26 ft. 18 00, 28 ft. 19 00, 30 ft. 20 00, 32 ft. 21 00, 34 ft. 22 00, 36 ft. 23 00, 38 ft. 23 00, 40 to 44 ft. 32 00, Cutting up planks to dry 24 00, boards 18 00, Sound dressing stocks 18 00, Picks Am inspection 23 00, Three uppers, Am. inspection 35 00.

Table listing lumber prices: 1 1/2 inch flooring, dressed 32 00, 1 1/2 inch flooring, rough 17 00, 1 1/2 inch flooring, dressed 20 00, 1 1/2 inch flooring, undressed 10 00, 1 1/2 inch flooring, dressed 20 00, 1 1/2 inch flooring, undressed 16 00, 2 headed sheeting, dressed 22 50, Clapboarding, dressed 14 00, XXX sawn shingles, M 3 00, Sawn lath 3 00.

MONTREAL.

From Our Own Correspondent.

JUNE 9.—The amount of business done so far this season is not quite so large as it was last year, and a much smaller quantity of lumber is arriving. This latter circumstance is considered a very satisfactory feature in the trade, as last season there was really a larger quantity of coarse pine, spruce and hemlock than was required; but now stocks are expected to be well worked off this summer as there is a considerable quantity of building to be done.

There is a fair retail trade being done in hard woods, choice lots being still inquired for on American account. Laths are now reduced to \$1.50 with considerable stock on hand; with this exception we have no changes to report. We quote prices ex yard as follows:—

Table listing lumber prices: Pine, 1st quality, M 35 00, Pine, 2nd 22 00, Pine, shipping culls, M 14 00, Pine, 4th quality deals, M 11 00, Pine, mill culls, M 10 00, Spruce, M 10 00, Hemlock, M 9 00, Ash, run of log culls out, M 20 00, Bass, M 17 00, Oak, M 40 00, Walnut M 60 00, Cherry, M 60 00, Butternut, M 35 00, Birch, M 20 00, Hard Maple, M 25 00, Lath, M 0 00, Shingles, 1st, M 3 00, Shingles, 2nd, M 2 50.

FREIGHTS AND SHIPMENTS.

As yet there is nothing doing on South American account, but, as will be seen from the following statement, deals has been shipping in large quantities to London and Liverpool: 67a. Gd. is about the current rate of freight, although some owners are inclined to ask an advance. Shipments to London since the date of our last report have been, per SS Carmona, 10,868 pcs deals; per SS Barcelona, 10,389 pcs deals; per SS Viking, 1,539 pcs deals. To Liverpool, per SS Nepigeon, 67 std deals; per SS Oregon, 13,660 pcs deals; per SS Polynesian, 9,158 pcs deals; per SS Lake Winnipeg, 39 std deals; per SS Montreal, 8,340 pcs deals, 3,258 boards, 6,257 strips; per SS Manitoba, 46 std deals; per SS Toronto, 9,353 pcs deals and 775 boards; per SS Mississippi 4,689 pcs deals. To Hull, per Barque Polynesian, 8,043 pcs deals and 460 pcs deal ends.

CORDWOOD.

There is very little coming in either by boat or rail, and at present there are no boats at the wharf. Tamarac is scarce and what is in stock is generally short and of poor quality. The demand, however, just now is very slack. The Government are calling for tenders for the supply of wood required for the Court House to be in by the 16th inst. The market is firm and tends upwards. We quote at wharf ex cartage: Long Maple 7 00, Short 6 50, Long Birch 6 00, Short 5 50, Long Beech 6 00, Short 5 00, Long Tamarac 6 25.

WINNIPEG.

The Commercial of June 5th, says:—There has been no material improvement in the state of this trade during the past week, and dealers are gradually settling down to the conclusion, that they have over estimated the demands of this season. Building operations are not going to be so extensive as was anticipated, and the lumber demand will be correspondingly lighter.

In its manufacturing notes the Commercial says:—There is no probability of the lumber mills being rushed this season as they were last summer, and the day and night run will be avoided at least for a great portion of the season. The facilities for shipping in lumber will give a good show to importers, who have already a large stock on hand, and local manufactures like other industrial interests are liable to find out that they have slightly overestimated the trade of the season. Furniture factories are still keeping busy, but are not forced to undertake night work. Later in the season their rush will probably be much greater, as with the location of the settlers who are now rushing into the country, there must be in a few weeks a heavy demand for furniture. Manufacturers are not disappointed with present affairs, and state that the present even flow of orders is almost as profitable as the rush of last season.

ALBANY.

The Argus says:—The trade during the week ending June 6th has been only fair, and does not embrace any transactions of importance. There have been no large buyers of pine in the market, and the shipments have been mostly of previous sales. A good assortment and stock of seasoned lumber is still on the yards, and the receipts have been mostly in good order. The difference between buyers and sellers at the mills as to the prices of this year's cut still con-

tinues, and thus far but few purchases have been made in Canada and Michigan. This is shown by the falling-off in the shipments by canal for the last ten days in May, which have been some twenty millions of feet less than those of last year. There has been a steady demand for the better kinds and qualities of hard woods, though the trade has not been large. Receipts by canal and rail keep up a full assortment of seasoned lumber on the yards. Spruce and hemlock are coming in lively, and the demand equals the supply, particularly of good boards and plank, while culls are accumulating to some extent on the yards.

Table listing lumber prices: Quotations at the yards are as follows: Pine, clear, M 35 00, Pine, fourths 60 00, Pine, select 40 00, Pine, good box 22 00, Pine, 10-in. plank, each 42 00, Pine, 10-in. plank, culls, each 22 00, Pine boards, 10-in. 23 00, Pine, 10-in. boards, culls 18 00, Pine, 10-in. boards, 10 ft. 30 00, Pine, 12-in. boards, 10 ft. 27 00, Pine, 1 1/2 in. siding, select 42 00, Pine, 1 1/2 in. siding, common 17 00, Pine, 1 in. siding, select 42 00, Pine, 1 in. siding, common 16 00, Spruce, boards, each 00 00, Spruce, plank, 1 1/2 in., each 00 00, Spruce, plank, 2 in., each 00 00, Spruce, wall strips, each 00 00, Hemlock, boards, each 00 00, Hemlock, joist, 4x6, each 00 00, Hemlock, joist, 2x4, each 00 00, Hemlock, wall strips, 2x4, each 00 00, Ash, good, M 40 00, Ash, second quality, M 25 00, Cherry, good, M 60 00, Cherry, common, M 25 00, Oak, good, M 40 00, Oak, second quality, M 20 00, Basswood, M 25 00, Hickory, M 40 00, Maple, Canada, M 23 00, Maple, American, per M 20 00, Chestnut, M 35 00, Shingles, shaved, pine, M 0 00, 2nd quality 0 00, extra, shaved, pine 0 00, clear 0 00, cedar, mixed 0 00, cedar, XXX 0 00, hemlock 0 00, Lath, hemlock, M 0 00, Lath, spruce 0 00.

BOSTON.

Cotton, Wool and Iron of June 9, says:—The demand while not very active is of very fair, steady proportions. Good desirable lumber keeps along at quite steady prices. Pine is moving moderately at the prices that have ruled for quite a time. Spruce is firm, with liberal orders. Hemlock boards are rather scarce and values are quite strongly held. Laths are in brisk request. Southern pine moves slowly and the market is easy. Hardwoods are keeping along quite evenly. Desirable grades of walnut are firm. Ash, oak, cherry, and whitewood move fairly at about previous prices.

CANADA PINE.

Table listing lumber prices: Selects, dressed 48 00, Shelv' dressed, 1st 40 00, 2nds 33 00, Dressed Shippers 27 00, Dressed Box 18 00, Sheathing, 1st quality 42 00, 2nd 34 00.

BUFFALO.

Table listing lumber prices: We quote cargo lots: Uppers 40 00, Common 18 00, Culls 13 00.

CHICAGO.

The Northwestern Lumberman of June 9th, says:—The daily arrivals of cargoes at this port during the past week have averaged a larger number than in any previous week since the opening of navigation. Over 250 are reported in the port list, the usual proportion stopping at the market. The greatest number reported was on last week Thursday, when 50 put in an appearance. On Wednesday of this week there were 46, and over 30 came in on each of four days, the least number, 19, arriving last week Friday.

The offerings have represented a fair proportion of dimension, boards, strips and shingles. There is but little really dry lumber coming at present, and it is claimed that there is not much in pile over the lake that has not been disposed of.

Price staff has ruled firm in spite of the larger offerings. The lower figure on short lengths has been lifted from \$9.50 to \$9.75, as indicating a settling and hardening of prices. Very little is selling now below \$10, if it is fairly desirable. The frequent sales a week or two ago noticed at

\$9.50 are now so scarce that that figure may be declared off. It is claimed by some that the numerous offerings during the past three or four days have caused piece stuff to drag a little, while others assert that cargoes have been disposed of with reasonable celerity. It is certain that all the arrivals have moved away from the docks after a short tarry, and there has been no appreciable glut in the market.

Boards and strips are firm and steady at quoted prices. Shipments directly from the mills have been liberal, and the commission men claim that but little cross-piling has been done within a few days past, and that the cut will come forward freely as long as the demand is as good as at present. It is also alleged that as heavy a volume of lumber of all sorts is coming forward as at this season last year.

It is understood that the east shore mills are this year cutting a larger proportion of boards and strips than of dimension, for the purpose of equalizing the prices between the two classes of stock. The decline in the price of dimension from last year's prices is assumed by the manufacturers as having arisen from disproportionate cut of this kind of lumber, which rather overdid the demand. The change in relative proportions of output may be now carried too far, so that at the close of the season there may be too much inch lumber. The question has been asked: If the mills are sawing mostly boards and strips out of dimension logs, will the quality of inch lumber run lower this year than usual; or, rather, will there be an overabundance of coarse common?

Table listing lumber prices: Short dimension, green \$ 9 75, Long dimension, green 10 50, Boards and strips—No. 2 11 50, Boards and strips—Medium 14 00, Boards and strips—No. 1 18 00, Shingles, standard 2 45, Extra A 2 00, Lath 2 10.

Receipts of lumber, shingles, etc., for the week ending June 7, as reported by the Lumberman's Exchange:—

Table showing receipts and stock on hand: RECEIPTS: Lumber, Shingles, 1883 64,817,000 40,709,000, 1882 52,735,000 23,789,000, STOCK ON HAND MAY 1: 1883 300,731,016 204,244,311, 1882 285,804,000 250,884,000, RECEIPTS: Lumber, Shingles, 1883 285,804,000 250,884,000, 1882 546,414,000 233,704,000, Inc. 257,010,000 17,180,000, Dec. 257,010,000 17,180,000.

NEW YORK.

The New York Lumber Trade Review of June 9th, says:—The condition of trade during the week shows but little change since last report. The demand has made no progress, the limited quantities passing into distributors' hands being taken without spirit or confidence, and only against wants in sight. Among the yards the opinion prevails that lower prices are likely to rule soon on both yellow and white pine, while the continual free offerings from the mills strengthens this belief, and causes the adoption of caution when stocks require additions. The predictions freely indulged in earlier in the year have failed of realization, and disappointed with the contrary condition of affairs, dealers no longer express themselves as being on the "bull" side of the market, but all, seemingly, have turned "bears" and settled down to await the pleasure of buyers. The active competition to secure the few orders that come upon the market show to what length manufacturers and holders generally are prepared to go, so eager are all to meet those who are willing to assist them in the unloading process. The prospects are indeed unfavorable. Consumption does not increase with the advance of the season, but the stock is gradually becoming greater, and this fact makes holders anxious.

Spruce appears to hold its own very steadily. There are fewer orders offering, but the random cargoes as they come to hand are taken at about the rates current last week. For some few desirable lots in since our last \$13.50 has been accepted, but this price does not really represent the market, as any fair cargo can be placed at \$14 and up to \$16 for a really good schedule.

For orders the current range stands \$15.50 @ \$17.50, within which a few bills have been taken, but the orders offering are mostly small, intended to cover early requirements only. Work at the mill is steadily progressing. There is no longer any scarcity of water, though the streams are said to be falling quite rapidly. The new log sawmills, however, are under good headway, and manufacturers count on a full supply.

Orders for hemlock continue to offer quite freely and mill representatives have their capacity well under engagement. Prices are firm, and no change in the value soon is anticipated.

OSWEGO, N. Y.

From Our Own Correspondent.

Since my last there have been some sales reported below opening prices. The market is dull and receipts light for this season of the year. Lake and canal rates are very low; receipts to date as follows. 1883, 45,000,000 ft.; 1882, 67,500,000 ft.

Three uppers	\$40 00@48 00
Pickings	36 00@33 00
Fine, common	20 00@25 00
Common	14 00@17 00
Culls	12 00@15 00
Mill run lots	10 00@22 00
Sidings, selected, 1 inch	34 00@33 00
1 1/2 inch	35 00@40 00
Mill run, 1x10, 12 inch	19 00@22 00
selected	22 00@26 00
Shippers	16 00@17 00
Strips, 1 and 1 1/2 inch mill run	14 00@18 00
culls	10 00@13 00
1x6 selected for clapboards	25 00@40 00
Shingles, XXX, 18 inch, pine	4 00@ 4 50
XXX, 18 inch, cedar	3 00@ 3 70
Lath	2 00@ 2 50

TONAWANDA.

CARGO LOTS—SAGINAW INSPECTION.

Three uppers	\$45 00@40 00
Common	18 00@24 00
Culls	12 00@14 00

GLASGOW.

The *Timber Trades Journal* of May 26, says: The past week may be counted as the opening of the early summer market. There have been numerous arrivals to Clyde, as will be observed from the import list; and on the 23rd inst., as noted below, a public sale was held in Yorkhill yard, here, the goods offered consisting of a large fresh cargo of birch and maple logs, also St. John, N. B., and Halifax, N. S., spruce deals.

The stock of last year's birch has been exhausted for a long time past, and this fresh cargo was expected to prove an attraction at the opening of the season; yet, although a good company was present, there was little spirited bidding for the birch or for deals. As noted below, the birch was not of large squares, so that the rates realized appear to be an improvement on last year's prices. A bid of 16d. for maple was given, but as the brokers were unable to obtain an advance on this figure, the wood was withdrawn.

Apparently, from the present weak demand for spruce deals, the supply meantime may be considered ample. Besides the sales of birch appended there were some made privately.

AUCTION SALES.

On 23rd inst., at Glasgow, Messrs. Singleton, Dunn, & Co., brokers:—

Half-c birch (squares, string measure, ranging from 13 to 21 in. and avg. 15 to 16 in.)		
400 logs	16 1/2 & 19 1/2	per c. ft.
140 "	19 1/2 & 19 1/2	"
40 "	20 1/2 & 21 d	"

Half-c spruce deals—		
9 to 21 ft.	13 1/4 x 3	10 1/2 per c. ft.
9 " 21 "	12 x 3	11 d "
9 " 21 "	11 x 3	11 1/2 d "

Do ends—		
3 to 8 ft	7 1/4 x 3	8 1/2 d "

LIVERPOOL.

The *Timber Trades Journal* of May 26, says. The dull condition of our trade during the present week would, so far as it has gone, appear to point out that the consumers have hardly yet settled down to business after the Whituntido holidays, as there appear to be comparatively few orders in hand, or if they have resumed business, that the demand in general is far from strong. The latter supposition is far more likely to be the case than the former, and though it is by no means strange to hear reports from the country that orders are few in number, or trifling in amount, yet a survey of what is being done in the way of deliveries from the yards shows that the consumption of timber, &c., is not what it ought to be to meet the views of merchants. The low range of prices for all kinds of whitewoods ought

to stimulate consumption to some extent, as it is difficult to see how they can go lower than they are now, but apparently this has little effect.

Spruce deals continue to be sold from the yard at declining prices, and at Messrs. Farmworth & Jardine's sale of Friday last, the 18th inst., when they offered 40,000 pieces, part of cargo landed on steamer last season, only about 8,700 pieces changed hands. The lots sold were:—

12 to 15 ft	3x9	£ 7 5 d.
16 " 20 " and up	3x7	6 17 0
12 " 16 "	3x7	6 17 0

all the other dimensions, as well as the broad deals and 4th quality being withdrawn. The imports continue light, and this should help to reduce stocks, though, with few exceptions, they are moderate and would not stand any great demand upon them without affecting prices, were it not that we are now approaching the general import season; hence there is little prospect of enhanced prices being obtained unless something unforeseen should happen which might give an impetus to the trade. The reports of the condition of the building trades in the various districts supplied from this port are, are, however, so uniformly discouraging that little relief can be looked for in this direction, and we must only trust that the imports will be restricted as much as possible.

LONDON.

The *Timber Trades Journal* of May 26, says: Business at the docks continues quiet, although vessels are dropping in from the timber ports; still numbers are confined to very small proportions, and the cargoes they contribute are absorbed apparently without adding materially to the constantly diminishing piles. At a recent visit to Rotherhithe it struck us the freshly piled cargoes could be counted on the fingers, and we hardly remember to have seen the dock stocks at the end of May so reduced as they are at the present time.

SWEDEN.

The Stockholm correspondent of the *Timber Trades Journal* writing on May 19, says:—The weather being now warm and spring-like, the ports of the upper Bothnian Gulf are opening out rapidly, and before this meets the eye of your readers navigation will have commenced along the whole seacoast up to Haparanda. In the lower ports, the bulk of the first open-water fleet has already arrived, and loading operations commenced. With the exception of the Sundswall district possibly, the tonnage of the vessels arrived is considerably less than last season. Comparatively few steamers are expected for London and other large importing English centres, while there is, on the other hand, a large number of small sailing craft chartered to convey sawn wood to a diversity of outports, both in Great Britain and on the Continent. The special feature of the present season's business, so far, appears to be that a great number of small transactions have been entered into, whereas large speculative purchases are conspicuous by their absence.

The same inanity and want of life which has characterized the f. o. b. trade the whole of this year still continues. An occasional transaction of a retail character is reported, but, with the exception of the purchase of about 1,000 standard ards of Sundswall goods at low prices, nothing of note has come under my ken this month. The Sundswall purchases in question are reported to have been affected at a trifle under a £10 basis for mixed 3x9 and 11 redwood, but I consider it right to mention that the transactions referred to are scarcely a criterion of the state of trade, terms of payment being exceptionally favorable for the seller. Considerable quantities of 2 1/2 x 6 and 7 whitewood battens, as well as 3x11 white deals, are being inquired for from Scotland and elsewhere, but the prices offered—viz., about £4 7s. 6d. and £5 5s. respectively for unassorted f.o.b. lower Gulf are so low that business seldom results.

The larger holders of good redwood marks between Gelfo and Sundswall are still disinclined to make large concessions on their list prices to induce business. Their argument is something in this wise. "What is the use of our reducing prices for one third of our season's pro-

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duction, when we have obtained our quotations for most of the remaining two-thirds, and when we know that stocks are not large abroad, and that a fair consumption is going on, which will compel London and other large English ports to pay our rates before long? We prefer holding our unsold balance in the meantime, and reducing our production by working shorter hours." Such is the reasoning of more than one large exporter, and I leave it to my readers to form their own estimate of the value of the arguments.

I remarked, a short while ago, that the Spaniards have bought pretty freely of Swedish goods this season. According to a less authoritative than Mr. H. R. Astrup, of this city, we are informed that one Swedish mill has already this season sold to Spain wood goods to the value of about £60,000. This is probably the largest quantity that has hitherto been placed in that country by one concern during the course of a season, and gives additional probability to the opinion of those that hold that, with the possible exception of the Australian Colonies, there is no market which gives such promise of increase in the consumption of Swedish sawn and planed wood within the next decade as Spain, supposing the import duties there to be satisfactorily and permanently regulated. Mr. Astrup thinks the export on such conditions likely to reach nearer 100,000 standards annually than the present 25,000 standards, within ten years.

According to intelligence from Berlin, the German Reichstag has cast out the Government Bill to increase the import duties on wood goods for that country. This is causing an increased demand for rough red boards and whitewood

battens for Germany, and several transactions are reported from the Sundswall and Honosand districts.

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THE RAFTSMAN'S LIFE.

Since the opening of navigation several gangs of raftsmen have been employed at the Northern Railway docks in constructing the timber which arrived there over the different railways, into rafts to be towed to Quebec and then shipped to Europe. Within the last decade the quantity of timber received at this port has materially decreased, and as each succeeding year greater inroads are made upon the primeval forest of Ontario, the total extinction of the trade is but a question of time. As yet, however, it retains respectable proportions, and this spring nearly half a million dollars worth of timber will be constructed into rafts at the Northern Railway docks, and forwarded to Quebec. The bulk of this timber is rock elm from Muskoka, but a considerable quantity of walnut and other fine woods have a place in the collections. The firm who build the rafts have men at work in the woods all winter cutting lumber, which is dragged over the snow to the nearest railway where, as soon as spring opens, it is shipped to Toronto. When the lumber train arrives here it is shunted on a siding close to the margin of the dock, and then commences the work of raft building. A gang of men roll the logs from the car into the water, where a wire rope is hitched around them. By the aid of a horse power which revolves on a strongly built raft, the logs are hauled to any spot desired with rapidity and ease. The timber is first formed into a small raft, which is called a dram. A dram is generally about 50 feet wide, by 300 feet long, and contains from 25,000 to 40,000 square feet of timber. The logs are bound together in a solid mass by maple saplings, which are twisted by machinery as to be extremely pliant. After a number of drams have been completed a steam tug tows five or six of them to Prescott, where they are formed into one great raft, which generally comprises about seven drams. This immense mass of timber is then towed down the St. Lawrence until the rapids are reached, when the raft is broken into single drams and in this way passes the many rapids of that mighty stream. The crew who man the rafts are thoroughly conversant with the intricacies of the channels, and it is very seldom that a raft comes to grief among the rushing waters. About two weeks is the time generally consumed in making the voyage from Toronto to Quebec, but of course if the weather is unfavorable a much longer time is occupied in the trip. When the timber reaches Quebec it is cut up into lengths suitable for shipment, and is then forwarded to England by sailing vessels.

A few seasons ago it was not an uncommon thing to ship 40 drams of timber from Toronto by raft, but this season only 20 drams will be made up. The value of these is about \$20,000 per dram, so that the total value of the timber made up at the Northern Railway docks will not fall far short of half a million dollars. The number of men employed at the work is about 120, principally French Canadians. For some reason or other the light and volatile French Canadian seems better fitted to endure the alternate hardship and ease of a raftsmen's life than his Ontario fellow-countryman. At all events, but very few Ontarians follow the raftsmen's hazardous calling. The party who have been working at the rafts at the Northern docks here are what the late Artemus Ward, of facetious memory, would term a "gallus lot." Accustomed to the easy romantic life of the lumbering camp, their free spirit revolts at the idea of submitting to the restraints imposed by civilized life. They cherish a deep-rooted antipathy to living in a dwelling-house, and to humor this fancy, their employer has given them quarters in several old shanties in the lumber yard, adjoining the docks. In their humble quarters here they seem to be supremely happy, and seemingly enjoy their free and easy style of living quite as much as the pampered child of luxury enjoys his style. In the evening, when the labors of the day are over, the men assemble in the yard and adopt various devices for killing time. The musicians of the party will bring out their instruments and furnish the music to which some giddy youth will trip the light fantastic. The yards resound with the music of the deep voices of the lumbermen as they gaily trill short snatches of some

old French song. Some amuse themselves by playing euchre and other sinful games, with packs of cards that look as if they had seen the service of many winters. The curiously inclined gather around the "oldest inhabitant," who, with that voracity characteristic of ancient residents, tells his open-mouthed audience of the hair-breadth escapes which he had from death while running a raft down the night, St. Lawrence. In these and sundry other ways they manage to pass the time, and each evening their quarters are visited by large crowds of citizens who are anxious to view a realistic representation of life in a lumbering camp.

In the winter months the raftsmen busy themselves in cutting timber in the woods, and when the return of spring loosens the ice king's grasp on the mountain's torrent, the raftsmen has often to guide logs down to a spot where it is convenient to ship them from. This is a situation that requires great steadiness of nerve and courage, and it is no infrequent thing to hear of adventurous lumbermen getting drowned while taking a drive of logs down stream.

After the raft building operations are concluded each year the men receive their well-earned wages, and so often go on a prolonged spree which lasts until their money is exhausted. In the fall they are generally as badly broke as the ten commandments, and anxious to go into the woods for another winter. This routine continues while their health can stand the strain, and when asking the lumberman what becomes of the men who were too feeble to go back to the woods he answered simply "God knows."

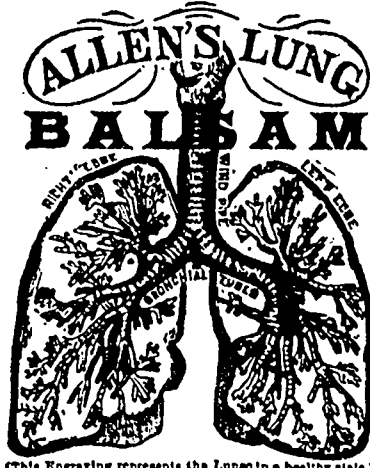
The men who are working on the rafts this spring are a very quiet and well behaved lot. Since their arrival here the police have not once been called on to suppress any disturbance. In a few days the men will take their departure, and instead of the merry shouts of the raftsmen, the shrill whistle of the propeller, and the gruff voice of the schooner captain, as with many unscriptural quotations he urges his crew to increased diligence, will be the sounds that will break the nightly stillness of the lakes.

VICE-ROYALTY ON A CRIB.

OTTAWA, May 29.—The first crib of the season began to come down the slides yesterday, and his excellency the Governor-General and Her Royal Highness the Princess Louise, having expressed a desire to "run the slides," special arrangements were made for their reception. About five o'clock in the afternoon His Excellency and Her Royal Highness, attended by a numerous suite, drove to the head of the slides at the Chaudiere. Here a raft constructed with unusual care of timber belonging to the Messrs. White, and fitted with rough but secure seats for the accommodation of Her Royal Highness and the Ladies in Waiting, was lying in readiness. Having boarded the frail-looking craft, Mr. W. A. Humphrey, who acted as pilot, took charge of the raft. Some half dozen raftsmen, carefully selected for their experience and trustworthiness, formed the crew, and under the watchful eye of Mr. Humphrey the rafts with its distinguished passengers passed through the danger of the slides without accident and mishap of any description. About six o'clock it shot out into the broad expanse of the river opposite the Parliamentary grounds where the steamer which plies between Hull and the Ontario shore ran out to meet it, and took the Vice-Royal party ashore. His Excellency and Her Royal Highness expressed themselves as being delighted with the success of the trip, and paid many well-merited compliments to the raftsmen. Amongst the Vice-Royal party was Mr. Samuel L. Clemmings' "Mark Twain" who will now have another chapter to add to his rafting experience.

PROPOSED FORESTRY CONGRESS.

A new item has been going the rounds of the Southern press to the effect that a proposal has been made to hold a Forestry Congress at Lake de Funiak, in Florida, during the month of March, 1884. It does not appear under whose auspices the proposed Congress is to be held, nor has anything transpired showing who are to be invited to attend its deliberations or take part in its discussions; but the forestry interests of the South are among the most important



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of its industries, and it is an encouraging sign to find that someone has become aroused to the necessity of conserving the vast reserves of growing timber that abound in that section. Lake de Funiak, which is on the line of the Pensacola & Alabama R. R., is a new town, but it is in the midst of forests, and is in an appropriate place for such deliberations to take place. If taken in hand by well informed men of practical knowledge and intelligence, such a meeting ought to result in benefitting the important lumber, as well as agricultural interests of the Southern States; but preserve us from a gathering of doctrinaires, whose chief object in attending such a convocation would be for the purpose of ventilating well-worn theories that are as impracticable as they are useless. The importance of tree planting in this country can not be over-estimated, and anything that will stimulate the interest that ought to be felt upon this question, should receive the support and co-operation of lumbermen.—N. Y. Lumber Trade Review.

Logs "Banked."

The Lumberman's Gazette of Bay City, Michigan, says:—The storms of the past week were exceedingly destructive for the lumbermen on the rivers in the loss of logs, quite a number of rafts being broken up and the logs scattered along the shore in almost inextricable confusion from the mouth of the Saginaw river to the mouth of the Au Gros. Messrs. Chapman & Co., I. H. Hill & Son, and some others are among the losers by the heavy northwest gales, which thus scattered their logs, and sent the tugs flying to the river for shelter. The Bay City Lumber Company had their rafts containing nearly one and a half million feet of 20 per cent. logs banked between the mouth of the Kawkawlin and Saginaw rivers, and some of them so effectually banked that it will cost as much as the worth of the logs to secure them again.

A New Canal.

The Florida ship canal scheme is likely to result in the actual opening of a water-way from a point near Jacksonville, on the St. John river, to a connection with the Suwanee, near the Gulf of Mexico. The purpose is to construct a canal capable of the passage of the largest ocean steamer. The company has been formed and is ready for business. This work will shorten the distance between gulf ports and the Atlantic 800 miles. It will be important to the yellow pine trade of Pensacola, Mobile, and other producing and shipping points on the gulf coast, as it will shorten the route to

New York and Boston by nearly a thousand miles, and obviate the dangers of navigation among the reefs around the southern end of Florida.—Northwestern Lumberman.

MENTAL depression, headache, and nervous debility, are speedily remedied by that excellent blood-purifying tonic, Burdock Blood Bitters. The Editor of the Mitchell Recorder states that he was cured of biliousness, liver derangement, and sick headache, by the use of this medicine.

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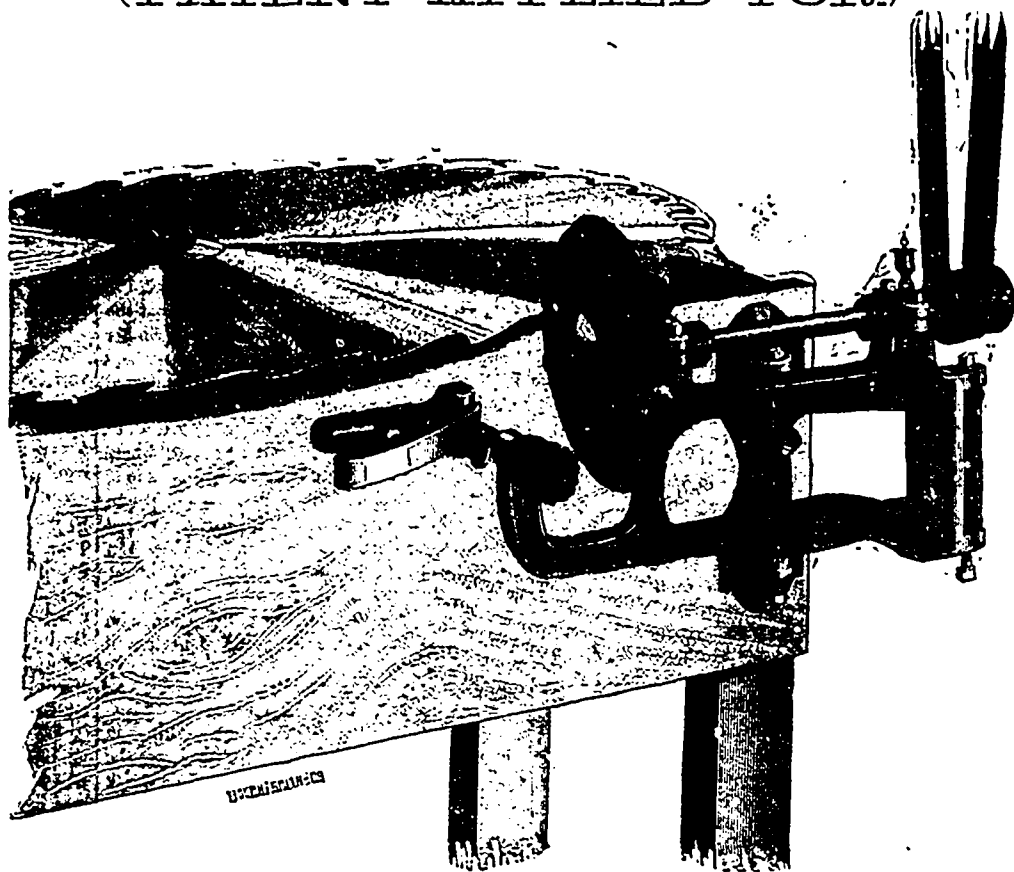
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FROM THE JAWS OF DEATH.

On Tuesday morning a young French Canadian mill hand named Narcisse Meunier, in Eddy's new mill, at Hull, Que., had one of the most marvelous escapes from death on record. It seems that while attending to his duties in the lower part of the mill he slipped and fell into the water beneath. At this point the stream resembles a gigantic seething cauldron, but notwithstanding the warning of the rushing waters Narcisse, who is a powerful swimmer, struck out boldly for the shore. In spite of his efforts he was hurled down the waterway towards the Devil's Hole, where the stream enters the underground passage. Nothing daunted by the tremendous strength of the current, against which he was battling, Narcisse continued to fight for his life. At length he succeeded in getting near enough to the shore to clutch a projecting piece of rock, to which he held until rescued by some parties who had witnessed the accident. When the news spread about the mill that this had occurred few could credit it, as it was considered utterly impossible that any man could have fallen into the mill-stream beneath the mill and escape with his life. When he fell into the water he shouted as loud as he could, but the noise of the mill prevented his cries being heard, consequently his fellow workmen did not know of the occurrence until it was over. Fortunately for him some outsiders happened to see him clinging to the rock on the shore with the energy of despair, while the force of the current was almost tearing his arms out of their sockets, and came to his rescue. Had it not been for this he would inevitably have been sucked down into the Devil's Hole and probably never heard of again. No description can give the faintest idea of the dangers of this spot, but after one glance at it seems inconceivable that a human being should have been there and survived. A reporter called at the mill to get the particulars of the affair from Meunier. Notwithstanding the fearful peril from which he had been rescued a few hours before, he was coolly engaged at his usual work as though nothing out of the way had happened. He is a stoutly built young fellow of about nineteen summers, and although he looked rather pale after his battle with death, he made light of the affair. In answer to an enquiry by the reporter he shrugged his shoulders and said he didn't feel very bad at the time, but he wouldn't like to be there again.—*Ottawa Citizen.*

Two-Horse Load of Tooth-Picks Daily.

Where do the tooth-picks come from? A Maine newspaper states that the little town of Sebect, at the outlet of Sebect Lake, Piscataquis County, in the interior, has one of the best waterpowers in the state, but has never been fully developed. A tooth-pick factory there is doing a large business, using over a thousand cords of poplar and birch wood annually, turning out a two-horse load of tooth-picks daily, and employing from 12 to 15 girls and 8 or 10 men. A private letter from the place states what the newspaper omitted, that "the tooth-pick mill gives employment to as many girls as can afford to pack a hundred boxes for twenty-five cents, and feed themselves." This seems very small wages for women, but board is cheaper there than in the city, and probably many of them board at home, and would be unable to earn as much otherwise.

A Good Wager.

The "Greendale oak" in Welbeck Park is called "the Methuselah of trees," and writing of it in 1790, in his "Descriptions and Sketches of Remarkable Oaks at Welbeck," Major Rooke said the tree was then thought to be 700 years old. In 1724 an opening was made in this oak large enough to allow a carriage, or three horsemen abreast, to pass through it. At that time the girth of the ancient tree above the arch was nearly 36 feet, the height of the arch was 11 feet, and the topmost branches were 54 feet from the ground. On the estate the story is told that a former Duke of Portland, in an after-dinner frolic, made a bet of 1,000 guineas that he could drive a coach and six through the body of the tree without touching the bark, and that he accomplished the feat and won the guineas.

CLARKE'S ETIQUETTE.

An Oshkosh, Wis., paper relates the following incident in the history of the Hon. J. C. Clarke, familiarly known as Jack Clarke:—"About one quarter of a mile below the dam at Morrill, the Lincoln Lumber Company own about 30 acres of land, on which they have erected a saw and planing mill. They have a double gang and a circular saw, having a capacity, for manufacturing 130,000 feet of lumber per day. Last fall John C. Clarke, of Wausau, took an interest in the property and was elected general manager, and under his supervision the mill has received a general overhauling, so that now it is about as perfect as a mill can be. A story is told of Mr. Clarke that is worthy of repeating. When he took charge of the business, he found in the office several young gentlemen who were somewhat on the dodo order. The new superintendent is a plain man, and he does not believe much in standup collars, tight breeches and eye-glasses. When dinner was announced, all parties took their seats at the table. By the side of each young gentleman's plate laid an elaborately carved ring and napkin. One glance was sufficient, and the new superintendent broke out with "Well, young gentlemen, what do you do with those things?" Receiving a reply, "We wipe our mouths with them." "You do? Well, you can pack up your trays and seek other sights and scenes, for I never employ men that do not wipe their mouths on their shirt sleeves when they eat."—*Northwestern Lumberman.*

THE EXTINCTION OF FIRE BY STEAM.

The frequently proposed application of steam for the extinction of fire has recently met with a practical application in a steel-pen manufactory in Berlin. The owner of the factory, in consequence of frequent conflagrations in the drying rooms for wooden penholders, had three small steam pipes, in connection with the steam boiler of the establishment, fixed in three such rooms. The ends of the pipes were closed by a short piece of pipe, made of an alloy of lead and tin, which would quickly melt should fire break out, when steam would at once rush out. To prevent the steam inside the pipes from hindering the melting of the ends, the latter were filled with resin. Quite recently the stoker was warned by a hissing noise that fire had again broken out in one of the drying rooms, and when it was entered it was found that such was the case, but that only a small portion of the contents had been destroyed. The other combustible materials in the room, frames, walls, and floors, were found to be only saturated with the condensed steam, a portion of the penholders still smouldering. The heat caused by the breaking out of the fire had melted the ends of the pipes, and thus caused the heat to escape, which had extinguished the conflagration at its commencement without the intervention of the hand of man. It is probable that this ingenious and valuable contrivance, which is especially suited for large factories or stores, will find a wide application in the near future.

Matters in Maine.

A correspondent of the *Lumber World* says: It has been very unfavorable weather in this vicinity this spring for stream driving, as we have had very little rain. We had little or no thaw during the winter, leaving the snow light and but little water in it. It went off by the sun so slowly that the small streams did not get water enough to bring out the logs. The first rain of any account was on the 22nd, and that not very great, but it raised the streams considerably for a few days. The prospect is now that there will be a large amount of logs kept back that cannot be got out this spring. The prospect for sales of lumber is good, so far as for heading for West India trade, and home consumption for box-boards, which constitutes nine-tenths of all the Saco river long lumber. All the mills that saw oak for shooks are overstocked, which makes shooks low, as they have fallen from \$1.25 to 80 cents and must be low for a year to come.

Of the five hundred men at present at work on the Moira timber drive, 200 are in the employ of Messrs. Rathbun & Son, Deseronto.

RAFTS ARRIVED AT QUEBEC.

The *Chronicle* gives the following list of rafts, &c., arrived at Quebec:—
MAY 25.—Jean Voyer, deals, Connolly's Mills.
Ross Ritchie & Co., deals, Three Rivers and St. Maurice.
Calvin & Son, staves, Bowen's Cove (Sillery).
Ross & Co., oak, &c., Cape Rouge.
MAY 30.—Sundry persons, oak, &c., Cap Rouge.
J. McRae & Co., oak, &c., Cap Rouge.
JUNE 1.—Collins Bay Co., oak, St. Michael's cove.
Collins Bay Co., oak, sundry coves.
Burton Bros., sundry woods, Sillery cove.
JUNE 7.—J. McLaren, white pine, St. Lawrence Docks.
E. L. Kelsey, staves, Union cove.
" " New Liverpool.
Simon Wigle, " Woodfield.

Monster Conveyance of Real Estate.

Probably the largest conveyance of real estate ever made in the Dominion to a private individual was made in Quebec on Thursday, June 7, the vendors being the executors of the estate of the late G. B. Hall, of Quebec, the well-known timber limit and saw-mill owner. The purchaser was L. A. Sonecal, and the property transferred comprising, among other features, the famous saw-mills at Montmorenci Falls, the Radnor forges, near Three Rivers, and over 2,662 square miles of timber limits in this Province alone, besides various other lands in the Eastern Townships and elsewhere. The deed, which covered 260 pages, was signed on his own behalf by Mr. Sonecal, who paid down \$250,000 cash on account of the purchase price of \$1,600,000. Hon. Geo. Irvine, who leaves shortly for Europe on professional business, acted as legal adviser of the Hall estate.

Salt Preserving Timber.

It is a curious fact, says the *Carpenter*, that in the salt mines of Poland and Hungary the galleries are supported by wooden pillars, which are found to last unimpaired for ages, in consequence of being impregnated with the salt, while pillars of brick and stone used for the same purpose, crumble away in a short time by the decay of their mortar. It is also found that wooden piles driven into the mud of salt flats and marshes last for an unlimited time, and are used for the foundation of brick and stone edifices; and the practice of docking timber after it has been seasoned, by immersing it for some time in sea water, is generally admitted to be promotive of its durability.

MELLY's saw mills, at Somerset, Que., were burned on Sunday, June 10th. The loss is estimated at \$10,000.

THE St. Paul *Pioneer-Press* gives a statistical review of the season's lumbering operations in the Minnesota and Wisconsin woods. The aggregates reveal the stupendous magnitude of the business. The total cut of the two states exceeds 4,000,000,000 feet. This represents the trees growing on 1,250 square miles. The Chippewa valley region of Wisconsin contributes nearly 1,000,000,000 feet, the Mississippi above Minneapolis nearly 600,000,000 feet, the Wisconsin river 441,000,000, the Duluth district 297,000,000, and the Black river 228,000,000. The streams on the west shore of Lake Michigan, grouped together for convenience, show a cut of 785,000,000. On the different railroads in Wisconsin and Minnesota about 600,000,000 feet were cut. The cut is by far the greatest in the history of the Northwest.

THE *Central Canadian* says:—The activity one beholds about Mr. Peter McLaren's mills and yards is truly wonderful. Night or day there is unbounded bustle. The great head himself is nearly always present somewhere. Occasionally he goes into the yards where there appear to be dozens of men both piling up and pulling down; and when he speaks to them it is in a friendly sort of way—the kind of tone and the kind of words that make men say: "A first rate man, that." The wages are very high this year—higher, we believe than ever before—and this puts fire into the men, who keep a cheer-

ful sunlight in their faces all the day. We hear no real cases of discontent. Though the work is heavy, it is not constant; and there are many chances to rest. The machinery gives entire satisfaction, and everything runs with the regularity and harmony of clockwork.

THE *Timber Trades Journal* says:—We learn that a couple of cargoes of deals, &c., despatched from the Surry Commercial Docks to the Island of Cypress about the time of the termination of the Egyptian campaign last year, in the expectation of considerable building operations being carried on there, are still unused. In fact, it is reported that they lie just as they were discharged from the vessel, with very little prospect of their being called into requisition, and the off chance of never being used at all in that region. It would be interesting to know how the deals have stood the long exposure out there, and what they would be worth for transshipment elsewhere. We believe the stuff was sent to Cyprus for the purpose of constructing barracks for the soldiers and other buildings in connection therewith, but the troops have been withdrawn, so the deals are apparently useless.

THE *Buffalo Lumber World* says:—A great variety of wood will be used in the manufacture of furniture this season. Walnut still remains in favor, and is quite expensive. Mahogany is also much used, the variety known as *Sau Domingo* mahogany being very desirable. It has an excellent yellow tone, growing richer and darker with age. Amaranth is among the rare varieties, its beautiful purple surface taking a high polish and carving finely. Leopard-wood shows a yellowish ground, with darker spots, and is rich and effective for screen frames or panels. Butternut resembles oak, and takes a carved decoration well. Satin wood is much used, and cherry is quite a satisfactory substitute for mahogany. Unstained cherry is a yellowish brown color, and can be used with good effect. Ebony is somewhat out of favor, the genuine wood being very expensive, while the imitations are always unserviceable and disappointing.

ONE OF MANY.—Mr. R. W. Carmichael, Chemist and Druggist, of Belleville, writes as follows:—"Your Burdock Blood Bitters have a steady sale, are patronized by the best families here and surrounding country, and all attest to its virtues with unqualified satisfaction."

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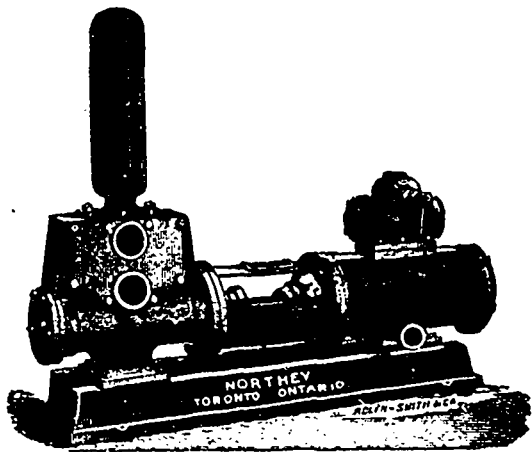
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