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

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VOL. 4.

PETERBOROUGH, ONT., MAY 15, 1884.

NO. 10.

TREE PLANTING IN QUEBEC.

In the Quebec Legislative assembly on April 22 Mr. Casavant presented the report of the agricultural committee, recommending that 5,000 pamphlets on tree-planting be printed, at two cents per copy and circulated. Some discussion arose, Mr. Beaubien having drawn attention to the unsuitability of the day fixed by the committee for tree-planting. Objection was also taken to the expense of the pamphlets recommended. Messrs. Mercier and McShane admitted that the present was only a small item, but too many persons were now being subsidized because of political services.

Mr. FACHEM remarked on the amount of useful literature distributed in Ontario, and thought the present work was one of great usefulness.

Hon. Mr. LYNCH said the committee on agriculture had this morning met to consider the fixing of a day for tree-planting. He regretted that it had been impossible to fix one uniform day for the entire Province, but he had yielded to the superior wisdom of the Committee.

Mr. JOLY observed that it would be difficult to find a more concise work on tree-planting than that of Mr. Chapais, which it was proposed to print, and though he objected to the increasing expenditure, he readily agreed to having the pamphlets printed. He should like to have had a uniform day fixed as a holiday for tree-planting, but saw a difficulty between the conditions of the eastern and western sections. He hoped that the committee would again be called together to reconsider the fixing of the 7th May for the western and 16th May for the eastern sections.

Mr. BEAUBIEN said the cost of the pamphlets was not excessive. He should like to have an opportunity of addressing the committee on the date for tree-planting.

Mr. CASAVANT agreed that Mr. Beaubien should be heard to-morrow, and with this understanding the report was adopted.

In the agricultural committee next morning, after remarks from Mr. Beaubien, Mr. Joly, Mr. Lynch and others, it was decided to recommend to the house that, notwithstanding the difference of climate, it is not impossible to realize the idea of a uniform date for the Province for Arbor Day, and that the 12th of May be fixed this year. Suggestions to have it observed as a general holiday, and for an adjournment of the House from Friday the 9th to Tuesday the 13th May were favourably received.

THE COMING SEASON.

Monday April 28th witnessed all the saw mills with one exception in Ottawa in full operation. The buzz of the saw will be heard in Messrs. E. B. Eddy's, J. R. Booth's, Perley & Pattee's, Young's and Bronson & Weston's, McOlymont's

mill in New Edinburgh and Shorman. Hardman's & Lord's mill in Hull began running this week. McLaron's mill at the Rideau Falls will not be ready to run until the end of May. All the old machinery in this mill has been removed and is being at present replaced by the most improved machinery. This mill when finished will be second to none, as regards equipment, in the Ottawa Valley. A lively season is anticipated and prospects are so cheery that the lumbermen feel warranted in running their mills day and night from the commencement. Heretofore night watches have not been set to work for a month or so after the mills opened. The demand in the American markets is very good indeed, but prices have not advanced. The electric light has been introduced into nearly all the mills at the Chaudiere. Perley & Pattee and J. R. Booth have adopted the Thompson & Houston light, and each firm has 20 lights. The United States Electric Light Co.'s light is used in Young's and Bronson & Weston's mills. The former has ten lamps and the latter has twenty. Mr. E. B. Eddy has the Brush light and has forty lamps on his extensive premises. The loading of barges at the Chaudiere docks has already begun, and the first tow of the season will leave early next week. Twelve barges containing three million feet belonging to Mr. J. R. Booth will leave on Monday. This firm was the first to commence loading this season.—*Montreal Witness.*

A CHAPTER ON TREES.

A Brazilian wood, called quebraucho, found in large quantities in the valley of the La Plata, is of high value for mechanical and engineering purposes. This tree is about the same diameter as the average oak tree, but it has a shorter trunk. It is used for railway ties, telegraph poles, piles, and things of a like nature. This wood, when well seasoned, is very durable on account of its hardness. It is difficult to work. The color is that of a mahogany, but becomes deeper in time. This wood is rich in the oil of tannin, and a large portion of Brazilian leather is tanned with it.

The cypress, of which there are three varieties, the red, black, and white or bald, is gaining in favor every day in the south. It is heavier than white pine, as a substitute for which it is being used, by several hundred pounds more per thousand feet. This wood contains a very small amount of resin, and a very high polish can be given it; in fact, because of its not being affected by moisture, it is being used for cisterns, hogsheds, and sugar, molasses and honey barrels. The red cypress is the favorite, and some of it is so heavy that it would sink upon being placed in the water. The white variety is much lighter and will float easily after being deoiled shortly before cutting, but it has not the firm grain of the red. The red cypress has a straight trunk with a small

top, and the bark when cut has a reddish tint.

Russian papers are full of talk about destruction of forests. Many Russian forests are becoming extinct. Within a century the area of forest in that country has been reduced from 11 per cent. in Tver, to 45 in Riazan. In many provinces wood is becoming very scarce, so great has been the destruction. Even the great forests along the Volga and Don, which extend a long way toward the Ural mountains, are destroyed. Only a fringe exists of the once celebrated chestnut wood of Vassilsursk, that dates back many years.—*Lumberman's Gazette.*

THE ADIRONDACK BILL.

The import of Senator Lansing's bill for the control of the Adirondack state lands, which has passed the upper house of the New York legislature, is synopsis as follows by the *Potsdam Courier and Freeman*:

It provides for the appointment of three commissioners with salaries of \$2,000, who shall have an office in the new capital at Albany. Their duties shall be to locate the lands owned by the State, to "make and publish such reasonable rules and regulations for the use of said forest lands by the public as shall give the greatest amount of liberty in the use thereof consistent with the preservation of the forest;" to prevent trespass, make regulations for the prevention and extinguishment of fires, and to prevent overflow of land by the erection of dams. The commissioners are prohibited from granting the exclusive use of any portion of such forest lands or any lakes or rivers therein to any person or corporation. The bill gives no authority to cut timber, and the penalty for cutting down a tree is \$5. The bill appropriates \$15,000 for expenses of the commissioners. Senator Gilbert voted against the bill. He said the bill was one creating political positions for individuals, and it was more in the interests of certain persons than in the interest of the State. There was one Adirondack department already in existence. There was job written over the bill from beginning to end. He denounced it as a job. He thought the bill was absolutely unnecessary.—*Northwestern Lumberman.*

ARBOR DAY AT BAY CITY.

Last Friday, April 25th, says the Bay City *Lumberman's Gazette* was Arbor Day appointed by Governor Begole, and although many citizens in the cities as well as in the rural districts complied with the spirit of the proclamation, there was an entire lack of anything like general compliance. We are sorry to be compelled to make this announcement, proceeds the *Gazette*, as we had hoped to be able to chronicle the fact that the suggestion that every man, woman and child in the state, as near as possible, had planted their Arbor Day offering, and that

the public schools had lent their influence for the promotion of this beneficent movement. But like any undertaking, the prospective remuneration of which is in the dim future, or reserved for future generations, this subject of tree planting is difficult to inaugurate generally. The present generation appear to ignore the fact that they have appropriated to their own use the principal and interest of nature's productions, in the long years which have passed along down the ages, and are loth to replace even a tithe, of their appropriations. The agitation of this question, however, will not cease as there is already sufficient interest awakened to insure final triumph. It may be that the noble spirits that have made this subject a portion of their life work may not have the supreme satisfaction of beholding the long sought victory, but they may rest on the assurance that "their works will live after them," and that the spark they have kindled will ultimately be fanned into a flame which shall be productive of grand and glorious results.

A Wonderful Saw.

A circular saw was recently sent from New York to a Michigan match company, which was 6 ft. in diameter. It has 52 teeth and makes 672 revolutions per minute, and is capable of making a ten in. to twelve in. cut with each revolution. It can saw off a 40 ft. plank, therefore, in an infinitesimal portion of a minute. This is not a solid saw but one of the new patterns in which the teeth are separate from the plate, and can be inserted and removed at pleasure. The teeth in the sort of saw of which this monster is a specimen are little curved bits of steel pointed like chisels at the cutting end. They fit into round sockets cut out of the edges of the saw plates, and their little chisel blades project slightly beyond the circle of the plate.

Paper Bottles.

Paper bottles are now made on a large scale in Germany and Austria. The paper must be well sized. The following is said to be a good recipe for the paper. Ten parts of rags, forty of straw, fifty of brown wood pulp. The paper is impregnated or coated on both sides with 60 parts of defibrinated fresh blood, 35 parts of lime powder, five parts of sulphate of alumina. After drying, ten or twelve rolled leaves are coated again, placed over each other and then placed in heated moulds. The albumen in the blood forms a combination on pressure with the lime which is perfectly proof against spirits, etc. The bottles are made in two pieces, which are joined afterwards.

A Paris correspondent, writing to the *Sunday Post*, suggests that it would be desirable to establish a society, with headquarters in Stockholm, for the management of the Swedish timber sales abroad through a limited number of agents.

ARBOR DAY.

A year ago for the first time the government of this province set apart a day for the special purpose of tree planting. The suggestion to which we owe so interesting and useful an anniversary came, we believe, from the Hon. H. G. Joly, who, in a little pamphlet published in 1882 on "The Returns of Forest Culture," after referring to the benefit that had been derived from the usage in the United States, put the question, "Why should we not follow the example?" The movement of which Arbor Day is the pleasant and fruitful result only began in earnest within the last few years. Some twelve years ago the attention of the British Government was directed to the rapid disappearance of the most valuable forests in the colonies and dependencies of the Empire, but it was some time before statesmen realized the nature of the sacrifice that was going on. Finally in 1874 Her Majesty's Commissioner of Woods and Forests issued circulars to the governors and administrators of British possessions containing a number of questions to be answered as to the extent of woodland, the quality of timber, the amount cut yearly, the amount wasted by fire, the quantity remaining, and the means, if any, adopted for its preservation or restoration. In 1878 a published statement of the answers received revealed some startling facts as to the terrible waste that had been incurred and the danger, in some instances, of the total denudation of once valuable forest land. From our own Dominion the reports were quite as disheartening as from other parts of the empire. In 1873 the Crown Lands Commissioner of this province indicated the necessity, in view of possibly total exhaustion unless the waste was checked, of some comprehensive plan of restocking our deforested lands. At the same time in the United States the warning of the few far-seeing men who had long ago pointed out the danger began to be taken to heart. Forestry associations were founded and by articles in magazines, as well as pamphlets and books, the country was awakened to a sense of its peril. Prof. Hough, Mr. Eggleston and other learned and earnest men made known what other communities had done in similar circumstances to prevent catastrophe. The forestry system of Germany was held up for example. In Prussia there are twenty millions of acres of forests, of which ten millions are the property of the state. The total income from these is \$14,000,000, the expenses being \$7,500,000, so that there is a clear profit of \$6,500,000. Yet had it not been for the wise precautions adopted and the admirable system of forest management that has been in force for centuries, those great stretches of forest land would be bare deserts.

It was just when the agitation among our neighbors was fairly on foot that international courtesy, by seeming chance, gave the movement the direction and effectiveness in the good results of which we now share. Among those who came to this continent to be present at the Yorktown celebration were the representatives of the Von Stouben family. One of these gentlemen held the important office of Royal Chief Forester of the German Empire, and it was natural that his hosts would converse with him on the subject which was uppermost in many of their minds. The consequence was that valuable information was imparted at first hand to persons delighted to receive it, and not likely to let go for nothing. In the month of January, 1882, a number of gentlemen met in the office of Judge Warren Higley, Cincinnati, to discuss the whole question from the standpoint of American needs. A committee was formed, which wasted no time, for in April a forestry congress was held, at which Canada was not unrepresented, and in the following August a convention was held in this city, which resulted in the formation of an international association. One important feature in the convention's work was the influence which it brought to bear on the general, state, and provincial governments. The simultaneous meeting of the American Association for the Advancement of Science lent additional distinction to the *personale* of the Montreal convention, and there was no lack of interest on the part of our own statesmen and men of science.

Since then the work has not stood still in this

province. The Arbor Day of last year was an experiment, and it was not to be expected that apathy would yield to enthusiasm all at once among the bulk of the people. But it undoubtedly did good. The very fact of devoting a bright spring day to the work of atoning for the cruel wastefulness of the past could not fail to impress people's minds. It was the inauguration of a new era. To the children especially, its significance was unmistakably for good. It taught them the use of trees in the most practical way, showed that they served a purpose beneficial to soil, to climate, to scenery, that there was, in fact, no object in nature that conferred so many and so various boons on men and animals. This year the effect will be still more beneficial. The subject has, in the meantime, been fully discussed. Both in the city and the country questions will have been asked and answered. In the schools more attention will have been paid to natural history and the trained mind will be prepared to take an intelligent interest in the celebration. Much, of course, depends on the organization of those to whom the tree-planting is entrusted. In some of the states the ceremony of inaugurating groves in the parks and other public places and memorial trees bearing the names of illustrious citizens is made delightful to the whole population, processions and bands and speech making adding *clat* to the occasion. It would be well if some similar plan were adopted to solemnize the day in this province. History and forestry and the duty of citizenship might thus be taught at once to the young and to the mature as well. Let the matter only be taken up in the right spirit and Arbor Day will not only be a welcome holiday, but one of the most useful institutions.—*Montreal Gazette.*

FOREST FIRES.

BRISBIN, Pa., May 3.—Hoover, Hughes & Co.'s mill here caught from the forest fires surrounding this place, and at least two hundred and fifty other buildings are burned. Mrs. Donovan, an aged lady, was caught by the fire and burned to death. T. O. Cryal, engineer at Hoover's mill, remained at his post until he was surrounded by the fire, and compelled to bury himself in the earth to save being burned to death. It is feared he is fatally injured from inhaling the smoke and flame. It is understood the fire was started in the woods by Hungarians last Sunday, who took that method to clear small patches of ground on which to build huts.

HONSDALE, Pa., May 3.—The losses definitely stated by the fire at Brablin now amount to \$380,000, and the estimate of the total loss will amount to \$1,036,000. The number of families homeless and destitute is about one thousand. Most of these are suffering for the necessities of life. Supplies are coming in slowly, and the demand is great. Goods will be transported free to sufferers by the Pennsylvania railroad. The sufferers are mainly poor miners.

PETERSBURG, Va., May 3.—Destructive forest fires are burning in the Isle of Wight county, originating in the burning of a saw mill. The atmosphere of this city all day has been dark from the smoke, almost obscuring the sun at times.

EMPHORIUM, Pa., May 3.—Forest fires in this section yesterday swept over at least 50,000 acres, destroying, as far as ascertained, four large mills and thirty other buildings, besides an immense quantity of lumber and logs. The loss on property, mills, and lumber will amount to \$100,000.

READING, Pa., May 3.—The Blue mountains, along the northern border of Berks county, are on fire in every direction. Serious danger is apprehended.

BABYLON, L. I., May 3.—Forest and meadow fires are raging in various points on Long Island, causing widespread destruction of property and much alarm among the inhabitants. Thousands of acres of valuable timber are being destroyed. The smoke is so dense that horses are overcome by it.

ASHLAND, Pa., May 3.—The danger from the forest fires is believed to be over. Four farm houses and outhouses, with stocks, are destroyed. A man named Westhaffer is missing; supposed to have perished. Forty-five to fifty

square miles of timber have been burned. The damage is estimated at \$112,000.

MOUNT CARMEL, Pa., May 3.—Mine Hill Gap colliery is in great danger from forest fires. Work is suspended.

PHILADELPHIA, May 3.—The mountain fires are assuming dangerous proportions. Hundreds of people are fighting them. On the Blue mountains, near Wind Gap, and on Pocotomo mountains the flames are making great headway. The woods are very dry for want of rain. The smoke is terrible, people can hardly breathe. Turkey river and West Shenandoah collieries were in danger yesterday afternoon; the fire department of Shenandoah saved the breakers by keeping them wet. It was thought the fire would reach Elan Gowen colliery during the night. It is rumored the Union pipe line is on fire at St. Mary's on the Philadelphia and Erie railroad. In some places trains are compelled to run through the fire for miles.

MATAWAN, N. J., May 4.—The fires in the pines south of here are burning with greater vigor than ever. The damage cannot be estimated. The woods at Browntown have again started, and farmers are fighting the flames. The loss there is placed at nearly \$50,000. The huckleberry crop, which brought hundreds of dollars to poor people in this vicinity, is entirely destroyed.

KINGSTON, N. J., May 4.—Forest fires still continue hereabouts. It is reported two men lost their lives while fighting the fire in the Shawangunk mountains. In the Catskills a large mill owned by Keator was destroyed. Hussey Hill, in the town of Esop, is all in black last night and to-day.

TRADE WITH AUSTRALIA.

The following letter appears in the London, Ontario, *Free Press*—

DEAR SIR,—I noticed from a news item in your paper of this morning, that the value of United States exports to Australia and New Zealand, last year, amounted to \$6,730,000, and those from Great Britain amounted to \$91,000,000. The American exports covered agricultural implements, carriages and carts, drugs, iron and steel manufactures, leather, kerosene, fish sewing machines, tobacco, lumber, furniture, and manufactures of wood. All of these industries are well represented within our Dominion. You very properly ask: "Why does not Canada bid for a larger proportion of this trade than she has done? We have as good facilities as the States in many branches of manufacture, and ought to be as well able, with perseverance, to find an outlet in Australia for our surplus products."

Our producers, manufacturers and mechanics, will heartily endorse your sentiments. The Ontario Car and Foundry Co., of this city, have now an order in hand for 100 screw-lifter dump cars for the Australian Government, upon which we are busily at work, for shipment via Boston this month. If this improved car built from the designs and specifications of the United States Screw-Lifter Dump Car Co.—and our work upon them give satisfaction, in Australia, there will be other large orders for railway cars and plant, secured for Canada through Mr. Carson Woods, of Messrs. Carson Woods, Rich & Co., Sydney, N. S. W., who has the placing of all such orders for the Government.

In order to influence these orders for Canada our Government should appoint this Mr. Carson Woods Commissioner for the Dominion, and our manufacturers, etc., could get all necessary information through him relating to business matters for the fuller development of our trade with this colony.

Yours truly,
London, May 3, 1884. THOMAS MUIR.

International Forestry Exhibition.

The only province of the Dominion taking part in the International Forestry Exhibition at Edinburgh this year is New Brunswick. Mr. Cadell, the secretary of the exhibition, writes that "the prospects of a successful exhibition are assured, contributions having been promised from India, China, Japan, British Guinea, Sierra Leone, the Mauritius, Gambia, Australia, Tasmania, the West Indies, Borneo, Denmark,

Norway, Sweden, the United States, Russia, and, in fact, nearly all countries except Canada, the absence of which will be very conspicuous and unfortunate. The building is nearly complete, and our arrangements are in a forward state." Mr. Cadell also states that four hundred feet have been engaged by the government of New Brunswick.—*Montreal Gazette.*

AN AMERICAN SAMPLE ROOM AT TURIN, ITALY.

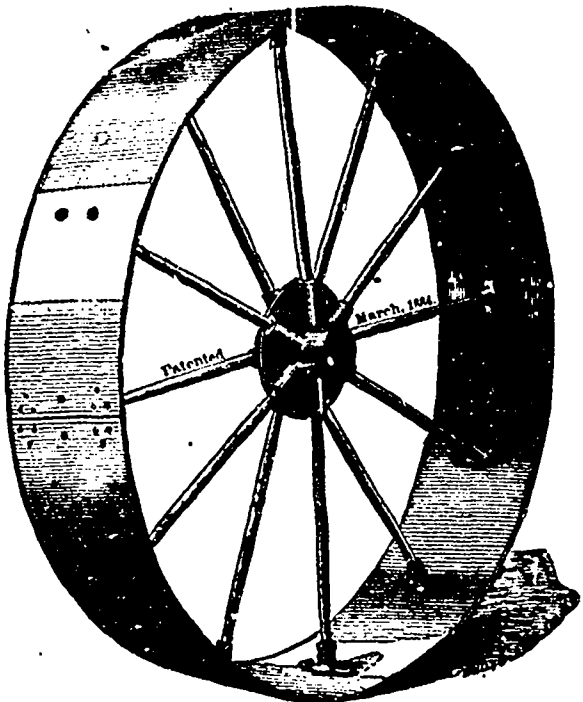
By the consular report for March we notice that the Vice and Deputy Consul De Zeyk in Turin, Italy, is making arrangements to establish a sample room under the direct control of that consulate at which, by the beginning of March, 1884, arrangements will have been concluded to receive goods destined for exhibition. Turin is in a central position from whence goods may in the shortest and cheapest way be transported to any other port of Italy. It is in the immediate neighborhood of the by far most frequently visited port of Genoa, between which and our Atlantic coast there has long existed direct shipping commerce, there being now a number of steamship lines engaged in the trade. Turin and vicinity possesses quite extensive establishments of cotton, hemp, woolen, paper, etc., mills, machine shops, cast iron foundries, a military arsenal, fire arms, and gun factory, and can be put down for the chief marketing place for at least Northern Italy, where for a city of 250,000 inhabitants, there is almost an extraordinary lively trade and brisk demand for the staple articles of almost every country in the world. Goods will be received at the above named sample room upon conditions that all freights will be prepaid by the shippers so that goods shall be delivered, free of all charges, to care of vice consul at Turin, and that he will not be responsible to shippers, owners, or their agents in any cases of partial damages or entire loss of goods happening before their delivery to his care. Goods can best be forwarded via New York and Genoa, through Phelps Bros. & Co., 54 and 56 Broad street, New York, who will also effect the custom house clearances, at Genoa and the proper delivery of packages, etc., to the vice consul at Turin according to invoices, which, together with written instructions as to the final disposition of the sample goods, must invariably be sent to his address, stating the exact amount and the price at which the goods can be disposed of, in which case the proceeds will, after the deduction of a reasonable commission for the covering of sundry expenses for storage, insurance, clerkhire, portage, etc., be duly remitted to the shipper, and when the goods are to be returned, a commission must be remitted to the vice consul at the same time with the order for reshipment. Among the importations recommended are household furniture, wool, carpets, Brussels two or three ply, petroleum lamps, improved fixtures, and new styles, steam engines from two to three horse power with and without steam boilers, india rubber and leather beltings, light wood working machinery, agricultural machinery, small dimensions, portable forges and blowers, portable flour mills, hydraulic jacks, common screw jacks, differential pulleys, revolvers, and good arms of precision, street locomotives, and small locomotives, from three to six horse power, for agricultural purposes. Parties interested may address A. J. De Zeyk, U. S. Consulate, Turin, Italy.

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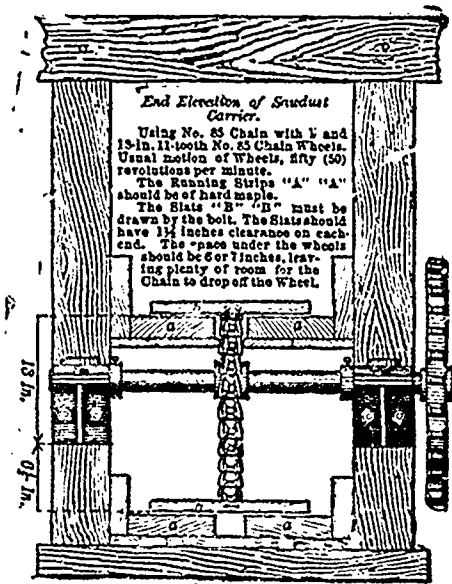
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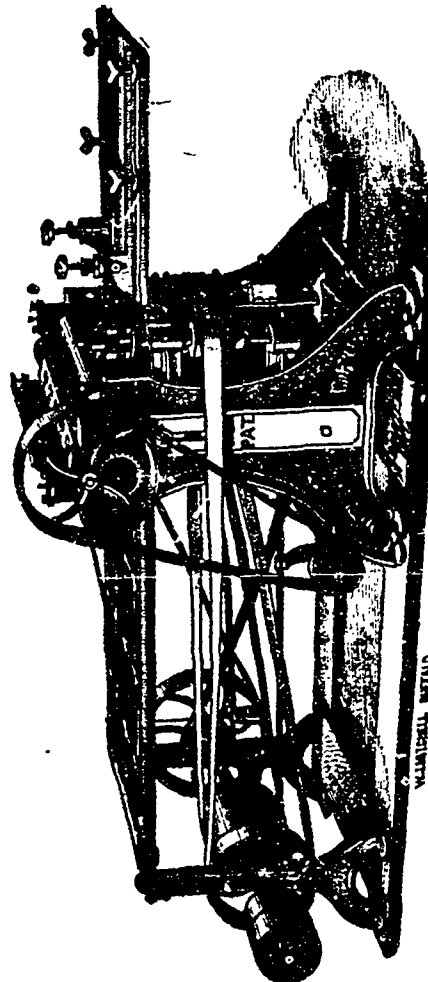
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AUSTRALIA.

The Monthly Circular of Lord & Hughes timber brokers of Melbourne, dated Wednesday, 12th March, 1884, is as follows.

Our last report was under date of 13th Feb., since which we have to report lighter arrivals from the Baltic ports, and offerings not so heavy as previous month, with a further advance in Baltic deals and flooring. Oregon is also a little firmer, and prices slightly better and obtainable, while American shelling, in consequence of large arrivals, is not so firm; clear pine maintained its price, but not so eagerly sought after; slates also remain in good demand at about previous rates.

Trade from the yards continues exceptionally good and likely to remain so, as the building trade is very active, and large sales of building are being weekly made. We may confidently look to a continuance of activity.

The arrivals have been—Leviathan, from Laurvig, with red and white deals and flooring; Aristos, from Christiania, Sir Jamsotjoo Family and Rollo, from Frederickstadt, with flooring; Hugo, from Gefle, Wanlock, from Sodorham, with deal; Wesor, from Quebec, with clear pine and spruce; Jeremiah Thompson, from Burrard Inlet, with Oregon timber, laths and pickets; Agata, from Boston, with clear pine, white pine, shelving, T. & G. ceiling, laths, slates, and plaster; Glengoil, Gulf of St. Vincent, Aviomoro, Montross, Oanduars, British Envoy, Aigburth, Glesinavis, and Catania, from Great Britain, with flooring, slates, lead, galvanized iron, cement and plaster; Waitemata, Vision, Robin Hood, Darcy Pratt, and Grassmere, from Kaipara; Rockhampton, from Mercury Bay, with Kauri pine; Cheviot and Wendouree, from Sydney, with cedar; Lyca-moon and Nemesis, from Sydney, with slates.

RED DEALS.—Imports: 624 standard, 9,813 pieces. The arrivals have been Leviathan, from Laurvig, Hugo, from Gefle, Wanlock, from Sodorham, and Rolo from Frederickstadt. On the 29th ulto., the cargo ex Gurli was offered at auction, resulting in the quitance of nearly the whole of the cargo, DDD 11x3 realising 6½d., 9x3 5½d. to 5½d., 7x3 5½d. to 5½d., 7x2½ 5½d. to 5½d. at per running foot of 9x3. Sales have also been made of small parcels ex Zoila Einer Thambarskolver, and Loch Katrine.

SPRUCE DEALS.—Imports: 20,074 pieces. The arrivals have been Wesor, from Quebec, with spruce; Leviathan, from Larvig, with Baltic white. On the 29th ulto. the spruce deals ex Halgerd, were offered at auction, but only a portion was sold.

OREGON TIMBER.—Imports: 1,079,949 feet super. This line arrived in the Jeremiah Thompson, from Burrard's Inlet, and was sold on 4th inst. at prices ranging from £6 15s. to £8 2s. 6d., and the balance ex Chrysolite, at £8 2s. 6d.

LUMBER. Imports. Clear pine, 142,583 feet super; white pine shelving, 93,129 feet super; T. and G. ceiling, 16,013 feet super. The arrivals have been Agata, from Boston, and Wesor from Quebec. The parcel ex Agata is advertised for sale on 14th inst. Sales by auction have been of clear pine and ceiling, ex Blackadder, and balance of shelving ex Paramita, prices showing a decline on last month's rates.

PITCH PINE.—Imports Nil. Auction sales: Nil. **REDWOOD.**—Imports. Nil. The only sale by auction has been balance of shipment ex Remisio, at a decline on previous rates.

FLOORING AND WEATHERBOARDS.—Imports: 4,322,440 feet lineal. The arrivals have been Leviathan, from Laurvig, Sir Jamsotjoo Family and Rollo, from Frederickstadt; and Aristos, from Christiania. The cargo ex Sir Jamsotjoo Family is advertised for sale on 14th inst. Sales by auction have been cargoes ex Electro, Einar Thambarskolver, and small lines ex Adele and Sabine, Drumblaur, Loch Katrine, Birth of Clyde, and Loch Ness, the following being prices realized:—Red, 6x1½, 12s. 3d. to 11s. 6d.; 6x¾, 9s. 3d. to 9s.; 6x¾, 5s. 9d. to 6x¾, 5s. to 4s. 9d.; white, 6x1½, 9s. 9d. to 9s. 6d.; 6x¾, 7s. 9d.; 6x¾, 5s. 9d. to 5s. 6d.; 6x¾, 5s. to 4s. 6d.; 4-out weatherboards, 7s. to 6s. 9d. These prices show an advance on last month's rates.

KAURI PINE.—Imports: 1,411,119 feet super. The arrivals have been Waitemata, Vision,

Robin Hood, Darcy Pratt, Grassmere, and Rockhampton. Sales by auction have been made ex Vision, Grassmere, Darcy Pratt, Waitemata, and Palace, sawn logs realising 14s. 9d. to 13s. 6d., and fitches, 16s. 6d. to 13s.

CEDAR.—Imports: 10,400 feet super. This arrived ex steamers from Sydney. Sales by auction have been made of small parcels ex Sydney steamers, at 4s to 20s.

RED AND WHITE PINE (Colonial).—Imports: Nil. Auction sales: Nil. **DOORS.**—Imports: Nil.

LATHS AND PICKETS.—Imports. Laths, 3, 385 bundles; Pickets, 1,908 bundles. Sales by auction have been made of Oregon Laths, 4½-foot, at 37s. to 36s. 6d.; spruce, 4½-foot, 34s. 6d.; Baltic, 4½-foot, 25s. 6d. to 24s. 6d.; 4-foot, 20s. 6d. Pickets, Oregon, 4½-foot, at £7 10s.; 6-foot, at £8 10s.; spruce, 4½-foot, at £6 15s.

SLATES.—Imports: 300,205 pieces. There have been no sales by auction during the month to report. Privately, a good demand exists at about last month's rates.

PLASTER.—Imports: 120 barrels. There have been no sales by auction during the month.

CEMENT.—Imports: 2,800 barrels. The arrivals continue light and the market bare. Sales privately have been made of best brands at 16s. 6d. to 16s. Auction sales: Nil.

GALVANIZED IRON.—Imports: 847 tons. Sales by auction have been made of small lines. Privately, best brands realised £20; inferior, £10 to £10 6s.

HARDWOOD.—Auction sales—29th February—Ex Southern Cross, 41 pieces 12x8 hardwood, at 7s. 6d. per 100 feet super.

PALINGS.—Imports: Nil. Auction sales: Nil.

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

THE TRADE OF ARCHANGEL.

The Norwegian and Swedish General Consul in Archangel in his report writes as follows:—The awkward roads from Archangel to the interior prevent the possibility of import trade. The ships arrive, therefore, with few exceptions, in ballast, which, of course, in a substantial degree, increases the outward freights, and when to this is added that nothing has been done to ease the entrance into the port (the River Dwina cannot be navigated by vessels drawing more than 14 ft.), also that the harbour dues are unproportionately high, it is not difficult to understand the depression under which the trade of the place at present suffers. On account of these circumstances the prospects are poor, and it has also been seen that several trade houses, during the last year, partly have dissolved business, and partly have limited it to timber and other forest productions, which it seems will soon be the only export goods on which the district can depend.

Various circumstances—high prices of timber, severe constant conditions for purchase in the State forests, and recently great accidental fires at several timber yards—have, during the past year, restricted the development of the trade of the district, and especially of the Archangel timber trade. These difficulties appear now, in a great measure, to have been overcome, and, at the same time, the exporters have begun to see the necessity of using the machines of the day to obtain cheaper labour and better use of the timber, and considering the position of the export trade as a whole, with the great wealth of the forests of the country and the remarkable quality of the timber, a considerable development of the timber trade of the district may certainly be expected. The quantity coming for shipment this year will, it is presumed, amount to about 45,000 St. Petersburg standards.

QUEBEC'S FOREST PRODUCE.

In the course of a speech in the Quebec Legislative Assembly the Hon. George Irvine, Q. C., expressed a very dispirited opinion about the great industry of this province—the timber trade. It was in a very bad way now, according to the honorable gentleman, and the prospects

for the immediate future were by no means bright. It was not from an political motive, he declared, that he said this; he was simply stating a fact a fact which had considerable importance for himself—as a warning to the Government not to depend very much on the probable revenue from the produce of the forests.

Enquiries by our representative in Quebec show that Mr. Irvine's opinion, gloomy as it is is not disputed by those most able to judge. Among other signs is the determination of Messrs. G. B. Hall & Co., to close down their famous Montmorency mills this season—for the first time, we believe, since the mills have been in existence. In connection with this matter it may be as well to state in few words the truth about Mr. Senecal's transactions with the Hall estate. Mr. Senecal paid the first instalment—\$250,000—of the purchase money, and he has not yet paid the second instalment. But the contract has not fallen through on that account; the property really belongs to Mr. Senecal at the present moment.

The season having now fairly opened, we give, for the information of our readers, a review of the position and prospects of the timber trade; a review representing the opinions of some of the leading timber merchants in the city of Quebec.

Judging of the present position of the trade it is desirable to consider the two staple articles, namely, timber in the shape of what is commonly known as square and wancy timber, and timber sawn up generally in the form of deals three inches thick. The annual consumption of the former for several years past has been falling off, being last year and this winter less than perhaps it has ever been recorded before. The present stock of square white pine is about seven and a half million feet; and although this is not more than about half the average stock of from seven to ten years ago, it appears to be far in excess of what the market is likely to require. In wancy pine the stock is rather larger than an average, but the demand for this wood is more uniform than for the square timber, as it is used more generally throughout Great Britain for pattern making and joinery purposes. The production during the past winter of square pine will probably be less than six million feet. This, again, is much under the average production of from five to ten years ago, it being then about eleven million. Although the production is so much reduced, still it is likely to be far in excess of any demand that will arise, and it is seen every day that this trade is gradually dying away from Quebec. The causes for this are the increased production and cheapness of pitch pine, and the quantity formerly taken not being required for the purpose for which this square wood was used in England, iron beams, iron decks for ships, and cheaper woods, being substituted for our yellow pine.

In hardwoods a similar disappointing view has to be taken of the future of the trade. The opening of railways in Virginia, Tennessee, and other Southern states has given facilities for bringing the oak from the hill countries of those States, sawn out into dimension timber as required by the large consuming manufacturers in England, chiefly for waggon building, at prices far under what the Western States oak can be brought in the log to Quebec and shipped at. This feature this winter has been more felt than previously, because the manufacturers have improved so much in the production of these oak scantlings that they now answer the requirements of the most particular railway companies in England. As far as Canada is concerned, the oak is entirely cut away.

Another description of square timber, elm, is becoming more difficult to get, and the price has gone up so high as to preclude it from being used, excepting where it is especially provided for.

The stave trade of Quebec is rapidly going away, it being impossible to compete with the staves produced at a much lower cost on the Mississippi, and shipped from New Orleans in vast quantities, being carried across the Atlantic by the steamers at donnage rates, at much below the cost at which they can be shipped by sailing vessels from the St. Lawrence.

These are the chief features of the trade of Quebec, excepting as regards pine and spruce deals. Of the latter, the stimulated production in New Brunswick has completely closed some of the mills in Canada and reduced the production of the others. But this is probably only temporary and the losses that were made on the shipments of spruce deals from New Brunswick last year has already had its effect in reducing the production this winter by from 50 to 60 per cent. and there is no doubt that our spruce forests in Canada in a few years will increase very much in value.

In pine deals the trade is healthy, and the consumption in England very large, but the production has been in excess of the demand, and the shipments on shippers' account last year were in excess of what the market could deal with in England, and the consequence was serious loss to those who consigned to England. But this is likely to remedy itself very quickly, as the production this winter will be certainly from 50 to 60 per cent. less than last year.—*Montreal Witness.*

Circular Saws.

The *Lumber World* says the Mechanics Association of Muhlhausen, in Germany, in their last annual report take a very decided ground against the use of circular saws, and advocate their abolition entirely wherever such action is possible. They base their conclusions upon the reasons that the use of circular saws involves more danger to the operators, that they require more power and waste more wood, and that their only advantage consists in a price smaller than that of band saws. The Germans use at the present day among their cabinet-makers carpenters and joiners, thirteen different varieties of saws, each of which has its own peculiar size of the teeth to each other. How important the thin saw blade is, not only as a means to save power, but also as a means to save wood, can be seen from the following. A log of walnut 4 metres long and 1 metre in diameter, cut into 20 pieces by the new horizontal saw frame saves 30 millimetres of wood when compared with the cutting of the old-fashioned vertical saws. This is equal to a profit of \$9 to \$12. For Germany, where annually 100,000 cubic metres of this wood is used in the various industries, this wood represents a saving of \$37,000 to \$50,000. The greatest enemies of saws are the particles and pieces of iron found in woods; these are often driven in some form into young trees, and succeeding growth covers them up entirely. A curious collection of such ingrown iron particles was recently exhibited in Germany. It had been obtained from America, Prussia, Germany, Spain, and other countries, and exhibited the queerest forms of wooden formation covering particles of iron of various shapes and sizes, whose presence was revealed only by a breaking of the teeth of the saw, and which without the cutting would have remained invisible to the human eye.

Ships for the Quebec Trade.

The *Liverpool Journal of Commerce* says:—An important shipping and commercial venture has been, or is being floated, in Greenock for the purpose of acquiring and sailing a number of wooden vessels in the Quebec timber trade. The capital, which has been fixed at £30,000 in 300 shares of £100 each, has been, we believe, pretty nearly subscribed, although in the meantime it is not intended to call up more than £75 or £80 per share. The name of the company is "The Clyde and St. Lawrence Shipping Co.," limited, and one of the main features of the company will be that, as a rule, insurance with underwriters will not be effected upon its ships, but the company will lay aside its own insurance funds. It only remains to be added that the promoters of the company are long established Clyde ship owners, and have had a long-extended experience in the management of ships in the lumber trade.

DANGER SIGNALS.—Reader, if you are troubled with pain, weakness, weariness and a dragging feeling in the small of the back, with thick, high colored, or bloody urine, then you have alarming signals of danger, and should resort to Burdock Blood Bitters, the grand kidney regulator and blood and cleansing tonic.

THE OTTAWA TRADE.

As is well known the lumber industry is the staple industry of this city. Anything therefore that affects the lumber interests must as a necessity interfere with the general business of Ottawa and surrounding district. Under the circumstances it is pleasing to be able to state that for the coming season the outlook is on the whole satisfactory, although the prospect is not so good as last year. There is a perceptible stagnation—at any rate the lack of that briskness which one would like to see—in all kinds of business, and, as a matter of course, it extends to the lumber industry. Beyond this the trade is in a condition at which those interested, both employer and employee, cannot well grumble. With the exception of Messrs. McLaren & Co.'s mills, which are under repairs, all the others in this district have commenced operations. The amount of work done daily is about the same as usual. In fact this is no criterion as to the state of the trade. When a mill opens it is to the interest of the employer to do as much work as possible. He has to employ the same number of hands and therefore the more labor they do the better it pays him. The only way to ascertain whether there is a curtailment of the quantity of lumber sawed, or any idea of curtailing, is to find out when the mills do not run at night or when they shut down earlier in the season than the usual time. This is the only and true indication of a lessening of the output. It is quite probable, from all appearances, that there will be less night work this year than in the past, and that several of the mills, through scarcity of logs, will have to close operations in the fall earlier than has been the case heretofore. In most instances the logs were pretty well sawn out last season, and the cut during the winter was less than it has been for some time past. This was due to two causes. The slight decline in prices and dullness of the trade caused the majority of the lumbermen not to cut so much as otherwise would be the case, thereby lessening the supply, and as a natural cause raising the price; but perhaps the most potent reason was that the winter was not at all favorable for the work, there having been too much snow, which told badly against the progress of those employed in the woods. Men are actively engaged on the drive and the first of the logs, that is of the past season's cut, are making their appearance. The wages of the men employed both on the drive and at the mills is about the same as that paid last season. As to the prices obtained for lumber they are much about the same, but few sales have been made recently. Lumbermen imagine that by holding sales back as much as possible for a higher figure they will be able to get in most cases, price equal to that of last year, but the demand will not be the same. Of course they will keep sawing and piling so as to have the article ready for the market. What is now being shipped had been disposed of some time ago, and there is every reason to believe that shipping will be proceeded with actively for some time, which will have the effect of giving plenty of space whereon to pile the new sawn lumber. A scarcity of piling ground has been felt at the Chaudiere for some time past and lumbermen have been put to additional expense in shipping it elsewhere along the banks of the Ottawa. The reduction of 10 per cent. in the rates to American and Canadian ports will also tend somewhat to increase the quantity shipped. During the winter a large quantity of lumber was sent by rail, but now that navigation has opened the whole trade will nearly go by water, the difference in price being near \$5 per car, which in the aggregate will amount to a considerable sum. A great proportion of the season's sales is expected to be large contracts, and this alone will hold prices down. Exact prices cannot as yet be quoted, and it is more than likely that quotations will be of a shifting character during the summer. Now that navigation has fully opened and the real push of the season has set in reliable figures will be obtained. It may be stated that the first shipment of the season was made from Mr. Booth's yard by Messrs. D. Murphy & Company.—*Ottawa Free Press.*

Subscribe for the CANADA LUMBERMAN.

St. John Spruce Deals.
The following letter appears in the English Timber Trades Journal:
Sir,—Permit me to draw attention to the old custom of spruce deal shippers from St. John, N. B., uniting to mark V on the 4th quality deals they export. I cannot tell how it happens that it should be ignored, unless it is to allow the merchants here a loophole to pass them along with higher qualities, which I know is often done, and I would suggest through the medium of your valuable Journal, that the St. John shippers revert to the old rule as early as possible, which will enable them to keep their name up against other ports. Yours truly,
SUFFERER.

Shipping of Great Ports.
During the course of last year 4,370 vessels entered the port of Antwerp, gauging a total 3,734,428 tons, which places Antwerp as I have already stated, at the head of European ports. In 1882 the tonnage of Havre was only 2,200,000, that of Genoa 2,250,000 and of Bilbao 317,000, owing to its iron ore exports. Among the English ports a few only exceed Antwerp. London is still the first port in the world, with a tonnage of 10,421,000 tons, and Liverpool the second, with 7,351,000 tons; Newcastle follows with 6,000,000 tons, also in excess of Antwerp, but both Hull and Glasgow are below, with respectively 1,875,000 and 2,110,000 tons. *Full Mail Gazette.*

Wood-Pulp
The new processes for the preparation of wood pulp and cellulose are multiplying the whole time. The patent of Blitz for cellulose consists in taking two parts of hydrosulphite of soda, and one gram, in proportion to six kilos of the hydro-sulphite, of vanadate of ammonia in four grams of hydro-chloric acid. The wood after being cut up by the ordinary process, is then submitted to the action of the above mixture under a pressure of three or four atmospheres, and for four to eight hours. The pulp is next ground down. It possesses some of the qualities of rag pulp and looks much like it.

The Oldest Yew Tree in England.
The oldest yew tree in England is situated in Cowhurst Churchyard. It was mentioned by Aubry, in the reign of Charles I., as then measuring 10 yards in circumference at a height of 5 ft. from the ground. It is said, on the authority of De Candolle, to be 1,450 years old. Its present circumference is about 33 ft. In 1820 this old tree was hollowed out, and a cannon ball was found in the centre. A door has been made to the inside of the tree, where there is room for seats for 12 persons.

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

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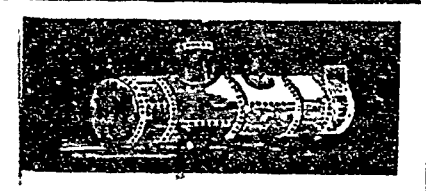
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Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number,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

The CANADA LUMBERMAN is filed at the Offices of Messrs. SAMUEL DRACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., MAY 15, 1884.

LETTERS-PATENT have been issued at Ottawa, incorporating the Pigeon River Driving Association and Improvement Company, with a capital of \$40,000.

Messrs. Sereny & Fraser are building a saw mill on a beautiful island in Lake Nipissing. It will be a very fine structure, fitted up with every modern improvement.—*Almonte Gazette.*

THE new bowl factory at Big Rapids is running two sets of hands, night and day, and averaging with one lath 42 dozen assorted sized bowls. Machinery for the manufacture of all kinds of handles, potato mashers, rolling-pins, etc., is being added.

DEAN BROS. steam pump-works Indianapolis, Ind., have furnished the Rust Owens Lumber Co., at Drummond, Wis., a system of water works, including pumping machinery, pipe and hydrants, having a capacity of one million gallons in twenty-four hours.

A COMPANY of English capitalists have taken hold of the business of the Northwest Lumbering Company, and the name of the concern is changed to the Northwest Timber Co., to suit English ideas it may be supposed. There will be no change in management, and Messrs. T. H. Carman and J. H. Bell will still be found in charge.

THE basket willow is in many sections a very profitable side crop, requiring little labor and often occupying land that would otherwise be of little value. The unpeeled willow sells readily at \$20 to \$25 per ton, while from three to six tons are grown per acre. The peeled willow is worth at the factory \$100 per ton. A machine has lately been invented for peeling willow by horse or steam power, and this great disparity in price will not long exist. This machine will give a great impetus to the manufacture of willow ware. About \$5,000,000 worth of willow has been imported into this country per year. As we can grow it profitably this importation should cease.

A PARTY from Hull or Ottawa are engaged in raising oak at the foot of Calumet. So far, they have succeeded in bringing up from the bottom of the river one hundred and twenty pieces of choice timber, principally oak and birch. Parts of rafts have sunk here from time to time, and in one place it is said the timber lies in the bottom of the river in a tier of about ten feet deep.

It has been decided to rebuild the Hudson Bay Company's steam mills recently destroyed by fire at Prince Albert, N. W. T. A gang of men is already in the woods at Edmonton getting out the necessary timber; new machinery will be ordered at once, and it is the intention to have the mill, which will combine all modern all modern improvements, in running order by the 1st of September.

A METHOD for rendering buildings fire-proof was tested in Chicago recently. The inventor claims for his design to confine the fire to the floor upon which it originated by covering the ceiling with thin sheet-iron, and placing between it and the joists three or four inches of ashes and above and around the space more ashes on which the floor is laid. The test proved all that inventor claimed for it, the joists not being damaged, although the heat was very great.

Two hours after Messrs. Caldwell had received the announcement of the decision in their case, they had telegraphed to engage men to go up the river and bring down the logs that had been stopped by the strong arm of the law. The mill at Carleton Place will soon be a scene of busy life. Perhaps no more striking illustration of the power of law could be given than the logs referred to lying along the banks of the river, held there by the invisible hand of the law. It is said that Mr. Caldwell has entered an action for \$200,000 damages. We hope a friendly settlement will be arrived at.—*Almonte Gazette.*

THE *Pembroke Observer* gives the particulars of what is certainly an extensive undertaking. The well-known lumberman, Mr. J. R. Booth, has commenced a rather extensive undertaking at Nipissing lake. As our readers are aware, Lake Nipissing enters into Georgian bay by means of the French river. Mr. Booth's limits are on Lake Nipissing, and the above fact would compel him, were things left as they are, to either take his timber to market by way of the Georgian bay, or ship it by the Canadian Pacific railway by way of Pembroke. After some consideration of the subject, Mr. Booth decided to do neither. Five miles from Lake Nipissing is Lake Nosbonsing, which connects with the Ottawa river by means of the Mattawa river. Mr. Booth determined to build a railway over these five miles, and thus get connection with the Nosbonsing lake. This extensive task he has undertaken, and when the railway is completed he will employ the steamers which run on Lake Nipissing to tow his timber across the lake, and will then load it on the cars and convey it to Nosbonsing lake, where it will be thrown into the water and floated down by the Mattawa river to Mattawa village, and from thence by the Ottawa river past Pembroke and on to market. The railway will be furnished with rails, locomotives and cars of the best description, and barges are now being built to convey them across lake Nipissing. The railway will cost about \$100,000, and is certainly a big undertaking for one man, but he believes it will pay in the end. Mr. Booth is also building a steamer and barge to be used in towing purposes on Lake Nosbonsing.

THE PROSPECTS OF THE LUMBER TRADE.

The Bay City *Lumberman's Gazette* has the following to say on this topic:—As has been previously noted the outlook for a good trade in lumber is quite favorable and unless the hot breath of politics shall exercise a withering effect upon them, there is no reason why the hopes excited by the opening activity of the season may not be realized. From every quarter comes word that building improvements in the large cities will be on an elaborate scale, necessitating a liberal consumption of stock.

It may not seem quite consistent that the depression in manufacturing industries should have a curtailing influence upon the growth of cities, but nevertheless they continue to grow and the demand for additional accommodation is imperative. Bay City is but a type of other cities and here the activity is undiminished. All the large western cities and many of the eastern are feeling the expansive impulse, and unless the midsummer political craze shall prove unusually violent, the consumption of lumber is likely to continue throughout the season of building operations. The great metropolis is adding superb to superb and the market report of the *Record and Guide* says an increased consumption of lumber has certainly become an established fact and there is a tendency to further growth. There is no doubt that in New York City and dependent points a considerable amount of stock of all kinds will be wanted. At Albany the shipments of lumber have opened active and heavy. A good attendance of buyers have been in the market, who report a lively trade at their homes. The feature at Minneapolis was an advance of \$1.00 in prices, caused by the steadiness of the demand and the bad outlook for the drives. At Chicago the yard trade is reported fair and the prospect good. The growing conviction that the tariff cannot be materially changed, if at all, this year, will tend to revive general business, and the conditions for a good trade in lumber will probably increase as the season advances.

QUEBEC CROWN LANDS REPORT

The report of the Commissioner of Crown Lands of the Province of Quebec for the fiscal year ended 30th June, 1883, presented to the Legislature of that Province last week, contains a large amount of interesting information. During the year 1882-83 202,838 acres of Crown lands were sold for \$98,764.07, and the sum of \$101,730.80 was received on account of these and previous sales. The amount collected on account of lands sold for agricultural purposes was \$72,016.33, for lands sold as mining locations, \$27,012.15, and for lands sold at special prices on account of fishing rights pertaining to them, \$2,702.32. 8,233 acres contained in one hundred lots on certain colonization roads were located as free grants. The receipts from timber dues, premiums, ground rents, interest, etc., on account of Woods and Forests amounted to \$624,748.34, which, together with the foregoing and certain other fees and deposits form the total revenue of the Department of Crown Lands amounting to \$856,872.45 for the period from 1st July, 1882, to 30th June, 1883—an increase of \$38,589.34 over the preceding fiscal year. Of the \$634,743 derived from Woods and Forests, the Upper Ottawa territory contributed more than half, namely, \$454,148—the remainder being collected in fourteen agencies. The total area under a license in the Province during 1882-3 was 43,589 square miles, of which 18,570 miles were in the Upper Ottawa territory. The total number of pine saw logs cut in the Province was 2,611,936 pieces, of which 2,043,228 pieces were cut in the Ottawa district. Of 3,656,687 cubic feet of white pine timber the Upper Ottawa furnished 3,626,844 feet, and of 381,448 cubic feet of square red pine timber 376,967 feet came from the Ottawa; with the exception of boom timber the bulk of all other kinds of wood yielding revenue was cut in the fourteen agencies outside of the Ottawa country.

The Commissioner draws attention to the fact that the revenue from Woods and Forests exceeds that of the Ontario Department, from the same source, during the corresponding period by \$222,425.20, although the comparison is hardly a fair one, inasmuch as the duty on square pine cut in the Province of Quebec is three-quarters of cent per cubic foot higher than the Ontario rate, and on saw logs about six cents greater.—*Ottawa Citizen.*

BUYING BLACK WALNUT.

Unusual quantities of black walnut lumber have been passing east from points in Ohio, Indiana, and Iowa for some weeks past says the Milwaukee *Sentinel*. The shipments have attracted much attention among lumber dealers, and it is learned that a company of English

capitalists, with whom a wealthy combination in Indianapolis is co-operating, has been for a year or more quietly getting possession of all the black walnut timber it has been possible to buy, and is now shipping it to England. The traveller on the railroad through the walnut belt sees at nearly every important station portable steam saw mills at work early and late ripping up black walnut logs into planks of convenient size for shipment.

The company has had buyers all through the states mentioned gathering up walnut trees wherever they could be found. In many cases the farmers have disposed of their trees at prices far below their value; it has only been recently that they have become aware of the scheme that is to take out of this country the most of the remaining black walnut timber in it. The consequence is that all the walnut the company now buys costs them double the price they were paying a few months ago.

"If the original forests of Ohio and Indiana were now standing," said a gentleman of observation, "their valuation would be many times more than it is to-day under improvement. In making their farms the settlers in these states destroyed millions and millions of dollars' worth of black walnut, and the destruction ceased not more than twenty years ago. In searching for timber, I visited more than one farm where miles of fence were laid with walnut rails, and the fences are not old ones at that. This was in Bartholomew county, Indiana, which, with Jennings county, contains about all the walnut forests that are left in that state. One old farmer told me that he worked almost incessantly for ten years to clear away the walnut trees on his farm, and that he burned up more than 80 acres of the finest kind of timber. His farm, after 30 years of cultivation, could not be sold for more than \$8,000. If it had its walnut trees back it would be worth \$100,000. This farmer was an old settler in the state, and only one among hundreds of others who for more than 50 years girdled and cut and burned the great forests they found occupying the land. The English company will send to England probably \$5,000,000 worth of walnut that they have purchased at almost nominal prices."—*Canadian Manufacturer.*

THUNDER BAY.

The Algoma Lumber Company are closing their business at Fort William and have sold their entire stock of lumber—estimated at half a million—to Mr. Thomas Marks. That gentleman in keeping with the enterprising spirit that he has always shown, has decided to build a planing mill of large capacity. The site for the new structure is in the V. at the south side of the approach to No. 3 Dock. The building will be 125 feet long by 60 feet in width. It will give employment to over 30 men, and will supply dressed lumber of all descriptions for the local and western markets.

The half million of lumber above referred to is chiefly dry finishing and upper grades, and will be manufactured into flooring and ceiling. It will be brought here from Fort William at once. The mill will be under the able superintendence of Mr. G. A. Priest, who favors us with these particulars. He says that the fuel which will be made through the operations of the mill, will be largely in excess of what would be required for their own power, and it has consequently been decided to provide steam power sufficient to run additional machinery which may be required by other factories which may in time be located there. The announcement of such progressive steps in this portion of the town will be greeted with satisfaction by property holders there.—*Sentinel.*

Moving Large Trees.

A Sarnia architect, Mr. Blisker, has done a notable thing in tree moving. He transplanted a handsome maple, which was one foot in diameter and 30-feet high, from one part of the town to another, hauling it by means of a capstan. It used to be thought a preposterous idea to move trees of such dimensions, but it is now found to be the easiest, quickest and cheapest of establishing shade trees in parks and boulevards. The large trees which were transplanted in Victoria Park three years ago are thriving well.—*London Free Press.*

IMPROVEMENTS IN MEN AND MACHINES.

It would be a curious study to ascertain how far the improvement in machines and in tools had kept pace with that in the skilled mechanic. One thing is certain, at the beginning of the inquiry, that a skilled mechanic is of just as much value to-day as ever. How much he has improved is a question for scientific examination rather than one for absolute statement. It would be a queer assertion that the men of fifty years ago were inferior to those of the present. All the facts of the past, as well as those of the present, show that our present mechanics are no more mechanics than those of half a century ago. All the great improvements in hand tools and machine tools for the last fifty years have come from the individual efforts of men who had done their work before the advent of machine and automatic tools. These men—these workmen and inventors—made possibilities out of suggestions, and realities out of imaginings. To them belong the realities of the present machine shop.

It would seem from this that it is not the tools and the appliances that make the workmen, but the workmen who make the tools. There are just as good mechanics to-day, with all our mechanical appliances for good work, as there were when every job required a new arrangement of tools for work. In fact, the improvement in machines presupposes the capacity of the machine makers.

And yet these improvements have their influence on the workman; the better the tool the more active the workman. There are grey headed, almost superannuated, workmen in our shops who have voluntarily discarded all their old time notions to take up with some "new fangled trick" that has been proved to be an advance toward perfection. Every improvement in tools—induced and perfected by mechanics—tends to an advance in the true mechanical improvement of the workman.—*Scientific American.*

Russian Ash.

Amongst the recent arrivals in Hull was a cargo of Russian ash, consisting of 1,311 pieces, shipped from Libau by the Wanderer. This has been imported by an inland firm largely engaged in the bobbin turning business, and is intended to be used in its own trade. It consists of ash butts, very straight, sound, and clean; and if its import grows into a trade, as we anticipate, it will seriously effect the import of Baltic birch. The advantage it possesses over birch is that it will not taint and decay in passage or in stock in this country. Beyond this, the larger logs, if white, have a market amongst cabinet makers and coach-builders. Like the English ash, it is subject to growing brown or black-hearted, but, unlike that of home growth, it is kind, soft, and tender—so much so that it is used for drawer making and other parts of furniture. In Russia itself this ash is used for door-making, office-fitting, etc.—a fact that in itself marks a wide distinction between Russian and English ash.

Demand for Birch.

The birch lumber demand has taken a new start on account of its use in the floors of skating rinks—as every smart town or village now-a-days has to have a skating rink as well as an opera house. The Whitehall, N. Y., lumber company, which deals largely in birch, has lately received orders from every direction for birch plank to be used in rinks. Thus it is that the ever varying wants and freaks of our modern civilized society develop new uses for the woods of the forests. There is no timber so mean despised to-day that may not be in urgent demand to-morrow.

A Rare Event.

It is seldom that the shipment of a cargo of lumber from Bay City to Canada can be chronicled, and it seems strange that such a shipment should be made, notwithstanding that Canada lumber often finds a market over the line. The Canadian schooner Ontonabec cleared on the 3rd inst. for Sarnia with a cargo of lumber to stock a yard at that place.—*Lumberman's Gazette.*

Friends of the Forests.

WASHINGTON, May 7.—The American Forestry Congress met this morning in the Agricultural Building. The Congress passed resolutions to the effect that it had witnessed with great satisfaction the attempt of the State of New York to preserve, protect, and regulate the sale of lumber in forests at the headwaters of the Hudson and Mohawk Rivers, and declaring legislation in this direction should be encouraged in all the States of the Union, and recommending the establishment of experimental stations and forestry commissioners by the States, and the aid of the Federal Government by appropriate legislation for the care and development of forests.

DRILLING square holes, says the *Mechanical Engineer*, used to be considered one of the impossibilities of the workshop, but some one with more ingenuity than sense contrived to do it. Turning square posts, however, is an accomplished fact, and machines for doing such work are in daily use. Square baluster posts, table legs, etc., are now produced moulded or planed in large quantities.

IT IS NATURAL.—It is natural for some people to be bilious, being often a result of peculiar bilious temperament, which with high living, too greasy food, indigestion from inactivity, is the frequent cause. The remedy above all others, is Burdock Blood Purifier. It is highly curative for all bilious complaints, and far better than physic for inactive conditions of the bowels.

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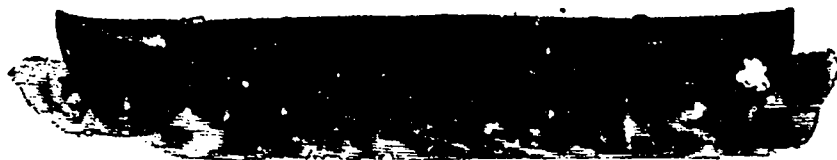
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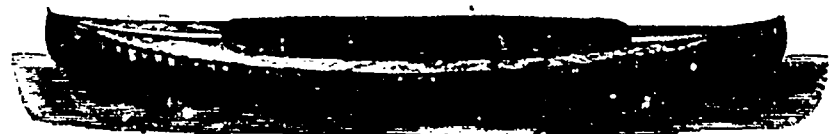
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FORESTRY.

We continue in this issue extracts from the proceedings of the winter meeting of the Fruit Growers' Association of Ontario:—

A MEMBER.—I should like to ask if any member present has any knowledge of the Catalpa.

MR. BUCKE.—It has been grown at Sarnia. It is not hardy.

MR. MCGILL.—I would like to ask the gentleman who spoke of our American cousins coming over and paying such high prices for black walnut stumps if he knew what they turned them into.

MR. ABERNETHY.—They make them into veneer.

MR. BUCKE.—They also make gun stocks out of them.

COL. MCGILL.—Not of the stumps; they are not long enough.

MR. A. M. SMITH.—A question was asked with regard to the Catalpa. At Grimby it stands the winter very well. A tree I planted there some five years ago is growing very well.

MR. GILCHRIST.—I saw a Catalpa planted in Huron this year, growing well.

MR. WRIGHT.—Along the sides of roads in our part of the country they principally plant hard maples, and some of them plant the soft maple. The soft maple does not, of course, stand the winter nearly so well as the hard maple. The basswood is grown very largely; because, when it is planted along the roadside and has a chance to spread its limbs, you would hardly recognize it from having seen it only in the forest. Some of them are to be seen in Quebec about the old English cathedral. Apart from their appearance they make excellent bee pasture, and in northern counties where we have not the same abundance of flowers that we have here, that becomes a matter of considerable importance to us. Another tree that we are planting considerably in our locality is the Red river maple. It grows very well with us. A man who was out in Manitoba four years ago brought four little trees home from there; and now you would be surprised to see the size they have grown to. Last fall he showed me some specimens already six feet high that he had grown from the seed from those Red river maples.

With reference to evergreens, the tree which we have found to do the best with us is the Norway spruce. The Canada balsam does very well, but when it grows up to a certain height the top is easily broken off by the wind. Cedars, of course, do very well with us. They make a fine wind-break and look very well too.

With reference to the way to induce people to plant trees along the high-ways, in the gardens, and so forth, I have found that the best plan of all is to set a really good example for them to follow. After having set out trees myself I have noticed that a great many have come to me and asked me how much it cost; and when they found how little it cost they have gone to work and planted trees themselves. I am a school trustee, and as such I have induced the Board to plant trees around our public school, and that has served as a good example, which has been followed by a good many people.

MR. GILCHRIST.—There was some seed of the Red river maple sent to me two years ago. It is a beautiful tree and grows very fast. The leaves have a purplish tinge.

THE PRESIDENT.—The trouble with that tree is that it does not grow to any size. It is not more than a large bush, or a small tree at any rate. For forestry purposes it would scarcely be desirable where other more valuable trees would grow. Rev. Dr. Wild is in the room, and we know that he takes a great interest in tree planting. We would like to have a word from him.

REV. DR. WILD said that as a minister he was somewhat interested in trees. He believed they were a regulator of climate, and that they were a great advantage to us in many things. He had perhaps five thousand trees. Three thousand of them were good bearing apple trees, a few hundred of them were pears, and a few hundred of them plums and peaches. Besides these he had a good grapeery. This was work enough for a minister, and a minister always lost money in farming—one could not do more than one thing at a time he supposed. He had on his farm nearly every kind of nut tree that would grow in Canada, so that he could grow

all his own nuts. He was very much interested in what this society was doing. If he ever retired from the ministry it was his great desire to turn his attention more fully to planting trees. He believed that was a thing we would have to come to in Canada. The great destruction of our forests was making a very great change in our climate. We had almost destroyed our spring and our autumn. In fact he thought that, if we continued as we were doing now, we should at length have but two seasons—that is, winter and summer. The streams were drying up too. If we could have a law which would induce farmers to plant trees along the sides of the road and other places it would make a great difference in our grains and fruits.

On his place he had a half circle of pine trees, which just left his orchard open to the sun, and there he was able to grow peaches—what none of his neighbors could do.

THE PRESIDENT.—Will Dr. Wild tell us where his place is?

DR. WILD.—It is at Bronte. I suppose my orchard is just about forty acres in extent, and yet towards the lower end of it I will suffer from the wind. The small peaches that I planted out there were killed last spring, but those up near this grove are living. The trees are small, thin ones; yet the shelter is some advantage to them. I read as carefully on anything of this kind as I do on the current ideas of theology. I thank you for your invitation. I am glad to see you, and wish you great success.

MR. PAGE.—I fully agree with the remarks of the gentlemen who have preceded me, not only with regard to the way in which tree planting may be made to beautify the country and with regard to the value of trees in respect of their timber, but also with reference to the influence which trees have, as Dr. Wild has pointed out, on the climate and rainfall of the country. I have been pleased to hear the remarks which have been made to-day on the subject, and hope that what has been said may go out through the country and stir up among the people an interest in the planting of trees.

Every man who owns the ground to put a tree upon should make it a point to plant at least one tree of some kind. We have very many native trees of importance in this country. We have no lack of trees for planting. The speakers before me either have forgotten or are not at present acquainted with the fact that our legislatures have taken measures in this last session to encourage the planting of trees.

MR. DEMERY.—In a certain section of the country I know a very nice grove or belt of trees that is growing along the roadside composed of pines, oaks, grey walnuts and some other varieties that have attained a size sufficient for saw logs; and these trees, it occurs to me, have a worse enemy than the animals that run on the highway, for the Municipal Council has offered those trees for sale. Now, the attention of our legislators should, I think, be drawn to cases of this kind. Those trees happen to stand just within the bounds of the highway, and really they are beautiful. I pass them as often as twelve times a week—sometimes more than that—and I am sorry that they should be offered for sale. I do not feel able to buy them to leave them standing—I do not know that I should be expected to do so; but I should like to see this thing prohibited if possible. Only a year ago there was a nice little belt of pines that had not got sufficiently large to make timber of, but which would make cordwood, was sold, and those trees were chopped up into cordwood and taken away. I think if our Legislature would impose a penalty of not less than ten dollars and not more than one hundred dollars, or something like that, upon any person found injuring or cutting a tree along the roadside, it might put a stop to this kind of thing. With respect to varieties to plant for profit, I do not know of any variety that occurs to me that would be so profitable as the black walnut. Some say they are tender in a great part of the country; but in our county of Prince Edward, which is certainly a severe climate, I know of one walnut tree that would make two standard saw-logs, and it has only been one generation growing. I know of another that has attained the size of one of those pillars there. I fancy that any variety of

tree that could be planted would eventually prove remunerative. The butternut, or grey walnut, grows very rapidly. We find it growing very far north, and it runs up and makes very pretty lumber. I believe it is anxiously sought for, and it takes the place largely of the black walnut. I would prefer black walnut where it will grow, and I believe it will grow over nearly the whole of our Province.

MR. WATSON.—The butternut grows well in our locality; but I have never been able to transplant it and have it live.

MR. BUCKE.—I have transplanted it when small after growing it from seed.

A MEMBER.—I have found no difficulty in transplanting it.

MR. BUCKE.—I am told there are trees of the *Acer Negundo* of a large size growing on the banks of the Don. Mr. Saunders said it was only a large shrub.

THE PRESIDENT.—Perhaps I should qualify that. They will grow probably thirty feet high.

MR. BUCKE.—They are very rapidly-growing trees.

A MEMBER.—Is there any other name for it?

MR. BUCKE.—The Red river maple or the ash-leaved maple. I think we are blaming the want of forests a good deal for the drying up of our streams, when the fact is that it is owing greatly to the swamps being cleared up.

MR. DRURY.—I am sorry I did not have this meeting furnished with a copy of Mr. Wood's Act with reference to the planting of trees. If the late President of this Association had seen it he would have observed that the difficulty he speaks of has been overcome by a clause in the Act. Any man injuring a tree—even the Municipal Council—can now be proceeded against and fined. We have talked a good deal about tree planting in the past; but it is with this as it is with other things—unless you have a little money to make it go it will not go. The Act provides that the trees be set thirty feet apart. An expenditure of \$500 by a Municipal Council will plant 5,000 trees, and those planted thirty feet apart will extend for a distance of thirty miles, so that by the expenditure of \$500 you can have a beautiful avenue of 15 miles of trees. I have seen it once in my life—I forget just where—miles and miles of highway planted systematically just as this Act contemplates that trees should be planted. I have no doubt that there are here to-day gentlemen of influence in the various municipalities; there may be, and doubtless are, some who are representative men, and I do hope and sincerely believe that before another year has passed around, action will be taken in many municipalities to secure the carrying out of the aims and purposes of the Act which has lately been passed by the Legislature. I am quite satisfied that if it is found to be a success in one municipality, the people all over the province will speedily demand that their municipality go into tree planting also; and that if they do, the value of their property will thereby be enhanced many millions of dollars in the estimation of those who are able to judge as to what gives value to a country.

MR. LESTER.—There has been an Ontario Act for several years protecting trees planted upon public highways. It gives the people the right of property in those trees, and those who plant them cannot remove them, and no council can remove them, without giving something like two months' notice. In the present Act there is just one thing I would like to see altered, and that is with regard to trees planted along the boundary lines between farms. The distance now from the boundary line is six feet, and a man planting six feet six inches from the boundary line would get nothing. And if a man planted two rows of trees he would get nothing for the second row.

MR. DRURY.—That was to prevent the road being kept too wet.

MR. SLIGHT.—I have often been pained to see the way in which the telegraph companies deal with trees, and I never was more so than one time that I was driving near Barrie. There was a beautiful belt of pines there, which I much admired, but the telegraph companies have come along there and utterly destroyed it in a disgraceful way. They might have taken

cut branches which would interfere with their wires; but instead of that they have gone and completely destroyed trees without any necessity. I would make this motion:—

MR. SLIGHT moved, seconded by MR. PAGE, "That the Fruit Growers' Association protest strongly against the reckless way in which the telegraph companies unnecessarily destroy trees on streets in towns and on the country roads; and that we would ask them to exercise all possible care in cutting off branches of trees, and that a copy of this resolution be sent by the Secretary to the telegraph companies, and that the Dominion Government be memorialized on behalf of the resolution." This was carried.

MR. HORKINS.—I wish Mr. Slight would insert in that resolution a request to the Municipal Councils, that they pass by-laws preventing cattle running on the road side. If this is not done there is little use in our planting trees.

MR. ROY.—I hope the time is not far distant when fences will be done away with universally. I was down in the Eastern States this summer, and I saw miles and miles with it a fence at all. There were strawberry beds and beds of various vegetables along the side of the roads, without any fence to protect them, and no harm came to them.

THE PRESIDENT.—I believe the telegraph companies operate under their charters, which are obtained from the Dominion Government, and it might be well for this Association to memorialize the Dominion Government on the subject. I suppose that a Dominion Act will over-ride any Provincial Act, and I do not suppose that we have power to interfere with the telegraph companies legally.

MR. BRALL.—I would like to remove the impression, which it seems to me is an erroneous one, respecting the effects of the roadside planting of trees upon the road itself. The idea generally prevails that if trees are planted along the roadside, they will keep the road muddy longer than they would otherwise remain so, especially when the trees get up so that they will shade the road. Now, I believe it is proved beyond any doubt by the highest scientific authority we have, that the trees so planted actually dry the road by absorbing the moisture from below them. There are many instances on record of swamps having been dried up by the action of trees. There is one instance of a lake three feet deep having been entirely drained by means of trees which immediately surrounded it.

MR. RESSOR.—I think that trees dry the road in dry weather, but not in wet weather. How does Mr. Brall account for this fact, that when you are driving through the woods you will come on a foot of snow in it, while outside the dust will be flying?

MR. BRALL.—I am not speaking of the inside of a bush. Mr. Ressor knows very well that the wind is the principal cause of evaporation, and that where the wind can have full sweep upon a roadway, the result will be just what I have stated. In the woods it is different. There the wind has no chance whatever to dry up the moisture.

New Kiln.

The new kiln to burn the refuse from Mr. R. C. Smith's saw mill south of the river is up to its full height, 125 feet, and the brick lining is being put in. The structure viewed from a distance, bears a remarkable resemblance to a huge round bottle, to which it would be almost exactly similar if it had a rim at the top. The work of erecting it has been watched with interest by our villagers, some of whom have toiled up the ladders reaching from platform to platform on the inside, and been well rewarded for their trouble by the splendid view they obtained of the surrounding country. The iron plates of which the kiln is constructed being all numbered, it is a simple though laborious job to put them together; but the men who worked on the outside needed steady brains, as they stood in a sort of bucket hung by iron hooks to the edges of the top plates. The expense of getting rid of the rubbish from saw mills is a very serious one, and it is to be hoped that the kiln now nearly completed will prove able to withstand for several years the

tremendous heat generated within. We saw it stated a while ago that some person had patented a process by which gas of a superior quality, and at very much less than the present price, could be obtained from saw dust mixed with tar and some cheap chemicals; and if this discovery proves bona fide and genuine it will be a good thing not only for the owners of saw mills, but for the residents of places just big enough to have mills but not big enough to support ordinary gas works.—*Fenelon Falls Gazette.*

A Gigantic Mast.

A Naples correspondent writes:—A magnificent mast has been sent from Verona to the Agricultural Department of the Turin Exhibition. The tree grew in the woods of Cadore, and five other majestic pines had to be hewn down and cut to pieces before the one destined for the mast could be removed. When the lower branches had been cut off, this fine tree-trunk was divided into two pieces, the bottom part measuring more than 120 ft., and the top part, still adorned with its green branches, 18 ft. The weight of the tree, after being thus prepared, was 41 cwt. On examining the base it was found that that part was 205 years old, while the summit was only 63 years old. The mast was dragged from the forest to the station on two waggons, drawn by eight horses, and the whole of it took up seven railway trucks. Three days were employed in the transport by rail, as the special train could only travel by daylight, proceeded very slowly on account of the curves, and had to stop continually, not being able to pass another train. The mast is slender in comparison to its height, being 65 centimetres at the base and 15 at the summit. The stem preserves an equal width up to the height of about 90 ft., after which it diminishes rapidly. Including the expenses of transport, the mast will cost more than £50 sterling.

Preserving Wood.

Cresoted wood has been found less destructible by fire than the unprepared wood. Recently a building constructed of pine and spruce in their natural state, was burnt, and nothing was left but the sills, which were made of cresoted pine. They were charred, but they retained their form and a certain amount of strength. Another striking case was that of a derrick forty feet high with a forty-foot boom made of cresoted pine standing on an untreated pine base; the latter was burned to ashes, but the mast and boom, although charred all over, had forty-five feet of their length still good for future use. Cresoted wood can be easily extinguished with water when on fire. Wood can also be preserved from decay by exhausting the air from the pores and filling them with a gutta-percha solution. This process effectually preserves the wood from moisture, water and the action of the sun. The solution is made by mixing two-thirds of gutta-percha to one-third of paraffin. This mixture is then heated to liquify the gutta-percha, when it is readily introduced into the pores of the wood. The gutta-percha hardens in the pores when it becomes cool.

Building Inspectors.

Building inspectors are being appointed in every well regulated city in the United States, and Bay City has seen fit not to be dissimilar in this respect. A board of building inspectors was recently appointed by the city council, and hotels, business blocks and public buildings are being subjected to a rigid inspection. This is as it should be, because of the assurance it gives that the modes of egress in case of fire are sufficient, and that the building is safe in other respects.—*Lumberman's Gazette.*

To Make Wood Last.

A writer in a contemporary journal says: "I discovered, many years ago, that wood could be made to last longer than iron in the ground, but thought the process so simple that it was not well to make a stir about it. Posts of any wood can be prepared for less than two cents apiece. This is the recipe: Take boiled linseed oil and stir it in pulverised coal to the consistency of paint. Put a coat of this over the timber, and there is not a man that will live to see it rot."

Chips.

THREE years ago the lumber saw mills in Arkansas was 349, now it is asserted there are over \$1,200.

ONE thousand shingles will cover one hundred square feet of surface, laid four inches to the weather; for the above, about five pounds of nails will be required.

THERE are 13,000,000 feet of logs, the property of the Winnipeg Lumbering Company, lying at Crookston, ready to be floated down the Red River. They will reach Winnipeg about the end of May.

DURING the months of February and March the exports of lumber and timber from Charleston, S. C., were reported as follows: Foreign—Valencia, 500,000 feet; St. John, N. B., 101,000; Bremen, 20,000. Coastwise—New York, 3,020,394; Boston, 250,000; Philadelphia, 660,000; Baltimore, 616,000; total 4,967,394.

PORT ARTHUR, the present Lake Superior terminus of the Canadian Pacific railroad, now has eight substantial docks, ranging from 400 to 1,000 feet in length. Among them is that of Watt, Moore & Van Dusen, a lumber firm, 475 feet long. On this dock is a shelter shed for lumber, which is cut at Lyon's Head, Georgian Bay.

It has been decided to build the Hudson Bay Company's steam mills which were recently destroyed by fire, at Prince Albert. Men are already at work getting out the necessary timbers. New machinery will be ordered at once. It is the intention to have the mill, which will combine all modern improvements in running order by the 1st of September.

CALIFORNIA has a building boom in common with the other portions of the country. Never were indications for a grand building season more pronounced, says a San Francisco journal, than they are at the present time. Up April 10 building and improvements to the value of \$2,000,000 had been begun. This is greater than the entire amount expended in 1880.

C. VAUGHN, surveyor, of Selkirk, Man., has made the discovery of a quarry of very excellent building stone at Sawyer's bay, on the north shore of Lake Superior. The rock is very hard and can be worked with ease, and there are vast quantities in the neighborhood. Eastern owners propose to work the ledges. The quarry stone industry of Lake Superior is growing to great proportions.

THE Caldwell mill, at Charlton Place, near Ottawa, Canada, will begin operations immediately. It would remain idle were it not for the late decision in the McLaren-Caldwell case. The Caldwell has had over 60,000 logs above Peter McLaren's improvements, which had been detained for two or three years, pending the final decision of the courts. Now the logs will be allowed to come down.

In order to ascertain if logs could be floated or rafted from Pitt River, Shasta County, to the Bay City, says the San Francisco *Chronicle* of April 15th, a man named Dock Kennedy was sent out last Friday on a pine log to undertake the novel trip. The log was 24 feet in length and four feet in diameter. Kennedy was clad in water-proof clothing and supplied with plenty of food, which he carried in a knapsack. He made the trip, some 350 miles, on his roomy log in four days.

THE Winnipeg & Hudson's Bay Railway & Steamship Company has been formed, the object of which is set forth as follows: The bill creating this corporation authorizes it to build a standard gauge railway from Winnipeg or some other point at or near Selkirk, on the Red river, or on the line of the Canadian Pacific railway, west of the town of Selkirk, and east of Portage la Prairie, Manitoba, to Port Nelson, or some other point on the shores of Hudson's Bay, in the Keewatin territory, either in a continuous line, or by utilizing the navigable waters along or near the said route for the purpose of transport, and to own steam or other vessels for the purpose of transport from the terminus of the said railway to Europe or elsewhere, and to construct a branch to a point on the Canadian Pacific Railway, west of Lake Winnipegosis, and also to build the railway in sections of 50 miles each.

How to Measure Trees.

Woods and Forests (English) says:—"Any person, however ill-informed, might easily get at the exact height of a tree when the sun shines, or during bright moonlight, by marking two lines on the ground, three feet apart, and then placing in the ground on the line nearest to the sun a stick that shall stand exactly three feet out of the soil. When the end of the shadow of the stick exactly touches the furthest line, then also the shadow of the tree will be exactly in length the same measurement as its height. Of course, in such a case, the sun will be at an exact angle of 45 degrees. Measurements of this character could be best effected in the summer, when the sun is powerful, has reached to a height in the heavens and when the trees are clothed with living green so as to cast a dense shadow. To many to whom this idea may not have occurred, it might be made annually a matter of interest thus on warm summer days to take the height of prominent trees, and so to compare growth from year to year."

Railway Ties.

An exchange says:—"Railway construction is bound to go on until it reaches a limit at which it ceases to be profitable. The consumption of ties will increase at a corresponding rate, while the question of future supply will become more serious and pressing as the cost increases and our native forests become thinned. It is pretty certain that wooden ties will not be discarded until our timber resources are far less abundant than they are now, or until some other material as cheap and as serviceable is substituted for wood. It is not likely, however, that any such material will be found, but it is more than probable that the durable properties of the wood, especially the soft and porous kind that is not now available for ties, will in time be very much increased by some of the preservative methods that have already proved very effective so far as they have been tried. But these methods are not likely to be used very extensively in this country until the cost of ordinary ties is considerably more than it is now."

The Angry Tree.

A specimen of the angry tree, indigenous to Australia, is growing upon a farm in Nevada, and is now eight feet high. When the sun sets its leaves fold together, and the ends of the tender twigs coil up like a pigtail. If the twigs are handled the leaves move uneasily for a minute or more. A singular thing concerning the tree was its apparent resentment on being removed from a pot in which it had matured into a much larger pot. Hardly had it been placed in its new quarters before the leaves began to stand up in all directions, like the hair on the tail of an angry cat, and soon the whole plant was in quiver. At the same time it gave out an odor most pungent and sickening, resembling the odor given off by rattlesnakes and other kinds of snakes when tasted. So strong and offensive was the smell that it had to be removed from the house for several days.

Alleged Destruction of a Plantation.

A large number of trees on the Mount Gabriel plantation, near Schull, in the county of Cork, have recently been discovered hewn to the ground. The plantation is owned by the Rev. Thomas Nash Hicks, of Torquay, who has also considerable other property in the district, the agent being Mr. Downes, solicitor, of Skibberreen. About three years ago, when Mr. Hicks brought ejection processes against some of his tenants, the same plantation was set on fire and the underwood destroyed. A heavy claim for compensation has been lodged against the district.

The "Great Eastern."

Arrangements are in progress to begin work upon this vessel very shortly to fit her for her new career of usefulness in Gibraltar Bay as a coal hulk. Permission for her anchorage has been obtained from the Colonial office. The project is viewed also with favor by the admiralty, as the Great Eastern will effect a great improvement in the bay, by dispensing with the multitude of small coal hulks which now encumber the harbor.

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Market Reports.

MONTREAL.

From Our Own Correspondent.

MAY 9.—As usual at the beginning of this month trade has been pretty lively, prices are holding out, and we can make no change in our quotations, but as new lath are coming in and stocks getting more plentiful we have reduced prices to two dollars. Large quantities of lumber is shipping from Ottawa and dry lumber is hard to obtain, and lots are readily picked up at full price. We quote prices as follows ex yard—

Table listing lumber prices for Montreal, including Pine, Spruce, Hemlock, and various shingles.

CORDWOOD.

Cordwood is coming in pretty freely and there is plenty on the wharves, and imports both by boats and G. T. R. are large, prospects are good for a full supply, prices, however, are firm as under, but the demand is slow. We quote ex cartage at the wharves as follows:

Table listing cordwood prices for Long Maple, Long Birch, Long Beech, and Tamarack.

SHIPPING.

Although the shipping trade has commenced we have not much animation to report, but shipping lumber is arriving freely and engagements by steamship have been made for Liverpool at 60s. per M. Of course there is nothing done as yet for South America.

TORONTO.

From Our Own Correspondent.

MAY 10.—Sales by car load and from the yards continue brisk although it is doubtful if any of the dealers are making much money, as there is far too much cutting in prices to warrant any great amount of profits; retail dealers cannot draw to their yards, sort up, and pile, and then deliver out again for less than \$2.50 per M., especially when they have to provide against more or less bad debts, whereas their margin for all this labor and risks is in many cases not more than \$1.50 per M. Such profits will not pay, and the weaker ones must ultimately go the wall. It is the same to a greater or lesser extent with the wholesale men. One firm in this city doing the largest business now being done here, are cutting on prices at a fearful rate, it may be that they have bought cheaper than other dealers, certain it is that other dealers cannot sell at the prices quoted by them without coming out behind. It is the old story over again, no concerted action between lumbermen, but each one going his own gait, and some dealers seem to act as though it was much better to dispose of 2,000,000 feet and make only \$1,000 than to handle 1,000,000 feet and make the same sum. Well, all I have to say in the matter is such men ought to have all such trade until they have their fill.

There has been considerable lumber shipped over the dock since my last letter, something like 4,000,000 feet, mostly for Oswego, has been sent away during the last two weeks, and several vessels are now at the docks loading.

Your readers will, doubtless, have noticed through the daily papers that Mr. Robt. Kerr has accepted a position as freight agent on the Canada Pacific railroad, and will leave here for Winnipeg about the 1st of June. There will be any amount of dry eyes amongst the lumbermen here, and, by a parity of reasoning, correspondingly wet ones at Winnipeg. Although it is only fair to that gentleman to say that no matter who takes his position here, it will be difficult for him to give satisfaction while the road is under its present management, with a legal man at the helm and a board composed mostly of merchants, either retired or at present in business, and the road depending on the lumber traffic for its earnings, what can

Table listing lumber prices for Montreal, including Mill cull boards, Shipping cull boards, Scantling and joist, and various shingles.

WINNIPEG.

The Winnipeg Commercial of May 6th says: This business is in anything but a satisfactory state at present. While the demand for goods is steadily on the increase, and a fair season's trade may be expected, a safe basis of doing business may not be reached during the summer. So many of our large lumber concerns are in straightened circumstances, and a compulsion to realize during the present year that prices are cut pretty much as the eagerness for money dictates. To reach reliable quotations it is feared will be impossible during the summer, as slaughtering seems to be the rule, and this is made worse by the fact that American manufacturers are also prepared to deluge this market with goods at ruinously low prices.

Table listing lumber prices for Winnipeg, including Pine lumber, Sheathing, Dimension and joists, and various shingles.

CHICAGO.

The Northwestern Lumberman of May 10, says:—The port list for the week ended Wednesday showed 193 arrivals of lumber and shingles. For the weeks ended May 3 and May 12 last year the arrivals numbered 70 and 124 respectively. So it will be seen that the current arrivals this year are considerably in excess of those of a corresponding time last year. In one respect, also, there is a difference between the two springs in the nature of receipts.

This year lumber is being bought more freely at the mills, and it is nearly all dry. Such lumber does not stop at the docks, but is passing up the branches in large volume, to the yards. Last year this feature though somewhat prevalent, was less marked than now. The north side yards last spring absorbed relatively more of the early cargoes than they are now taking, though they are receiving their proper share. The greater cry this spring from the Twenty-second street yards is for dry lumber, and it is mostly purchased either over the lake at the mills, or of the commission men here to arrive. Some green lumber comes to the docks as a test of the market, but it drags heavily. Indifferent cargoes of piece stuff, boards and strips are neglected. Buyers want a square deal on dry

lumber mostly, for instant harding; they will attend to green lumber later on. Nearly every day this week there has been a good fleet of cargoes at the docks, the majority of which has been shingles and green piece stuff. Scattering cargoes of mixed dimension boards and strips, and others altogether inch lumber or dimension, some dry and some green, have also been offered and worked off. The market has been considered fairly active on all but shingles, though transactions in lumber to arrive take the lead, and they call for dry stock.

Receipts of lumber, shingles, etc., for week ending May 8, as reported by the Lumberman's Exchange:—

Table showing receipts and stock on hand for Montreal, including Lumber, Shingles, and various grades.

ALBANY.

Table listing lumber prices for Albany, including Pine, Spruce, Hemlock, and various shingles.

OSWEGO, N. Y.

Prices remain steady, receipts have been very light since the opening and trade very dull. Three uppers, Fine, common, Common, Culls, Mill run lots, Sliding, selected, 1 inch, 1 1/2 inch, Mill run, 1x10, 12 inch, selected, Shippers, 1 and 1 1/2 inch mill run, 1x6 selected for clabboards, Shingles, XXX, 19 inch, pine, XXX, 19 inch, cedar, XX shingles, Lath, Lath, spruce.

BOSTON.

Cotton, Wood and Iron of May 19, says:—The inquiry is quite fair and is improving, but the weather is still a depressing element in the market. The amount of building is to be large this season, but it does not open up as rapidly as with milder weather. Desirable lumber is not in excessive supply here, but of trashy calls there is a superabundance. Orders for pine are coming in only moderately as yet. Yellow pine continues to move slowly at low prices. Orders for spruce can be taken, but it is almost impossible to place them, as many of the mills are shut down. As to hardwoods, good walnut sells freely at firm prices.

Whitewood is selling quite well. Cherry is in steady request. Wide ash boards are in good demand. Considerable also has been doing in oak.

CANADA PINE.

Table listing prices for Canada Pine, including Selects, Dressed, Sholving, Dressed, 1st and 2nd, Dressed Shippers, Dressed Box, and Sheathing, 1st quality.

TONAWANDA.

Table listing prices for TONAWANDA CARGO LOTS—MICHIGAN INSPECTION, including Three uppers, Common, and Culls.

BUFFALO.

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

TYNE.

The Timber Trades Journal of April 26th, says:—The arrivals of the past seven days have been only small, and consist mainly of pine in bulk. Amongst the list will be noticed one cargo of timber from Danzig, one cargo Memel deals, and a cargo from Oxelosund, together with three steamer cargoes from Norway and Gothenburg, with assorted cargoes deals, planed boards, and pitwood. With the early opening of the navigation from the Baltic it will not be long before several ships from the lower ports and steamers from Sundswall and adjacent ports will be due. Stocks of deals here are very low, more especially of the higher qualities, of which there is an absolute scarcity. The stocks of American goods and pitwood are still very high and prices stationary. In all descriptions of wood goods the demand is but feeble, and the outlook for the season is not at all bright or cheerful. As a rule saw-mills are fairly well employed except those on the river, principally employed in the shipbuilding trade, and these are at the moment doing little or nothing.

LONDON.

The Timber Trades Journal of April 26 says:—The bright dry weather of which we are experiencing such a lengthened spell, though cold, is very suitable for outdoor work, and building operations must be tolerably active just now in consequence; so that we may look for some stir in the trade pretty soon. The absence of heavy unreserved sales of timber, &c., at the "Baltic," also should come to the assistance of the market, and might be expected to afford the dealers, who are now the principal holders of stock here, a fair chance of selling their stuff at somewhat better prices.

The long-expected advance in values, which we have been looking from day to day to manifest itself at the public sales, has not arrived yet apparently, as we could trace no marked symptoms of that nature at the sale this week, and we fear if the improvement does not show itself before long, the fresh arrived goods, now soon to come forward, will make the upward movement still less likely.

Freights still seem going further to the bad, and the 22s. we have recently recorded from the Swedish lower ports is not so readily forthcoming as it was, and it is anticipated that the 20s. which charterers are said to be offering will have to be accepted, so plentiful are steamers now in the market.

In fact, it appears as if tonnage rates will eventually have no recognized scale to go by, and it will just be, get what you can.

The Shipping Bill of the President of the Board of Trade—which by the by, is very unlikely to become law—will have had one good, viz., in stopping shipbuilding, and thus preventing the immense overgrowth of tonnage in the market which has been going on continuously for several years past, and to which in a great measure the wretchedly low freights of the last year or so are entirely attributable.

At present the chances are against making a profitable voyage, but not all vessels will lose money at the present low rate of remuneration. A small freight will sometimes pay with a fortunate run and no accident.

Steamers were shy of the deal trade for a long time, but now appear to prefer it to any other freight. It is loaded and discharged quickly, that is one advantage, and it is also a very clean cargo, which is another recommendation in its favor.

The recent year to those who charter early will be seen one of the most favorable in respect to the cost goods will stand them in on this side, and the fact of tonnage being so low from the White Sea will create quite a revolution in the prices of deals from that direction, especially of the common sorts, and may be expected to bring such goods more into direct competition with the Swedish and Russian deals of similar class.

LIVERPOOL.

The *Timber Trades Journal* of April 26, says: Business continues very quiet in the country, and complaints are still made of the want of life and animation in the manufacturing districts. In spite of these reports there is, however, a fair amount of stuff going into consumption, but the prices are all in favor of the consumer.

The import is still light especially in spruce deals; the demand, however is correspondingly small, and little impression is made upon the stocks, which are too heavy, seeing that with the present low rates of freight and the quantity of steam tonnage available we may have an increased import at any moment.

Freights continue very low, especially in the pitch pine ports, where we hear vessels have been chartered at 32s. per load, Pensacola to Liverpool. From Quebec to this port freights have been engaged at 24s. per load, which are now the current rates.

The announcement is made that the old firm of Henry Sharples, Son, & Co. has been dissolved and reconstituted by Mr. William and Mr. John Sharples, who will carry on the business at Quebec, under the style of W. & J. Sharples.

TIMBER SALES.

On April 25th Messrs. Farnworth & Jardine sold part of the cargo per Mermoid, from Quebec, which vessel was wrecked on the coast during the past winter. A portion of the cargo was salvaged and brought on here, and this was sold without reserve, on account of whom it may concern. The timber being in fair condition sold at what may be considered good prices.

Quebec waney board pine—		
14 to 18 ft. by 25 to 29 in.	24d.	per ft.
14 " 18 " " 25 " 29 "	22d.	"
12 " 20 " " 21 " 23 "	20d.	"
13 " 27 " " 20 " 24 "	19d.	"
15 " 24 " " 25 " 29 "	22d.	"
14 " 25 " " 26 " 29 "	23d.	"
12 " 29 " " 22 " 29 "	27d.	"
12 " 27 " " 20 " 24 "	24d.	"
13 " 32 " " 25 " 29 "	25d.	"
15 " 27 " " 16 " 21 "	21d.	"
15 " 23 " " 20 " 24 "	23d.	"
12 " 29 " " 20 " 24 "	19d.	"
13 " 24 " " 25 " 29 "	23d.	"
13 " 25 " " 20 " 23 "	23d.	"
13 " 24 " " 18 " 21 "	21d.	"
Square timber AA rank—		
23 to 43 ft. 16 to 19 in.	29d.	"
22 " 41 " 15 to 17 "	27d.	"
18 " 43 " 14 " 15 "	23jd.	"
25 " 44 " 13 " 15 "	25d.	"
24 " 44 " 13 " 15 "	23d.	"
No mark—		
15 to 48 ft. 10 to 25 in.	15d.	"
Red pine—		
19 to 27 ft. 10 to 14 "	13jd.	"
Oak—		
26 to 43 ft. 12 to 22 in.	30d.	"
Pine deals, 2nd quality—		
9 to 13 ft. 3x7 to 21 in.	£14 10s.	per std.
Pine deals, 4th quality—		
9 to 16 ft. 3x7 to 19 in.	£5 15s.	"
Spruce deals, 1st quality—		
9 to 14 ft. 2x7 to 11 in.	£7 10s.	"
Spruce deals, 2nd quality—		
9 to 16 ft. 2x7 to 11 in.	£5 15s.	"
Spruce deals, 3rd quality—		
9 to 16 ft. 2x6 to 11 in.	£4 15s.	"
Pine deal ends, 4th quality—		
6 to 8 ft. 3x11 in.	£5 10s.	"

LIST OF PATENTS.

The following list of patents upon improvements in wood-working machinery, granted by the United States Patent Office, April 29, 1884, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of Amer-

ican and foreign patents, No. 617 Seventh St., N. W., Washington, D. C. —
 297,922.—Box-making machine—J. S. Gibbs, Bridgeport, Conn., assignor to U. S. Box-Machine Co., New York, N. Y.
 297,894.—Latho dog—O. D. Warfield, Chicopee Falls, Mass., assignor to O. H. Wood, Province, R. I., & E. E. Holton, Chicopee Falls.
 297,635.—Latho, turning—J. B. Romans, Nashville, Tenn.
 297,607.—Lubricator—M. S. Cabell, Quincy, Ill.
 297,616.—Lubricator—M. McMullin, Denver, Col.
 297,622.—Lubricator—T. Nel, Paris, France.
 297,535.—Mechanical power—W. S. Gray, May, Texas.
 297,810.—Saw—J. Lodward, Westerly, R. I.
 297,841.—Saw, drag—J. R. Payne, Freedom, Ind.
 297,558.—Saw-frame, drag—M. Beck & A. McReory, Excelsior Springs, Mo.
 297,566.—Saw sharpening machine—L. Bush, Jr., Assignor to American Machinery Co. Chicago, Ill.
 297,698.—Saw-sawage—S. Kinnoy, San Francisco, Cal.
 297,559.—Saw-swaging device—B. F. Bridges, Big Rapids, Mich.
 297,766.—Saw-tooth, insertible diamond—E. Foerester, New York, N. Y.
 297,568.—Wood, composition for staining and preserving—S. Cabot, jr., Boston, Mass.
 PATENTS ISSUED MAY 6.

298,207.—Bearing for shafts, etc.—S. J. Howell, Melrose, Mass.
 298,120.—Belt fastener—J. A. Roberts, assignor of one-half to W. M. Dwight, Detroit, Mich.
 297,291.—Belt gearing for machinery—J. H. Cromie, assignor to M. A. & C. A. Furbush, Philadelphia, Pa.
 298,232.—Belt-holder, machine—W. R. Sattley, Wellington, Ohio.
 298,015.—Chuck, latho—W. A. Montgomery, Cleveland, Ohio.
 298,300.—Flooring—D. Ham, Iowa City, Iowa.
 297,967.—Latho rest—S. H. Brown, Ramo, N. Y.
 298,269.—Planing machines, tool oscillating device for—J. Angus Lambeth, county of Surrey, England.
 298,115.—Saw—H. W. Peace, assignor to H. W. Peace Co., Brooklyn, N. Y.
 298,293.—Saw guard—W. H. Dalby, assignor of three-fourths to A. Medsker and C. E. Clark, Indianapolis, Ind.
 10,171.—Saw-mill circular (reissue)—W. J. F. Liddell, Charlotte, N. C.
 298,195.—Saw mill feed mechanism—E. T. Gardner, assignor of one-half to J. H. Odom, Rocky Mount, N. C.
 298,225.—Vice, bench—W. H. Northall, assignor to C. S. Loet, Bridgeport, Conn.

BUCKHORN.

From Our Own Correspondent.

THE LOCKS.—Mr. Goodwin is pushing ahead with the construction of the locks here. They commenced last week to lay the sills. In or about six months there will be a marked difference in the looks of things. To push ahead is his motto.

SAW MILL.—Mr. W. H. Hall is having great improvements made in his saw mill, by getting it overhauled from the very foundation. He has placed in it a Balkan Turbine wheel manufactured at Port Perry, and a large circular saw. This mill has been in decay for years. Since the Trent Valley Canal has commenced it has made things lively in this mill, and, in fact, has done good to the whole village. There is not an empty house to be seen and everyone is prospering.

TO SAW TOUGH LUMBER.

All tough timber, when the logs are being sawed into lumber of any kind, whether scantling, boards or planks, will spring badly when a log is sawed in the usual manner, by commencing on one side and working toward the other. In order to avoid this it is only necessary to saw off a slab or plank, alternately, from each side, finishing in the middle of the log. We

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will suppose, for example, that a log of tough timber is to be sawn into timber of a uniform size. Let the sawing be done by working from one side of the log toward the other, and the ends of the scantling will all be of the desired size, while at the middle some of them will measure one inch broader than at the ends. After the log has been spotted, saw off a slab from one side; then move the log over and cut a similar slab from the opposite side. Let calculations be made by measuring before the second is cut off, so that there be just so many cuts, no more and no less, allowing for the kerf of every cut. If the log is to be cut into three-inch scantling, for example, saw a three-inch plank from each side, until there is a piece six and a quarter inches left at the middle. The kerf of the saw will remove about one-fourth of an inch. When a timber log is sawed in this way, the cuts will be of a uniform thickness from end to end. Now turn the log down and saw the cuts the other way in the same manner, and the scantling will not only be straight but of a uniform size from end to the other, if the saw be started correctly.—*Sinc's Lumberman's Form Book.*

Model Work and Pay.

In the recently published report of the Ontario Agricultural College and Experimental Farm, there is an item of \$4,000.42 paid for students' wages. This is an equivalent of 20 first-class farm laborers, counting wages at \$200 a year. Add to this the 10 regular farm and garden hands, who, let us suppose, are first class men getting \$200 a year—\$2,000. There to should also be added the wages of the foreman of the farm, garden and mechanical departments, as required by the estimates for 1884, \$1,000 each—\$3,000, and also the wages of superintendent, say \$1,000. This makes a gross total of \$10,000 paid out for the ordinary work of these departments. This sum is equivalent to 50 men at \$200 a year, or about 10 hands for every 100 acres of the farm. If men can be hired for \$180 a year, the number would be 55 in place of 50. This does not include extra help in summer, or labor expended on experiments or in the arboretum. However, let us credit a few hundred (or a few thousand?) dollars for instruction by the foremen, and for any extra factory work not usually performed by the ordinary farmer. It is also necessary to bear in mind that the facilities enjoyed by the Farm in the way of water privileges and agricultural implements and machinery are far superior to those of the average farmer.

The profits on the \$25,000 voted by Government for a fresh importation of live stock will be inadequate to maintain this equipage and keep up the reputation of the Farm. How would it do for the farmers to have the management to make the best use of the means they have before they get any more?—*Farmers' Advocate.*

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 And every species of diseases arising from
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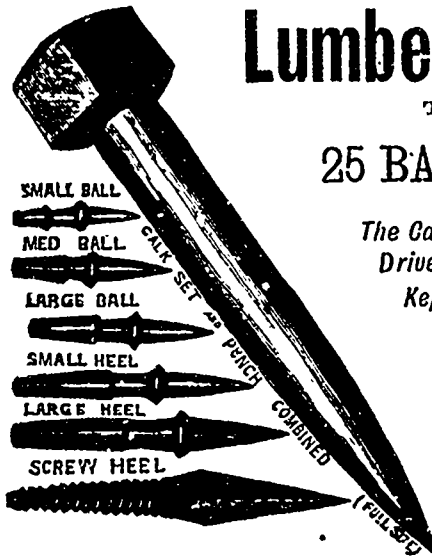
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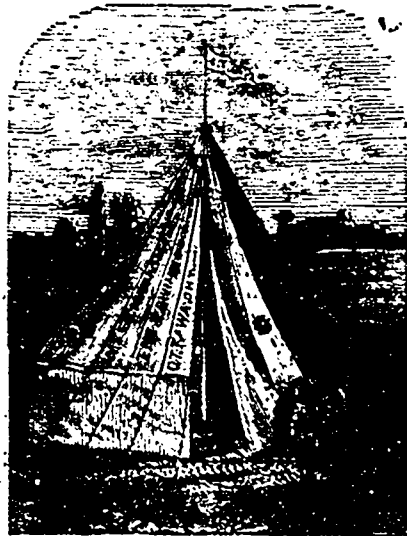
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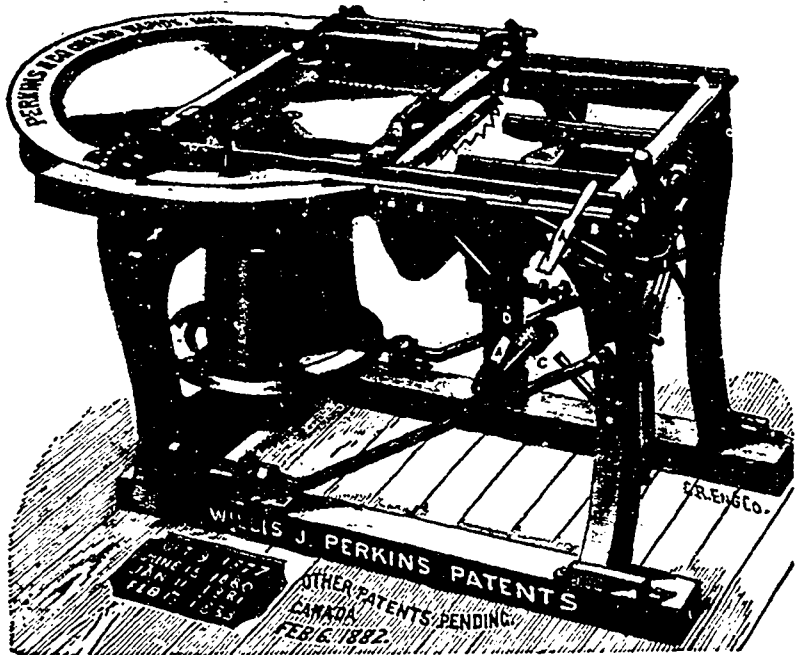
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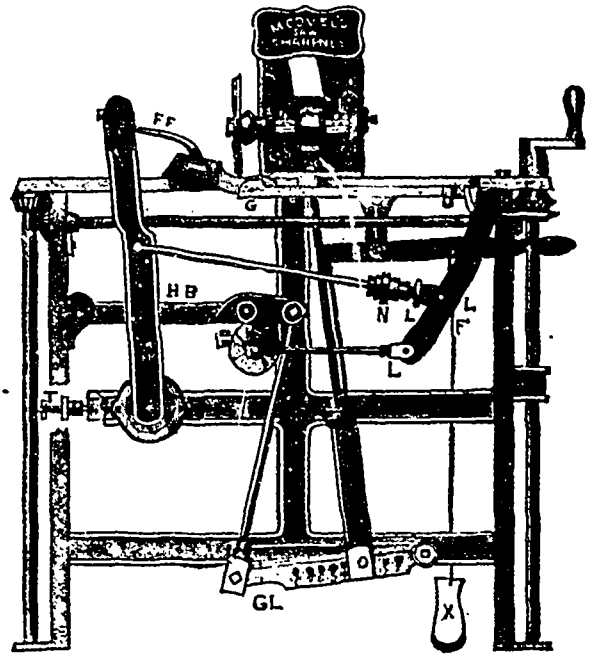
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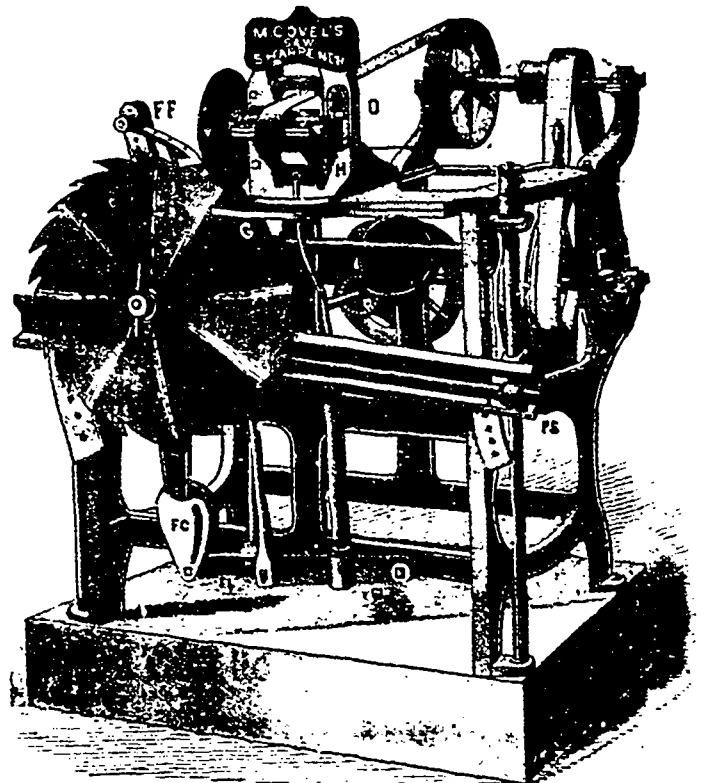
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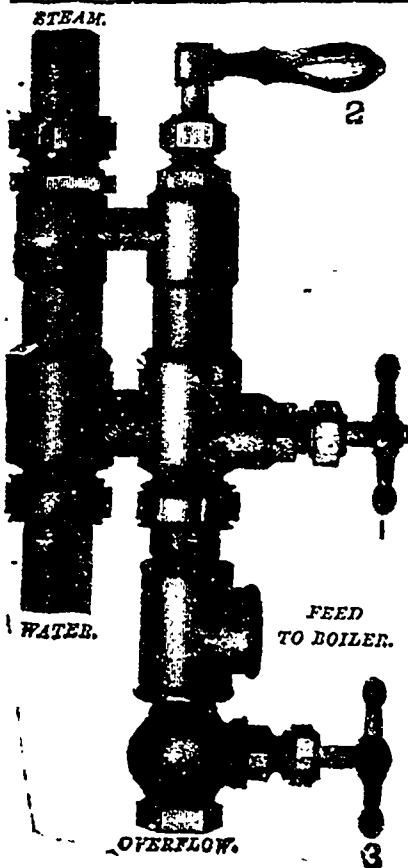
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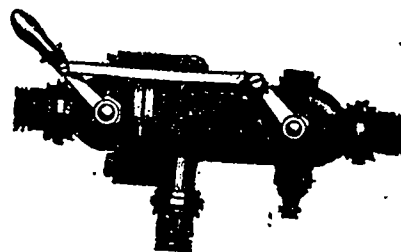
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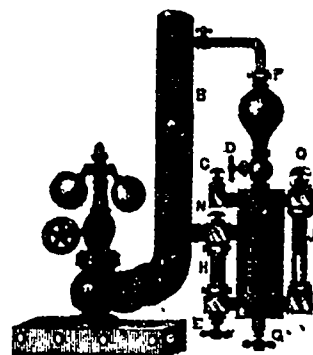
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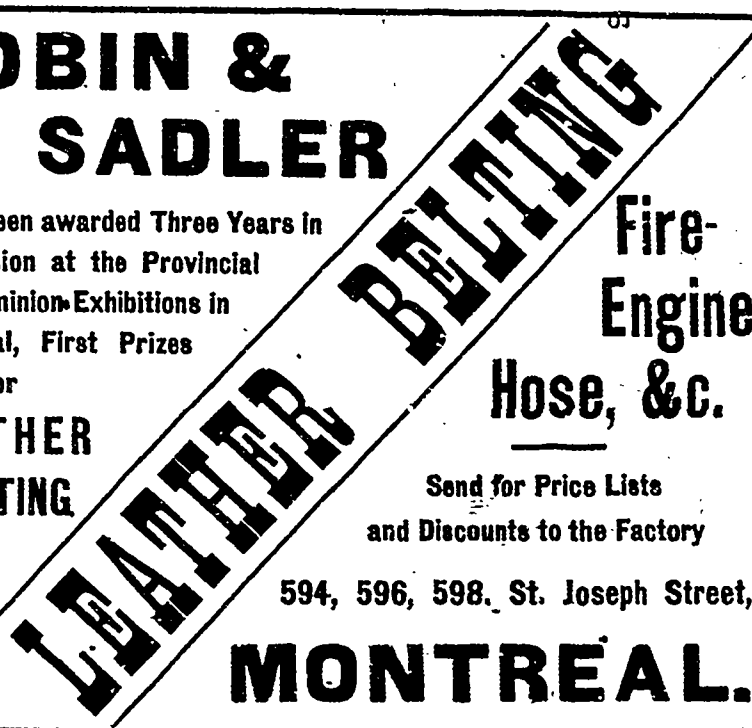
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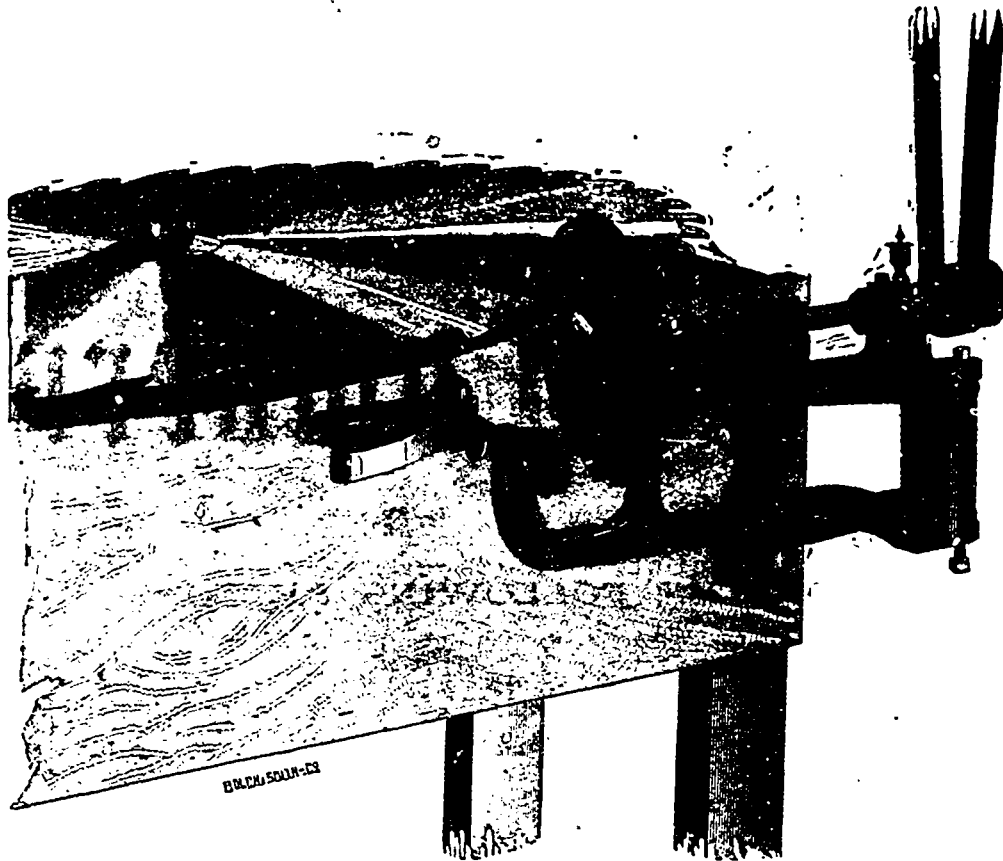
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"We are well pleased with the Gummer."

W. W. BELDING, Wyevale, writes :—

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