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NO. 19.

#### LUMBERING ON THE MIRAMICHI.

A description of the operations in progress or in contemplation at the lumber mills of the Miramichi is given by a travelling correspondent out of the *Saint John Sun*, writing from Newcastle, N. B. It is therein stated that a considerable quantity of lumber is being held at Miramichi ports for higher prices. And the quantity shipped to Europe this season will not, it is believed, exceed seventy million feet. That this is a limited export compared with recent seasons will be seen when we give the quantities shipped to Europe in the previous four years:—

|                           |                   |
|---------------------------|-------------------|
| 1882 shipments            | 117,000,000 feet. |
| 1883 do                   | 149,000,000 "     |
| 1884 do                   | 108,000,000 "     |
| 1885 do                   | 87,000,000 "      |
| 1886 (probable) shipments | 70,000,000 "      |

A corresponding decrease is shown in the number of feet rafted at the South West boom during those years, viz.: 77,740,000 feet in 1882; 71,194,000 feet in 1883; 37,049,000 feet in 1884; 37,282,000 feet in 1885, and 30,806,000 feet in 1886.

Charters have ranged from 40 to 45 shillings per standard this year. No steamers have been engaged this season. Snowball's deals have been shipped up to date in four sailing vessels. Most of the deals forwarded have been to ports in France and on the Mediterranean. Nearly all those cut by Richards & Hickson at Newcastle, are piled up on their wharf, and Barclay, of Nelson, has only shipped two cargoes this summer, your correspondent was informed. Scarcely any move has been made by operators as to next winter's work, and those spoken to seemed to be greatly discouraged over the continued depression in the European market, and the prospect of no decrease in the government stampage tax. No doubt Northumberland operators, for reasons which have been pretty fully ventilated in the press, are more seriously affected by high stampage than their confreres in the south and west. A few cargoes of laths have been shipped to New England this season by the N. B. Trading Co.

Information obtained as to what is being done, or is likely to be done, at individual mills on the river is thus given. We condense the report: J. B. Snowball's two gang steam mill at Chatham, the capacity of which is 175,000 feet per day, is expected to cut twenty million feet this season, which is equal to about 114 days running at full speed. His water mill at Madbank will cut two millions. The double-gang mill at Black Brook, of the New Brunswick Trading Co., on the other hand, expects to cut only eight million feet, which represents but sixty-four days' exertion of its capacity of 125,000 feet daily. D. & J. Richey's mill at Newcastle, equal to over 100,000 feet per day, is expected to cut ten to twelve millions. E. Hutchinson's single gang mill at Douglastown,

daily capacity about 50,000, will saw from five to six million. George McLeod's single gang mill at Rosebank, capacity from 35,000 to 40,000, will turn out between five and six million. About six million will be disposed of by the Richards & Hickson single gang mill at Newcastle. Charles Sargent, at Nelson, has a single gang mill and will take care of about six million feet. This mill is sawing for George McLeod. George Burnett & Son's single gang mill has about eight million feet to saw. John Pitt's mill, not running heretofore, started this week and will cut two or three millions for Wm. Richards. Double gang mill, capacity 80,000. At Blackville is the water mill (single gang), owned by Scott Fairley, will cut about three million this season. Sinclair's steam rotary mill at the Northwest bridge will cut about two million feet.

Now as to the mills which are shut down. The Loggie mill at Chatham, (rotary), now owned by the N. B. Trading Company; Alex. Morrison's double gang mill at Chatham, and the Park mill at Nelson, owned by D. J. Richey, have been idle all summer. And R. P. Whitney's single gang water mill on the North-west is not running this season.

According to these figures the total output of the Miramichi mills this year will be about 80 million feet.

#### THE LUMBER TRADE OF THE CANADIAN NORTHWEST.

A Bay City, Mich., correspondent asks for information respecting the lumber supply tributary to Winnipeg, Man., and concerning Port Arthur, Ont., as a manufacturing and shipping point. The home forest supply of Manitoba is mainly found on the shores of Lake Winnipeg. Spruce is the principal lumber producing timber. There is a fine growth of spruce on Fisher river, and other streams that run into the eastern shore of Lake Winnipeg. In fact the principal forests of spruce are on the east shore of that lake. The growth is described as rather small, but smooth, straight, and free from coarse knots. Little pine abounds on Lake Winnipeg, but there is plenty of tamarack and poplar. Much of the country along the lake shores, especially on the west side, are low and marshy, a region which is the special habitat of tamarack and poplar. The mill business of the Lake Winnipeg district is centralized at Selkirk, a town at the southern end of the lake, at the mouth of the Red river of the north. It is the lake port of the city of Winnipeg. The Northwest Lumber Company has a mill of large capacity at that point, and handles the greater portion of the logs and lumber that come from the shores of Lake Winnipeg. Distribution of sawed product is, of course, throughout Manitoba and the other northwestern districts. Selkirk has rail communication with the city of Winnipeg, and

hence with the railway systems of Manitoba and the northwest territories. It is admirably situated for a large lumber trade, and can command all that Lake Winnipeg can afford. The body of water is remarkably quiet, and log rafting is much less dangerous than on the great lakes of the border. But the forest supply being limited mostly to spruce, it is not likely that the Winnipeg lumber business will ever assume vast proportions. Still, knowledge of the forest resources of the district is yet astonishingly limited, even among Canadians, and hereafter there may be developments that shall cause a lumber point to grow up at the southern end of the lake that will rank with the larger centers in the great lake region or the lower provinces. The growth of Manitoba lumber production will be gauged by the growth of population in the tributary country. Without question the Canadian northwest is destined to be a field that will one day require a vast yearly distribution of lumber. When Canadian progress reaches the stage indicated, the timber resources of Lake Winnipeg will be powerfully drawn upon.

If our Bay City correspondent contemplates lumber operations on the north shore of Lake Superior, as his letter indicates, he must expect to meet not only competition from Lake Winnipeg lumberman, but from the Lake of the Woods region, and, to some extent, from the American side. There will also be competition from the Bow-river district, in Alberta, near the Rocky mountains, and eventually from Saskatchewan river. But the resources of these last named localities are limited, and will undoubtedly be no more than sufficient for the immediate territory. If our correspondent has a quantity of pine on the north shore of Lake Superior there can be little or no risk in manufacturing and distributing it westward from Port Arthur. Logs can be rafted from shore points to Port Arthur, and the sawed product shipped thence over the Canadian Pacific to Manitoba and beyond. Such a scheme looks perfectly feasible. Mr. Geo. A. Priest, and Mr. Alonzo W. Spoor, both of Port Arthur, are gentlemen well informed in regard to Port Arthur lumber interests, and would, no doubt, answer any inquiries that might be addressed to them. The *Lumberman* would also be pleased to have their views on the matters here but hinted at.—*North-western Lumberman*.

The "Lumber Exchange" agitation in New York is becoming a lively question among lumbermen and the lumber press. The opinion is expressed on one hand that such an institution is not required, while some of the largest dealers think it would prove of immense advantage to the trade in general. What the outcome will be time will have to prove.

#### CANADIAN TIMBER.

It has been estimated by Mr. Ward, an accredited authority on the subject, that Ontario furnishes 4,474,000 pieces equal to 3,000,000 standard pine logs of 200 feet each, producing 520,000,000 feet of lumber; 6,790,000 cubic feet of white and red pine, or 81,000,000 feet b. m.; dimension timber, 23,000,000 feet b. m.; hardwood, cedar &c., equal to 5,000,000 feet—making in the aggregate 635,500,000 feet b. m.; paying to the provincial government for timber dues \$501,000, and ground rents \$46,000, with 28,000 sq. miles under license 48,500 square miles, producing 2,400,000 square pine logs, equal to 386,000,000 feet b. m., and 1,308,000 spruce logs, producing 106,000,000 feet b. m.; white and red pine timber, 3,110,000 cubic feet, equal to 37,320,000 feet b. m.; hardwood 51,000 cubic feet, or 611,000 feet b. m.; railroad ties 143,000 pieces 32 feet each, making 4,576,000 feet b. m.; tamarack, 175,000 feet b. m.; hemlock 34,000 feet; cordwood equal to 5,000,000 feet making in all 549,976,000 feet giving a gross revenue of \$668,596. Nova Scotia has very prolific forests, but the axe and fire have proved singularly destructive. The rough products of the forest at nearly 200,000. The province of New Brunswick has large "limits" spreading over portions of the counties of Restigouche, Gloucester, Madawaka, Northumberland, Victoria, Carleton, York, Sunbury, Kent, Westmoreland and Queen's. It is stated on the authority of Mr. Ward, that the "cut on government lands in New Brunswick is equal to 160,000,000 feet of all classes, principally spruce; the pine in this province, once so famed, is almost exhausted. There being a large extent of private lands in this province it is safe to estimate that there is not less than 500,000,000 feet of lumber and timber produced, considerably more than three-fourths of which is exported, balance being for home use. The extent of territory is 17,500,000 acres, 10,000,000 of which is granted and located, leaving seven and one-half millions still vacant, and giving to the province \$152,000 for timber dues, ground rent, and so forth."

#### MAKE YOURSELF USEFUL.

A man who regards work as a hardship, an oppression, who look upon the time given to his employer as a species of limited slavery, can never do anything well. He must take an interest in this work if he would excel. The true rule for a young man is to make himself as useful as possible to his employer. He should never feel satisfied with himself as long as anything in his power to promote his employer's interest is left undone. In this way his labor is rendered profitable. Promotion comes unsought and before it is expected. Here lies the secret of success.—*Ex.*

## TREES ON THE PACIFIC SLOPE.

George H. Hamm, the well known correspondent, who is "doing" British Columbia in the interests of the *Winnipeg Manitoban* writes as follows:—"The timber supply of the province is apparently inexhaustible, and will doubtless prove a mine of wealth before many years. Already shipments are made to the Australian, South American and Chinese markets, but the volume of trade has not as yet reached the proportion that it is capable of. The principal tree is the Douglas fir, which ranges from four to twelve feet in diameter, and from two hundred to three hundred feet high. It is straight and tough, and capable of bearing a great strain and is almost unequalled for bridging, framework and for shipbuilding, while its great length and straightness make it especially adapted for masts and spars. Besides the Douglas, the following trees are to be found in the province—the list being obtained from a work issued by the local government. Western hemlock, large, found on coast and Columbia river; Englemann's spruce, eastern part of province and interior plateau; Menzies' spruce, very large mostly on coast; great silver fir, coast tree of great size; balsam spruce, abundant in Gold and Selkirk ranges, and east of McLeod's lake; Williamson's Alpine hemlock, too scarce and too high up to be of much use; red pine (yellow pine or pitch pine), a variety of the heavy yellow pine of California and Oregon, very handsome, four feet diameter, common in drier parts of interior; white pine (mountain pine), Columbia region—Shuswap and Adams' lakes—also interior of Vancouver island; white-barked pine, small; western cedar (giant cedar or red cedar), wood pale, yellow or reddish color, very durable, often found 100 to 150 feet high, and 15 feet thick; yellow cypress (yellow cedar) mainland coast, Vancouver and Queen Charlotte island; western larch, (tamarac), Rocky Mountains, Selkirk and Gold ranges, west to Shuswap lake, large tree, yields a strong, coarse, durable wood; maple, valuable hardwood, on Vancouver and adjacent islands, Queen Charlotte island and the mainland coast, up to 55 deg., attains a diameter of four feet; vine maple, very strong, tough whitewood, confined to coast; yew, Vancouver and opposite mainland shores, very tough and hard, and of a beautiful rose color; crab apple, along all the coasts, wood very hard, takes good polish, and withstands great wear; alder, two feet thick, on the Lower Fraser and along coast, good furniture wood; western birch (paper or canoe birch), Columbia region, Upper Fraser, Peace river, range and value not much known; oak, on Vancouver island 70 feet in height, and three feet in diameter; dogwood, Vancouver and coast opposite. Arbutus, close-grained, heavy, resembling box; reaches 50 feet in height and 20 inches in diameter, found on Vancouver and neighboring islands. Aspen poplar, abounds over the whole interior, reaching a thickness of two feet. Three other varieties of poplar are found, commonly included under the name cottonwood. One does not extend above Yale, and is the same wood largely used in Puget Sound to make staves for sugar barrels for San Francisco. The other two kinds occur in valleys in the interior. Mountain ash, in the interior; Juniper (red cedar or pencil cedar) east coast of Vancouver, and along the shores of Kamloops and other lakes in the interior.

There are already some very extensive saw mills in operation—and have been cutting for a quarter of a century—and yet this branch of industry is only in its infancy. Not only is there the trans-Pacific trade, gigantic as it should soon be, but with cheap freight rates the treeless plains of the northwest could be readily supplied and profitable interchange of commodities spring up.

## COLUMBIA'S BIG TREES.

The *Montreal Gazette*, referring to the Canadian Pacific railway exhibits at the Dominion exhibition, has the following regarding the extensive timber of British Columbia.

In entering the tent the attention of visitors is first drawn to the examples of the enormous timber which grows on the Pacific coast. The largest is a specimen of the Douglas fir, so called after Sir James Douglas, the original (Hudson's

Bay Co.) governor of Vancouver island and British Columbia, which, in 1839, were two separate Crown colonies. This tree is also known commercially under the appellation of "Oregon pine." It grows to a height of some 270 feet, and the trunk is not only very valuable for ordinary lumber, but has a special usefulness for ships' masts and spars, of which cargoes are made up for all parts of the world. Among ports most constantly supplied direct from British Columbia are Marseilles, Sydney, Hong Kong, Calcutta, Singapore, besides the naval dock yards of Great Britain. The specimen at this exhibition is a section of about one foot in thickness and has a diameter of eight feet. The age of the tree is estimated by a computation of the rings which indicate the annual growth, and show it to have been 561 years old when it fell a victim to the axe of the woodman. In the immediate vicinity of where this tall tree grew were stumps, one of the largest of which measured seventeen feet six inches in diameter. Those who feel an interest in yachting may like to know that it is timber of this class obtained from Oregon, British Columbia and Washington Territory that the masts and spars of celebrated racing yachts such as the *Puritan* and *Galatea* are supplied. Owing to these trees growing so close together and to such an enormous height, frequently 150 feet without a limb, the grain is exceedingly free from knots or faults of any kind. The quantity in existence in British Columbia is very great, but owing to the lack of snow in the valleys where the largest specimens grow, special means have to be employed to transfer these giants of the forest to points where they can become merchantable products. The other specimen mentioned is of British Columbia spruce, also a very valuable timber. It measures seven feet in diameter. Between these sections of timber, on a pedestal, is displayed a block of coal from the Galt mine at Lethbridge, in Alberta. It weighs some 800 pounds and was cut out specially for this exhibition. Though not adapted for every purpose this coal makes an exceedingly valuable fuel; it burns with a hot flame and is used in Manitoba in open grates, in globe heaters and cooking ranges, and is sold at present at \$8.50 per ton. The utilization of the black diamonds of the Northwest has effectually solved the difficulties of the fuel question, which previously oppressed the minds of the residents in this part of the country six or seven years ago, at a time when the somewhat meagre supply of available timber for Manitoba was being rapidly exhausted and when hard coal, imported from the United States in bags, brought \$25 a ton.

## HINTS ABOUT CIRCULAR SAWS.

When hauging a saw the first thing to do is to see that the saw is true and straight, and that the mandril is correct in every particular. Examine the collars with a straight-edge, and see that the steady pins when driven into the collar have not raised small bunches around them by being too tight. If there are bunches they should be taken off with a file or cold chisel. The fast collar should be slightly concave on its face, but should never be convex; the loose collar may be straight faced. The mandrel and steady pins should not fit too tight into the saw, for if they do the least warmth in the journal box will expand them and cause the saw to bind or spring. When the saw is fastened between the collars it should be perfectly flat on the log side, but if found to be bulging or wavy loosen the nut to see whether the fault is in the saw or the collars. This should be carefully seen to before using it. The arbor should have some end play, and the guide should be one that can be adjusted in or out. The pins of the guide should run as close to the saw as possible without producing friction. The saw should hang so that the front edge inclines slightly toward the log, so that the back edge will not cut or scar the log. Some of these points may be considered fine-haired by some persons, but they are essential to first-class work and ease of running. When a top saw is used, it should drop down into the kerf of the lower saw about three inches. For good work the top saw should run in an opposite direction to the lower saw, and should have a spring guide which will allow to follow any irregularity in the track of the

lower saw, but which will bring it back to its neutral position when out of the cut. Water should not be put on a running saw when it is hot, as it will spoil it. Water may sometimes be used on a saw running in pitchy or gummy wood to keep it clean or prevent friction. When this is done a small stream should be directed near the eye of the saw of both sides, when by the centrifugal action of the saw it will diffuse itself evenly over the whole surface.

The arbor boxes should be what is technically known as water boxes, as they are better calculated to keep the arbor cool. When an arbor becomes heated the heat is conveyed to the saw, causing it to be lumber and "run hot." The speed of a saw should be from 12,000 to 15,000 feet per minute, though some have been run as high as 20,000 feet per minute.—*Wood and Iron.*

## THE BUSINESS OUTLOOK.

After months of the deepest business depression, affecting all lines of trade of the entire country, favorable indications were seen a the time for full business approached. The marked increase in volume, and margin of transactions, that characterized the beginning of September were augmented day by day, throughout the month, and to-day the country enjoys a genuine business boom, that has all the appearances of permanency. It has not been brought about through speculative methods, but from the honest needs of a rapidly growing and needful country. A stimulus has been given to trade that bolsters up the hopes of all merchants, that few dared dream of a few months ago. The best element of the present boom, the most cheerful aspect lies in the conservative and solid basis upon which it is made. Confidence is everywhere established, and the business world takes on a new hope, buys liberally, and prosecutes with vigor and faith, certain that energy will be repaid. The condition of the trade is healthy. The iron business, which is generally the leader in an upward or downward move, is a pretty good barometer of the business tendency. That iron has taken on the most activity ever known in this country, is a pretty clear indication of the approach of good times. All old blast furnaces, and many new, are running at full capacity, and hundreds are contemplated and in course of construction. Iron enters into about every branch of manufacture, and consequently the present enormous output is a pretty good test of the faith the iron men have in the stability of the country, and the needs of the near future. Its a good index to base operations on, if we had nothing else for a guide; but we have.

Reports gathered from almost every line of trade indicate a largely increased business over last fall. There is no doubt but that stocks of all kinds are exceedingly low in the interior towns, and merchants must buy largely to replenish their stock to meet the demand. There is a short European crop, while flattering accounts are made as to our own panning out largely in excess of midsummer estimates. More cotton will be baled in the South than was anticipated. Cereals, lumber, iron, real estate, in fact, all properties, are increasing in value steadily. The demand will be good for all of next year, at least. The only danger lies in over-production and especially is this the case with the manufacturers of lumber. The Northwestern Lumber Manufacturers' association can do much to prevent this deplorable outcome. They have shown their ability to grapple with the situation by their joint movement in the past. They can curtail the cut, so as to meet the requirements of the country and sustain fair prices, or, they can overproduce and unsettle values.

Its a difficult problem to contend with, when lumber is advancing in price. Every lumberman wants to cut as much lumber as the capacity of his mill will turn out. Owing to the short hauling season this year, it may not be deemed expedient to reduce the amount of logs to be hauled the coming winter. The present is what we have to deal with, and the immediate future prospect, and we are pleased to chronicle a very bright view.

The railroad reports show phenomenal gains in earnings. Seventy-five of the extensive lines show a gain last month of nearly \$4,000,000. The main trunk lines are crowded beyond their

capacity to handle shipments. The post-office, express, and bank clearances denote only too clearly the enormous amount of business transacted the past month, in comparison with the past. We are certainly on the eve of a prosperous season.—*Chicago Lumber Trade Journal.*

## THE BULGARIAN CRISIS.

The People Will Not Yield to Russian Dictation.

SOPIA, Sept. 30.—General Kaulbars to-day received a deputation of prominent Bulgarians, who called upon him to endeavor to induce him to withdraw or modify his circular. The deputation was composed of 114 of the most respected and influential citizens of the principality, and was headed by Dr. Voulcheff, who acted as spokesman. He stated to General Kaulbars that the circular had surprised the Bulgarian people, and asked him to reconsider the Russian demands, particularly for the postponement of the elections for two months. The nation was anxious, Dr. Voulcheff continued, to speedily settle the choice of the prince to occupy the Bulgarian throne. In addition to that modification the doctor said the people desired Russia to withdraw her demands for the immediate raising of the state of siege, and also the demand for the instant release of the garrisons in custody for the complicity in the coup d'etat. The continuance of the state of siege was the only guaranty the Government had for the preservation of peace, which the rest of Europe desired as well as Bulgaria. The Bulgarians, deeming that the Czar had no desire to prolong the crisis, begged General Kaulbars to telegraph to him to hasten the choice of a Prince. The constitution stipulated that the Grand Sobranje, elected to select a ruler, should meet within one month after the elections. In regard to the liberation of political prisoners Dr. Voulcheff said it would be a dangerous precedent to establish, to liberate without trial or punishment those responsible for such a momentous an act as the deposition and kidnapping of Prince Alexander, besides being contrary to the laws which were the safeguards of the country. Besides, if the prisoners were released as demanded, the probabilities were that the people would kill them in the streets, such was the popular indignation against the implicated men. The Government thought the imprisoned officers should be tried first and subsequently offered clemency. In conclusion the deputation assured General Kaulbars that Bulgaria was thankful to the Czar for his past protection, but maintained that the laws of the country must be respected. No other Ministry than that at present in power could extricate the country from its crisis. Gen. Kaulbars in reply, said the Bulgarians know very well that the Czar had the prosperity at heart, but they must confide in the Czar, and carry out his wishes. Dr. Voulcheff interrupted Gen. Kaulbars at this point, and said, "If that is all you have to say, we will retire." The deputation then withdrew.

## AWFUL POWDER EXPLOSION.

Four Men Blown to Fragments—A Building Completely Wrecked.

BARLOW, N. Y., Sept. 30.—A terrific explosion occurred at the Ditmar Powder Works, at Bay Chester, on the Harlem River branch of the N. Y. and N. E. R. R., about ten o'clock this morning, resulting in the instantaneous death of four men who were employed in the factory. The explosion occurred in the packing house. The men were putting up and packing cartridges when the explosion occurred, shattering the building to splinters, and blowing the four men to fragments. The exploding powder, of which there was a large quantity, shot up in the air as high as 50 feet, and splinters of the building were blown a great distance. The names of the men were Ernest Dralon, John Rusch, Max Shafholt and Reinhart. The foreman of the works says the explosion was caused by two fellows shooting into the building.

## THE FISHERY DISPUTE.

Views of the United States Government—Discussion Inopportune.

NEW YORK, Sept. 30.—The *Tribune's* London correspondent says:—The American Government, while desirous of coming to some amicable understanding on the points in the fishery dispute, is understood to consider the present an unfavorable time for entering upon the discussion. When Great Britain shall have brought Canada to reasonable views, and when Canadian irritation has subsided, a good understanding between the two countries may be embodied in a suitable treaty.

AT THE INDUSTRIAL.

O.P.E.'s Exhibit From the North-West at Toronto.

The Canadian Pacific Railway made a splendid display at the Toronto Exhibition Northwest products and minerals. Of it the *Globe* said:—The exhibits in this building are extremely good, and ought to attract much attention. Entering from the north, several large lumps of a reddish substance, on the first table, will be noticed. According to the label attached, this is rock for horses and cattle, and sceptical possibly needs only to rub its fingers across and put them to its mouth to be convinced that the label speaks truly. The table supports bags holding fine samples of oil cake in various conditions, and otherwise.

The exhibit, however, good as it is, will long retain the visitor's attention from its most striking feature in the whole building—the exhibit which is made by the Canadian Pacific Railway, and which illustrates the productive powers of the whole country along its course to the Pacific coast. It is an admirable display, both for extent and its impressive character as a whole, and for the variety, excellence in quality, and skill in arrangement shown in every detail. The attention of even the slowest observer, will hardly miss the entire section of the British Columbia tree, which stares him in the face. It is a legend, telling its birthplace and height is 7 ft. in diameter. At the foot of this tree, and on either side, either lying extended, or kept from the view by glass cases, are fine specimens of the mineral wealth of the great Canadian North-West territories. At the other end facing the entrance, is a similar trophy, the tree being fir, and eight feet in diameter. Between every two of the supporting pillars of the building a miniature arch is constructed by means of bundles of prairie grass and different sorts of grain. On the sides of each pillar are affixed the reddish specimens of the fauna of the North-West. On the tables below, in almost bewildering variety, are arranged samples of the agricultural wealth of the same zone.

IMPERIAL POLITICS.

Mr. B. Churchill on the Conservative Policy—The Unionist Combination.

LONDON, Oct. 2.—Lord Randolph Churchill speaking at Dartford to-night, said the House of Commons was the slave of the ideas of the Radicals and Parnellites. It was imperative to provide a simple and active means of closing debates. If the House followed the advice of agitators, the action would lead to further repression, but Irish commerce had begun to revive and with the present good harvest people of Ireland might anticipate better times.

With regard to affairs in Bulgaria, he said it was impossible to foresee how the war would come, but he still hoped a peaceful settlement would be effected. England ought to support Austria in her difficulty. Lord Churchill spoke in praise of the support which the Government had given from Lord Hartington, Mr. Chamberlain and all of the Liberal-Unionists. He said that foreign affairs would be dominated to the Union and the Unionist Party. The Government recognized the policy which the Unionists had made the odium which they had incurred by their former friends; therefore, it was the duty of the Government to prove to the people of England that the Unionists were right in the course they took. The Government would give the greatest attention to legislation affecting England and Ireland, which had lately been neglected. It would introduce measures to give farm laborers to obtain freehold interests, and would also deal with the question of tithes and railway rates, to secure for cheapening the cost of transport of land, and a genuine popular form of government would also be presented. As regards the land question in Ireland, they would have to change from the present single ownership in order to have a more fair, although the work would be heavy. He did not believe that there would be harsh evictions in Ireland.

The lumber season of 1886-7 has opened, and there is considerable activity. Men are being hired by the agents of the different lumber firms to be sent off to the various timber regions. Mr. J. M. Irwin shipped thirty men this morning per Grand Trunk Railway for the Horton district. This gang followed another of forty-five men who were sent last week. The gang will operate in the townships of Havelock, and others adjacent. Mr. Irwin, who is stopping at O'Connell's hotel, is sending men for the Strickland to go to the Bay district. The wages paid vary from \$15 to \$20 per month.—Peterborough.

A NEW EXPLOSIVE.

General Boulanger's New Bombs and Their Destructive Properties.

PARIS, Sept. 29. General Boulanger desiring to secure from the Government an appropriation of \$25,000,000 for the most explosive bombs, recently invited the Budget committee to witness the experiments he has been carrying on in private. The experiments were made with a mortar, designed as a type for the destruction of fortifications. The missile, which explodes with exceedingly destructive effect, is charged with a new explosive, of whose composition General Boulanger and his associates alone possess the secret. The compound, however, is admitted to have all the powers of gun cotton, with none of its defects, and is said, in addition, to be easily transportable and to be free from liability to spontaneous ignition. It is stated that the budget committee were not only highly satisfied with the results of the experiments, but promised to fully support General Boulanger's demand for a special appropriation.

MINDEN.

ACCIDENT.—Mr. Eastman, of Snowdon, was bringing some young cattle to the village with their heads tied down to their front feet, and got two of them into the water at the Ingoldsby Narrows, which were drowned before they could be rescued.

LUMBERING.—The different lumbering firms have a large number of men in the woods north of Minden. Nearly every day fresh arrivals take place. Considerable energy is being evinced here this season in lumbering operations.

CONFIRMATION.—One of the most interesting events that has transpired in this village for some time past was the confirmation service in St. Paul's Church, Minden, on Tuesday evening last, when Rev. J. G. Dean presented no less than forty-eight candidates to His Lordship, the Bishop of Toronto to be confirmed. Thirty of the candidates were females and eighteen males. The services were of a very solemn character and the address of the Bishop was most affecting. His Lordship very clearly explained the nature of the ordinance and the duty of the candidates. His address was listened to with great attention and marked effect upon the very large congregation present which filled the church to overflowing, notwithstanding the late hour at which it was held, 8 p. m. Some of the candidates and their friends had long distances to travel to reach here, but all expressed themselves highly pleased with the results. A liberal collection was taken up for missionary purposes. His Lordship was the guest of Mr. and Mrs. J. H. Delamere during his short visit, and we understand he expressed his delight with the progress church work is making in this mission.—Echo.

AQUATIC CIRCLES EXCITED.

A Check Given by the Promoter of the Henden Regatta Dishonored.

LONDON, October 2.—Aquatic circles were much excited last night over rumors that the £300 contributed to the prize fund of the proposed Henden regatta by J. H. Craig, of New York, was turned out to be only "straw." When the oarsmen paid their entrance fees on Wednesday, Craig, the promoter of the regatta, handed to Mr. Allison, editor of the *Sportman*, as stake holder, a check for £300, payable at Gillig's American Exchange. Mr. Allison presented the check for payment, but it was dishonored. Mr. Allison then announced that he would provide the stipulated prizes and to take charge of the gate money. Craig's name is really Rushnell, and he has resided in New York and Toronto. He has several times refused to give his address, on the grounds that reporters would hunt up his mother and frighten her to death with stories of his being in trouble in a foreign country. Mr. Allison has had several stormy interviews with Craig. Craig pleaded for delay, alleging that the number of drafts which he should have received from America had miscarried. He had plenty of money at his command, he said, and as soon as his drafts came to hand he would pay over the amount of the check. Very little credence is given to his statements, however, as on the night that the entries were made at Putney, a bootmaker vainly dunned Craig for £25 which he had bet on the result of the Gaudaur-Beach race.

The Cashier Pardoned.

TRENTON, N.J., Oct. 2.—J. A. Hedden, the cashier of the First National Bank of Newark, who wrecked that institution by embezzlements and was sentenced to five years' imprisonment, was pardoned yesterday by the President.

General News Notes.

The planing mill of Smith & Clark, Victoria, B.C., was recently burned.

At Calgary, Alberta, lumber from the Pacific slope is reported to be selling at the same price as that of local manufacture.

At Collingwood preparations are going on for the coming lumbering season. According to the *Bulletin* this winter promises to be one of unusual activity.

Messrs. RALSTON & IRWIN have just succeeded in effecting a sale to a northern Michigan lumbering firm of five pine limits on the north shore. The total amount realized for the limits was \$100,000.

The Water Mill of the Parry Sound Lumber Company was again started last Monday, the recent rains having given a sufficient head of water. The mill will be kept running as late as possible this fall.

A RAFT containing upwards of 2,000,000 feet of saw logs broke away from the wharf at the John Spry Co. saw mill, Michigan Sault during the gale of Sunday night week and made a free run down stream. The loss is a severe one.

During the coming winter the cut of saw logs in the Parry Sound district will be the largest ever taken out. Already many camps have been established and active preparation for a big season's work are being made.

A young man named Harvey Ford, working in Halden & Wilson's saw mill at the locks, near Sault Ste. Marie, on Tuesday of last week, had the misfortune to get his right hand too near one of the saws and had the forefinger amputated.

Every limit of any value in the Ottawa District that has been offered for sale of late has been readily disposed of, mill-owners realizing that a day is coming when those who do not own limits will find it difficult to obtain logs to keep their mills running.

A PARTY of Canadians have bought 50,000 acres of timbered land on the Little Tennessee river, Tenn., and want to buy 100,000 acres more. Their object is to cut off the timber, develop the mines, if any, and settle the lands with Swedes, Swiss and Scotch.

The Ottawa Citizen says:—"Mr. J. R. Booth has laid up three large rafts to winter over at Malloch's boom, Annapolis having decided not to put them on the Quebec market this year. There is said to be more timber being sent to Quebec this year than there has been for several seasons."

There are considerable prospects of a big output of lumber this season if the number of men going to the woods may be taken as an indication. The agents all agree that it is a number of years since they have found the demand for labor brisker. The number of men being shipped up the river is unusually great.

Messrs. Couland and Adams from Glasgow, Scotland, have arrived in Ottawa to look into the possibility of extending the timber trade between Canada and Scotland. They are favorably impressed and several suggestions they have been made are likely to prove of great advantage to Canadian shippers.

The St. John (N.B.) *Globe* reports that the river tugs are practically idle at the present time, all the logs that were in the booms having been rafted and towed to their destination. The quantity of lumber brought down the river this year was much larger than that of last season, but more than 25,000,000 feet of logs are high and dry along the small streams, and cannot be brought out unless there is a heavy freshet, which is improbable this fall. The water in the river is very low at the present time.

GRADING on the Duluth & Manitoba Railroad between the Northern Pacific Junction and Red Lake Falls, Minn., is about completed, and track laying is in rapid progress. The line between Red Lake Falls and Grand Forke, on Red River of the North, is under contract. Red Lake Falls, says the *Minn. Lumberman*, promises to become an important mill point, since the Red Lake pine region is tributary by way of Red Lake and Clearwater rivers. The new road will furnish a shipping outlet for sawed product, east, south, and west.

J. & T. CONLON, says the *Expositor*, have shipped about 60,000 ties, some 17,000 pavement posts and 1,000 telegraph poles from the Manitowlin this season, and have four cargoes of ties still to ship. They have also bought the Burpee saw mill and are getting it fitted up to cut ties and lumber this winter. Besides this they have a floating saw mill at work on Lake Wabigoon which is turning out over 500 ties per day.

A DISPATCH from Duluth to one of the daily papers of this city, and printed on Tuesday, stated, with considerable flourish, that the Grand Haven Lumber Company, of Grand Haven, Mich., had lately purchased the Pillsbury pine, to the amount of 600,000,000 feet, and had begun operations for cutting a large amount the coming winter. The truth of the matter is, as stated by a representative of one of the parties in interest, of this city, that S. B. Barker and H. C. Akeley, and perhaps others of the Grand Haven Lumber Company, are interested in a contract to put in and manufacture the Pillsbury pine, situated in the region of Lake Itasca, Minn. This pine is understood to compare nearly or quite 1,000,000,000 feet. The contract will probably necessitate the erection of a mill at Minneapolis, or some other convenient place for receiving the logs and shipping the sawed product. It is intended to bank about 15,000,000 feet of logs this season. The operation will be carried on by a corporation called the Itasca Lumber Company, which was some time ago formed by the interested parties.—N. W. Lumberman.

MR. HARRY DONALD, well known in business circles at St. John, N. B., was, says the *Globe*, recently arrested on a bailable writ for \$25,000 at the instance of Messrs. Guy, Bayan and Co. Mr. Donald was at one time manager of the firm's business in Mobile. It is alleged that while acting for them he entered into a secret partnership, and used the credit and endorsements of the firm without their knowledge to advance his own interests, to the neglect or disadvantage of those of his employers; that he became possessed of a large milling property there, and that the property was obtained fraudulently obtained. Donald went to England and while he was absent a party was sent from New Brunswick to examine his books, with the result alleged above. An effort was made by Mr. Bayan, while Donald was in England, to arrest him, but this failed. Since his return, Mr. Donald has been carrying on a shipping business in the United States, and during a visit to New Brunswick, he, it is said, consulted a lawyer in New York, and was assured that he could not be held here on any charge such as is indicated above. He was arrested, however, and lodged in jail. His counsel, Mr. Fred Barker, Q.C., M.P., made application to Mr. Justice Tuck for his discharge, and his honour gave the parties a hearing to-day, Mr. C. N. Skinner, Q.C., appearing for Messrs. Guy, Bayan and Co. Mr. Donald is a native of St. John, and is well known here. He married some time ago a Southern lady of wealth and position, Julia Tuck decided to discharge Mr. Donald on the ground that the fraud charged was not clearly set out in the writ. As soon as he was discharged Mr. Donald, acting under advice of his counsel, left St. John for the United States.—*Miramichi Advance*.

Indians Becoming Bolder.

WINNIPEG, Oct. 2.—A despatch from Indian Head says: The Indians are becoming bolder each day. A man named Gaudapio who guard property for the Medicine Hat range company, about twenty miles away, was held up by eight Blood Indians and robbed of his rifle, revolver and everything else of any value. Horse-stealing has begun about there. The police outposts were ordered in.

Bridge Building.

Mr. W. H. Law, of the Central Iron and Bridge Works, has returned from Millford, Prince Edward County, where a new ninety-six foot span iron bridge, made at the works, was opened for public traffic. The Warden of the county and members of the County Council, the Reeve and Councillors of the township, and a number of prominent people from Picton, were present on the occasion of the opening of this, the first iron bridge put up in the county. Speeches were made by prominent men. Everything passed off with entire satisfaction.



CANADIAN TIMBER IN ENGLAND.

The Timber Trades Journal of London, Eng., in its issue of Sept. 15th, reports the following arrivals from Canada.—The London arrivals since our last include the Capulet, from Quebec, which entered the docks with Saturday's tide, and the Crete, from Montreal. Both these were big steamers, and had evidently met with bad weather on the way. The Capulet, seems to have got knocked about in the Atlantic, and when she came up the river had a very dangerous list, her cargo having shifted during the voyage. We can understand grain cargoes shifting, but, though it is by no means uncommon to find wood laden steamers lopsided, we cannot help thinking it must be due to careless stowing. The fact that sailing ships are hardly ever noticed in that predicament would seem to bear out our view. Steamers are always in such a violent hurry to get away that they bundle the deals into the hold, and stow them anyhow, with the result that when straining at sea a plank gets out of its place. Another difficulty in the way of making good stowage is picking up part cargo at different ports; the goods are jumbled up, and liable to break away at any critical moment. Insurance companies should look to this.

The imports from the 2nd up to date to London amount to 53, of which 30 are steamers, and include five pine laden vessels from Montreal, the Crete, part deal laden, and the Capulet, with 60,000 deals, for Messrs. Bryant, Powis, & Bryant. The Crown Prince, from Pensacola, with sawn timber and planks, for Mr. G. M. Freebody, has gone into the Surrey to discharge, having delivered a parcel of cedar on the Middlesex side. Amongst the largest of the Baltic steamers is the Korka, from Cronstadt, with deals, for Messrs. Simson & Mason. Taken altogether, the import is a full average one for the time of the year. A larger portion of these cargoes than usual, we notice going overboard, the endeavour being to save possible dock expenses.

We note the arrival at Liverpool, of Messrs. O. T. Bowring & Co's s.s. Romeo, from Montreal, with a full cargo of pine lumber shipped by Messrs. Robert Cox & Co., for their Liverpool house. This is, we hear, one of the largest, if not the largest, consignment of lumber ever shipped from that port, for one firm's account.

AUSTRALIAN LUMBER TRADE.

The growth of the lumber trade of the Australasian colonies has been extraordinary within the last few years. The total quantity of rough and finished lumber imported into New South Wales alone during the year 1885 was 65,822,037 feet, valued at \$2,296,760, against 49,182,5 feet, valued at \$1,903,960 for 1884. The imports from the United States increased no. 10,000,000 of feet or from 13,782,746 feet in 1884 to 23,165,235 feet in 1885. The principal increase in American lumber has been in the rough descriptions.

In the supply of lumber for the colony of New South Wales, the United States takes the lead of all other countries; New Zealand comes next and British Columbia third on the list. Norway furnishes the largest share of dressed lumber, a fact probably occasioned by the low price of labor in that country. The imports from America consist principally of pine and redwood from the various states and territories on the Pacific Slope.

New markets are being opened up from the product of the saw mills in California, Oregon and Washington Territory every year, and active preparations are being made for its shipment in larger quantities than ever, not only to Australasia but to Japan and other countries. The popularity of America lumber in the Australasian colonies has excited much opposition on the part of those interested in the sale of Australian timber, and efforts are being made to increase the import tax on lumber. The present duty is 43 cents per superficial feet on dressed lumber, and 24 cents per 100 feet on rough lumber.

Our readers will confer a favor on us, when writing to advertisers, if they will state that they saw the advertisement in the CANADA LUMBERMAN. This costs the correspondent nothing, but helps us materially.

DOES CHARRING TIMBER PROMOTE DURABILITY?

The general belief has long been that it does, and in accordance with this conviction the practice has been widely followed. But a contrary view of the subject is taken by Wood and Iron. That journal says in a recent issue:—As charcoal would endure for ages in places where timber would decay speedily, the practice of charring the surface of fence-posts and other timber has been repeatedly recommended in books and ephemeral publications, as eminently worthy of universal adoption.

The theory upon which such a recommendation is based would seem to warrant a confident expectation of satisfactory results in practice; but repeated experiments with charred timber have furnished conclusive assurance that this process will not promote its durability. Indeed, numerous experiments have shown that charring promotes premature decay. Two posts split from the same log may be set side by side in the ground, the surface of one being charred and the other not; and it will be seen that the charred post will perish before the other.

The same is true of railroad ties, and all such timber as may be exposed to the alternating influences of wet and heat. Could the entire timber be changed from its perishable condition to one solid piece of charcoal, the durability would be promoted to a surprising length of time; but the strength of the material would be destroyed. When fence posts or other sticks of timber are exposed to the rapid action of wet and heat, the surface will decay first. One might suppose, therefore, that when timber is enveloped by a layer of charcoal, the durability of the entire piece would be greatly promoted. And such would be the case were it not for the fact that the charcoal is not impervious to water; and as water reaches the timber below the charred surface, decay will commence soon after the grain of the wood has been exposed to the influences of the weather. When the change has once begun beneath the charred surface the durable covering of coal will be of no service whatever in preserving any portion of the wood. Taking this practical view of the subject, it will be perceived that if only half an inch of the outside of a post be charred, the post will not endure so long as if the same thickness of wood had been left uncharred, to waste away by slow decay.

TREE FELLING BY MACHINERY.

Machinery and steam power have been adapted to almost all the operations of lumbering but one—the process of cutting down the trees. For that purpose the axe, swung by the strong arms of experienced men, has not in America been superseded to any appreciable extent by any mechanical device. To be sure, the immense trees of the Pacific slope are cut through by saws, but the saws are worked by hand, and even cross cut saws have not displaced the axe, except where the size of the trees made it necessary. At least one tree felling machine is used abroad, made by a London firm, but it is not to be found in this country. Perhaps it was the success of the English machine that induced William E. Hill, of "steam nigger" fame, to invent a similar contrivance which he offers to the American saw-mill public. Its main part is a steam cylinder five feet long, five inches in diameter, with a bore of four inches, and having a piston stroke of thirty inches. The machine stands upon low skids, and by means of trunnions and a swinging table can be adjusted to any position desired. The front end of the cylinder has a swivel head with a stuffing box, to which the slides are fastened, thus allowing the saw to be turned to make cuts at any angle. The machine is anchored by dogs to each side of the tree to hold it steady while in operation. The success of such a device, besides mechanically correct construction, depends principally on its cheapness of operation and the quickness with which it can be moved from one tree to another. Its weight is 425 pounds, and it is driven by a 2-horse power steel boiler. The machine is evidently powerful and efficient when once in action, but the cost of operating it must be demonstrated by practice experience.—Boston Journal of Commerce.

THE LUMBER TRADE

The Fort William, Ont., Echo says:—The lumber trade on the Kaministiquia is one which is deserving of considerable attention at the hands of district journalists. Few residents are aware of the amount of money and labor expended in producing the material which so largely enters into the construction of their churches, dwelling houses, stores, hotels and public buildings, yet a visit to the mills down the river would open the eyes of very many to the importance of this growing industry. At the mill of Graham, Horne & Co. a busy scene presents itself to the eye of the visitor. Saws and planers keep up a busy hum "from morn till dewy eve." 30 men are constantly employed and 10 more are wanted in consequence of the rapid growth of their business, their shipments reaching nearly all points in Manitoba and distant towns in the Northwest. As an illustration of the rapid development of their trade we may mention that where last year they only had one little drying shed they are now engaged in erecting several others the total length of which will be 1,000 feet. This fact speaks for itself and needs no further comment at our hands. Messrs. G. H. & Co. are doing well, and the energy which they are displaying in extending their trade relations show that industry, perseverance and talent can do much when well applied.

Proceeding down and on the south side of the river, we come to the extensive establishment of W. H. Carpenter who owns two mills and makes quite a noise in the world. Mr. Carpenter has 40 men employed, is now making arrangements for sending 300 choppers into the woods this season and will get out at least 3,000,000 feet of logs.

The Neebing Lumbering Company also propose to extend their operations, but will most probably confine themselves to the production of shingles.

Messrs. Hammond, Crawford, Corbett and others are talking of doing an extensive business in the tie and pile line, and others are likely to engage in the same business if fortunate enough to secure contracts.

We don't fatigue readers with figures, but leave the statisticians to figure up the probable amount of money that is being and is likely to be expended by the Kaministiquia lumber dealers in prosecuting their calling during the season of 1886-87. Sufficient, however, has been shown to prove that the lumber trade of Fort William is rapidly increasing in volume, and from past and present experience can be worked up to a much greater extent by the infusion of new capital and energy.

The forest fires of this season unhappily destroyed millions of feet of standing timber, but, we are informed, the mill men have entered into an agreement whereby the owners of limits are to first cut all trees that are scarred and then take those that escaped the fiery ordeal.

This is a wise step and one which we hope to see followed in order and more wealthy districts, as by so doing the lumberman will not only assist themselves but will also help Dame Nature in her efforts to present to the visitor a series of panoramic views unbroken by the disfigurements which result from forest fires.

MANUFACTURED FROM WOOD.

"Business is good with us," said a dealer in woodenware to a reporter the other day, "but prices are so low that it requires an immense number of sales to amount to much in dollars and cents. Competition has lowered prices considerably, but there is another factor at work upon the prices of woodenware, which does not affect any other articles to an equal extent."

"What's that?" asked the inquisitor. "Machinery. Lathes have been invented to turn out almost anything in our line and other machinery has been perfected, until the wooden ware manufacture is almost entirely done without the aid of man's hands. Now take butter trays for instance. The tree is cut down and shaped by taking off the bark. Then it is run through a machine which cuts it into veneers about the right thickness for the tray. Then these veneers are sorted and the sound ones are cut by a stamping machine into the right size,

leaving lappets which fold over. These lappets are sewed together by hand and then the chine fastens on the tin edges. It takes a man to tell about it as it would to make dozens of them. The work is done so rapidly that the time one tree is split into veneers, the ceiling tree has been made up into trays. They are sold in bulk in New York for them \$2.75 per thousand, according to size. The veneers are made into picnic plates which have come into vogue within the last half dozen years and made in a similar way.

"What woods are employed in the manufacture of these trays?"

"Mostly gum, white cedar, beech and similar woods."

"How much are those paid?" asked the reporter, pointing to some three-hooped veneer trays that were piled up in one end of the mill.

"They are quoted at \$1.15 per dozen in New York," was the reply, "a price which seems credible unless you know how they are made. Wooden shooks, the size intended for the veneer are fed into a machine and come out at the other end a complete pair, with three hoops fastened on even better than could have been done by hand. Another machine pairs the veneers both inside and out, usually white pine inside and an oak tint out on the outside. Wash tubs are made on the same principle and are sold at the factory at the rate of \$2.00 per dozen, representing the different sizes in ordinary use.

"In the manufacture of washboards, the lumber is often given two years to become thoroughly seasoned. Then, by machinery almost entirely, the wood is manufactured into washboards of all grades and sizes. Although some of the washboards are manufactured in another part of the way quarter of the world, they are sold at 80 cents per dozen.

"It is the same with nearly every branch of our trade. The genius of man has constructed machinery which can cut wood into every shape and shape conceivable, and the result has been the rapid decrease in prices, until a whole lot of full of stuff represents but a few thousand dollars, and what several years ago would have netted a profit of a million would scarcely today a profit of a thousand. But I guess you have reached bed-rock. If prices fell much lower the present figures we would be selling goods for less than the wood in the rough would bring."—Lumberman's Gazette.

A GREAT CHIMNEY.

The highest chimney yet built in the world has recently been completed at the Mechanical works in Germany. The whole height of the structure is approximately 440 feet, 11 of which is underground. The subterranean portion is of block stone, 37 feet square up all the rest is of brick. The plinth, or base part of the chimney above ground, is 31 square, so that the height of the shaft is thirteen times the lower diameter. For a 31 feet the chimney continues square, then comes octagonal in plan for a little distance, finally changes to a circular form, retaining shape to the top. The exterior diameter of shaft at the top is about 1 1/2 feet. The shaft is 10 feet in diameter at the bottom and 10 feet at the top. Until the completion of this chimney, of the St. Rollix chemical works, near Garmisch, which is 434 feet high, was the tallest in the world.

AMONGST other things British Columbia celebrated for its Douglas Pines, many of which are too large to be disposed of by an ordinary saw mill. Recently four logs were sent to Vancouver. Their dimensions were as follows:—

- 1 log 62 ft. long, 40 in. diam., congt 250
- 1 log 53 ft. long, 44 " " " 50
- 1 log 36 ft. long 55 " " " 50
- 1 log 24 ft. long, 56 " " " 46

The Quebec Chronicle finds the lumber market to be even duller than it usually is this season of the year. One raft of 6000 timber, about 47 feet average length, was sold at 16 cents. In deals there is little doing, the sales in the principal markets of Great Britain are being effected at prices entirely low to pay shippers. Pine are not much inquired for as they were, and spruce are of sale.

**FREE LUMBER.**

Thousands of our citizens have been led to believe that a removal of the duties on the import of Canadian lumber would have a tendency to increase and protect American forests. This fallacy. The removal of the duties would advance the profits of the Canadian lumbermen to the extent of the reduction, though per capita stimulating production among the saw mills in the Dominion to the detriment of our home market. Our American forests are owned by individuals who are obliged to work them for their daily sustenance. Lumbermen would not cut their lands or saw mills simply by reason of the Canadian competitor getting his lumber free of duty. The American operator would feel that our Government had committed a wrong should the Canadian who pays duty here, be allowed to sell his lumber to our markets without duties, while the American operator is handicapped with a duty on his lumber. His saws, his tools, his blankets, tools, and almost everything which enters into the cost of his lumber. Yet the operations of the American citizen whose whole capital is invested in his timber lands and in his saw mill must continue under the fiercest and most unfair competition.

It is a waste of valuable raw material. A cutting of mature trees gives a better specimen a better chance for life and growth. The Canadian Government wants to trade, or, practically, free trade with this country. This cannot be accepted by us without serious impairment of extensive American forests. The Canadians have put up the duty on pine logs to \$3, and on spruce to \$2 per thousand feet. On shingle bolts have fixed a specific duty of \$1.50 per cord. The object is to prevent Michigan lumbermen, who have purchased timber lands on the north shore of Lake Huron on a large scale from raising the logs to the Michigan to be sawed. But the real purpose is to favor the lumber building up an American country in favor of free trade in lumber. Canadian writers on forestry are prolific in predicting a lumber famine in the United States. This is not wholly disinterested advice. Our country should afford the same protection to lumber interest that it does to other industries. Free lumber would build up Canada and damage the lumbermen of this country, and any corresponding advantage to other countries.—*Manufacturers' Gazette*

**HOW AXES ARE MADE.**

The manufacture of axes, the material through twelve different operations being ready for labelling and boxing. At its rectangular piece of iron, about three inches of an inch thick, three and one-half wide, and about six inches long. The steel, and in some instances is inserted at the edge of the iron, and in others it is over the edge of the iron. There is a great demand for axes made entirely of steel. The most important part of the process of manufacture is tempering. "This is really where the axe is made," said a manufacturer. The grinding and polishing is the most laborious process. It is here that the rough, axe-shaped semblance of an axe is ground polished until it is as bright as a mirror. It is that the work will prove fatal within five days to any man who pursues it steadily. The axe is filled with imperceptible dust from the grinding and many of the workmen tie small pieces of cloth saturated with water over their faces.

The dust nuisance in the Ottawa river is complained of, and it is suggested that the government could easily do something to prevent it at this season of the year. Not only deposit beginning to affect the lower part of the Rideau canal, but the frequent fogs of gas generated by the pine dust period of submergation are stated to be very dangerous to those taking pleasure boats.

**LOAFING.**

While there are many complaints made, from time to time, says the *Mechanical News*, about the dullness of business and the hardness of the workingman's lot, we hazard the statement that about one half of the hard times and business depression is the direct or indirect result of loafing—either good, or solid, square, old fashioned, primitive loafing or the modern revised version, which is called, for some occult reason or other, "soldiering."

There are very few honest, safe and profitable occupations in which success can be attained by sitting down and waiting for it, or is got by luck. There is more gold got out by patient labor than was ever brought to light by stubbing the toe against nuggets. The diamond fields are the scene of patient, plodding labor, neglecting no shadow full of dirt.

There is a marked difference between workmen who are doing for themselves, or who are piece working, as well as among those who are "by time." One man will loaf away an hour a day. It may be listening to, or watching his neighbor; or hunting a match or helping hunt one; or wondering what to do next; or it may be distributed all through the day by deliberate and careful attention to the science of slow moving as applied to the prevention of heat or rupture; but it is there, all the same, there is an unproductive hour or a day with a tenth or an eighth less work in it than it should have.

A first workman cannot afford to loaf. He may lose his place, for a selfish reason. He is not giving an honest equivalent for what he receives, for a moral one. He is getting into the habit of working slowly, which will interfere with his profits if he gets on piece work—selfish reason No 2. He is setting a bad example to others to render a poor equivalent for their pay moral reason No. 2.

We could keep on piling up reasons of each kind against loafing, but they will suggest themselves; and then the case is somewhat analogous to the one where the lawyer announced twenty-nine reasons why his client did not appear at the trial. In the first place, he was dead. The second reason was that "the first reason was reason enough."

There are many foundries and factories, mills and shops, where no smoke issues from the stack and no rumble of work is in the air, and in which more energy and less loafing, on the part of proprietors and employes, would have enabled work to continue right along, at least at a rate which would pay hands and keep the business in public mind until times were better. Ten per cent. more work out of every man would not have strained any one and would have made just the difference between a slight loss in the business, and "expenses cleared." And that ten per cent. more work would have improved every man on the place.

We just heard an anecdote of a noted stenographer who drops into profanity if a day goes by without his having anything to do; not because he loses the earnings of that day, but because he loses speed. He gets some one to read fast to him, in order to keep up his speed.

Go into an engine room and see the engineer doing nothing all day, and you will see a man who will not earn any more ten years from now than he is now getting. Instead of loafing, he might be reading, or drawing his engine out to scale or learning something about the machinery his engine drives.

The time for loafing is after work. Then it should be free and unreserved, and will be beneficial, and rightly earned.

ANOTHER most important event in the progress of the Dominion, which is held to be only second to that of the opening of the Canadian Pacific Railway enterprise itself, was the inauguration on the 13th ult., of that company's new Canadian telegraph system, with connections also in the United States as well as to Europe, by arrangements consummated with the Postal Telegraph and Commercial Cable companies controlled by William Mackay. The Postal Telegraph system completely covers the United States, being a union of all lines secured by Mr. Mackay that were dependent of the Western Union, including the American Rapid, the Northern Mutual and the Bankers and Merchants.

**BRITISH COLUMBIA LUMBER TRADE.**

The great timber limits in the Province of British Columbia are rapidly being utilized, and the fact is not looked upon with much satisfaction by those engaged in the timber trade across the border. The *Northwestern Lumberman* referring to this subject, says:—

"Pacific coast mill men and lumber exporters must look out for competition from their northern neighbors across the national boundary. An important part of the lumber trade of California, Oregon and Washington territory mill men has been their exports of lumber. This trade has not been on the average very profitable, but it has been an outlet for surplus stocks and prevented a demoralizing over supply at home. The exports to the Australasian British colonies have been especially important and have largely increased with recent years. But co incident with this increase has been the growth of the saw mill industry of British Columbia, and that province has already shown itself no mean competitor. The completion of the Canadian Pacific railroad, and the consequent awakening of enterprise all along its line will be particularly potent at its western terminus. The magnificent timber resources of British Columbia will be opened up rapidly, and will supply not only the lumber demand of the prairie regions to the east, but will be available for export. Other things being equal, it is to be expected that Australia will give the preference in making purchases to the products of a country to which it is politically allied. Moreover, the movement in Australia to bar out American lumber, in favour of that from New Zealand, by an almost prohibitory tariff, will not be brought to bear against the timber of British Columbia. Pacific coast operators should be awake to the situation. They may not be able to prevent the substitution of the northern product for their own but there is yet time for them to largely occupy British Columbia if the field should seem a desirable one."

**A SUCCESSFUL MACHINE.**

The following flattering testimonial has been received by the Waterous Engine Works Co., of Brantford, regarding the working of their 25 h. p. Portable Champion Mill.

RODGER'S PASS, B. C., August 26th, 1886.  
The mill is and has been working all right as the amount she has cut since I started will show for itself. I have run steady ever since I started, never had to stop an hour, or cost them a dollar, so there is nothing in the way for them to settle. The mill was cutting in 28 days after it left Brantford—that is I started up on the 21st of June to cut, and up to date I have cut more than one million one hundred thousand (1,100,000) and we have to do the edging with the large saw. When the mill got here they said that it was too small, and that it was to be 35 or 40 horse-power mill, direct action, 60 in. saw and large carriage. A mill of that class would not have been any too heavy for the work I have to do. The logs are hard to cut, and at first they were too large, (4 feet diameter) for this small carriage and small saw, that is the reason the pulley and extra size saw were ordered. To cut the amount I am cutting, I have to work the mill and run the engine fully more than I should do, but I am as careful as possible to see that everything is kept right, and so far all has went well. Let me know if there was any stated capacity in contract. Our average cut per day will be fully 20,000 and do the edging on the large saw, and that keeps us so there is not much time to be lost. It is 1 in. boards and 3 and 4 in. plank, but it is all to be cut 14, 12, 10 and 8 inches wide. We do not saw any bridge or other timber. The most of the logs that we cut are spruce and cedar. The cedar is bad to saw, it is hard to make a saw to run right in it. Yours etc., JOHN LYLL.

**The Loss of Power.**

Start at your engine, and follow up your line of shafting, and figure up how many tons of excessive weight you have been carrying thereon, which to keep in motion, has been at a cost of from one to five horse-power per ton weight, according to alignment of same; then follow back and cipher your loss by slipping belts, and you will be surprised to find the sum total to be more than one half the amount of power you are using—*John P. Morely, in Power and Transmission.*

A dispatch from St. John N. B., says: The Bangor lumbermen all agree in saying that the cut of logs the coming season will be much larger than for several years past. It is said that one third more concern will operate than usual, and all will go in for winter's work. As yet no estimates have been made of the probable amount of the cut. A great many concerns are taking up the West Branch, but no permits have thus far been made there. More work will be done on Cumberland Lake than for some time past.

**BAND SAWS.**

Band saws are probably the coming machines for making lumber, where great economy of raw material is the thing to be most carefully considered. The experiments made, and the practical use of these implements during the last two or three years, demonstrate this much beyond any question. But because this is true, it does not follow that circular saws are to become obsolete. They have made too good a record to be disposed of so summarily. There is no good reason for believing that circular saws will not be in great demand for many years to come, if they do not occupy a prominent place in the list of lumber cutting tools as long as there is lumber to be cut. Both the band and circular represent developments of the same principle; they both accomplish their work by means of a serrated blade moving rapidly in one direction, therein differing radically from the principle of the earliest sawing machinery—that of a reciprocating movement—the highest development of which is seen in the modern gang. So handy, effective, reliable and cheap an application of the principle of a continuously moving blade, as is found in the circular saw, cannot give way entirely to any improvement, however economical of timber it may be. For very many situations, the circular mill, of low first cost, adapted to more or less rough usage, not easily got out of repair, rapid in its work, and altogether a reliable device, is better fitted than would be the most perfect band machine, though it might cut a kerf no thicker than a sheet of paper. The fact that there are so many places of this kind which can be better filled with a circular mill than with any other sort of lumber cutting arrangement, insures for it a demand and popularity that will not be perceptibly reduced by the encroachments of the band saw upon its domains. Indeed, it is possible that improvements may still be made in circular saws that will bring it close alongside the band, in point of economy. Astonishing success has been achieved already in the use of thin saws, and who will venture to fix the limit beyond which improvement in this direction shall not go.—*The Timberman.*

**THE NOISE OF THE FINGER.**

Dr. Hammond says that when you place the end of your finger in your ear, the roaring noise you hear is the sound of the circulation in your finger, which is the fact, as anyone can demonstrate for himself by first putting his finger in his ears, and then stopping them up with other substances. Try it, and think what a wonderful machine your body is, that even the points of your fingers are such busy workshops that they roar like a small Niagara. The roaring is probably more than the noise of the circulation of the blood. It is the voice of all the vital processes together—the tearing down and building up processes that are always going forward in every living body from conception down to death.



# THE CANADA LUMBERMAN

DEVOTED TO THE LUMBER AND WOOD  
WORKING INTERESTS OF THE DOMINION.

PUBLISHED MONTHLY BY

A. G. Mortimer, Peterborough, Ont.

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Per line, for first insertion..... 10  
Per line, for each subsequent insertion to 3 mo's..... 04  
Cards not occupying more than 12 lines (1 inch) per annum..... 8 00  
Cards not occupying more than 12 lines (1 inch) for six months..... 5 00  
Cards not occupying more than 6 lines per annum..... 5 00  
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Special rates will be made for page, half page and column advertisements.

All communications, orders and remittances should be addressed and made payable to A. G. MORTIMER, Peterborough, Ont.

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

Advertisements intended for insertion in any particular issue should reach the office of publication at least six clear days before the day of publication, to insure insertion.

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

PETERBOROUGH, Ont., OCTOBER 1, 1886.

If you want a situation, or want to find a first class foreman, advertise your wants in the CANADA LUMBERMAN. Only one cent a word.

We expect a great rush of subscriptions during the next few weeks, as a result of our low offer for the balance of the year. Send in your quarter.

We desire to secure active agents in every county who are willing to work on liberal pay to take subscriptions for the CANADA LUMBERMAN. Outfits and sample copies free.

The auction method for selling lumber, recently adopted in New York, does not appear to have gained popular favor. Sales of this nature have been almost entirely discontinued.

The editor of the *American Builder* grows funny, and says:—The most afflicted part of the house is the window. It is always full of pains, and who has not seen more than one window blind?

The railroads of the continent require nearly \$15,000,000 worth of timber per year for ties alone—equal to the annual product of a strip of woodland 400 feet in width alongside every mile of track.

MANUFACTURING interests in the Dominion show a steady and rapid increase. Lately compiled statistics prove that the total number of factories has risen from 843 in 1873 to 2,135 in 1886. The amount of capital invested in these undertakings has increased from \$37,819,731 to \$67,293,373, and the value of the products from \$89,063,262 to \$102,870,166 during the same period.

From the next issue the LUMBERMAN will be enlarged and materially improved in every way. Neither the typographical appearance or the arrangement of matter in this issue is up to what we intend making it in the future. Hurry is something which should never be permitted in a printing office, but unfortunately such has been necessary in turning out the present number.

WHAT is stated to be the widest leather belting ever made in Canada, is now in process of construction by the widely known leather belting manufacturers, Messrs. Robt & Sadler, of Toronto and Montreal. It is for the Royal Electric Co., of Montreal, and it is to be used at their lighting station in that city to transfer the power to dynamos. The belt is 111 feet long, 38 inches wide, and double thickness.

DESIRING to make the CANADA LUMBERMAN a medium for the diffusion of information relating to the lumber and wood-working industries, we cordially invite communications on all relevant topics. Not only do we desire to secure all the news from month to month from all sources within the scope of this paper, but we also invite free use of our correspondence page for the discussion and ventilation of any subject likely to be of interest to the lumbering and wood-working fraternity.

COLONEL JEFFERS of East Saginaw, has bought from certain persons in Canada 500 000 acres, or twenty townships, of standing white pine. The land is situated on the Georgian Bay and upon the Serpent, Spanish and Mississauga Rivers. Colonel Jeffers, writes:—I have been engaged for most of my life in the business of buying pine, and think that nothing outside of the Saginaw Valley was ever seen like this whole Georgian Bay country for good pine. It is far superior to the Wisconsin or Lake Superior pine.

### TO JANUARY, 1887.

For the balance of the year we will send one copy of the CANADA LUMBERMAN to any one sending us 25 cents. To new subscribers who will send us \$1 we will mail the LUMBERMAN from now until the 1st of January, 1888. Every lumberman, saw mill owner, and wood worker in the Dominion should accept this very liberal offer. As this is the only journal of the kind in Canada, and as we propose making it a thoroughly representative organ for the lumber and wood-working industries none can afford to do without it. Send us your money, and receive in return a paper which will keep you acquainted with the ins and outs of the trade, and especially a complete market report.

### EXCHANGE ECHOES.

Contemporary Opinions on the Various Matters of Interest to the Trade, Northwestern Lumberman.

We are told by the manufacturers of machinery that their business has picked up wonderfully of late. The dullness that prevailed in the shops in the early summer months has disappeared, and in its place has come activity. One gentleman says that his shops are overrun with orders, and that the outlook is very promising. Another gentleman visited a section of country not particularly noted in lumber circles, and brought back \$40,000 worth of orders; and there will be more to follow. There is without question, a growing feeling of confidence among lumber dealers and manufacturers.

Monetary Times.

Circular advertising is getting to be a terrible nuisance to many firms. About half of their mail is made up of envelopes containing circulars. The experienced eye can now detect these as soon as seen, and they go into the waste basket unnoticed. Business men now a days cannot spare the time to wade through long-winded circulars. If you have anything to sell say so by means of a judiciously worded and attractively displayed advertisement in a live newspaper. It is cheaper and is more likely to command attention than the most elaborate circular.

Southern Lumberman.

MORE people go crazy on the subject of sawdust than in regard to anything else of the same utility, and more cranky suggestions have been made for its use for more varied purposes than any other refuse and waste incident to the wood-working trades. A German gentleman,

named Fredrick William Wendenburg, of Bagnitz, Prussia, has made application to the government of Canada for a patent for a process of manufacturing cattle feed from sawdust or wood meal and other materials, and also have patented the use, application and employment of the same in Canada. We suppose cows kept on this food will be expected to yield a fine article of pyroigneous acid and wood alcohol milk and make large yields of oleomargarine butter. When the fool killer comes and does his whole duty we will hear less mention of sawdust.

Southern Lumberman.

NONE of the various log rule tables give any satisfactory method of measuring a hollow log. A very interesting discussion on this subject occurred the other day on a proposed trade for a large lot of standing poplar timber in Giles county, Tennessee. All the terms of the trade were agreed upon except in regard to the timber that should prove to be hollow. The seller proposed to deduct the square of the hollow from the amount of lumber the log would make if sound, and the buyer proposed to deduct one-half the diameter of the hollow from the diameter of the log. For instance, he proposed to count a 24-inch log that had a four inch hollow in it as a 22-inch log. No agreement was arrived at, and our opinion was asked. We would be glad to hear from lumbermen, and learn what the custom is in measuring hollow logs in every locality. Write to us on the subject.

Northwestern Lumberman.

The Duluth lumbermen have a scheme for getting around the difficulty of running logs down the wild St. Louis river. The proposition is to establish the Union Boom works near the mouth of Cloquet river, and secure rail connection between that point and the mills at Duluth, by which to bring logs down from above the rapids. This looks like a feasible undertaking, and one that could be carried out if sufficient capital and energy are employed. It is evident that much of the lumber from the Duluth district can be profitably marketed in the lake cities and at the east. The tendency of a large portion of the mill output at Duluth is already eastward. It certainly seems as if it would pay the owners of stumpage on the St. Louis to provide a means for bringing logs to the mills at Duluth, from whence a choice of markets in all directions can be had.

Southern Lumberman.

The Canadian government wants reciprocity, in other words, free trade, in lumber with the United States, and has placed an export duty of \$3 per thousand on pine logs and \$2 on spruce logs in retaliation for an import duty levied on Canadian lumber by the United States. Some Michigan lumbermen have made heavy purchases of Canadian timber lands, and from these conditions several question more or less affecting various lumber interests have arisen among our northern contemporaries. Difference of opinion prevails. Whether free trade will have a tendency to protect American forests; whether it will lower the price of American lumber or merely advance the price of Canadian stumpage, are some of the questions discussed. It is a matter that does not affect the lumbermen of the South, and free trade or a high tariff on Canadian lumber are matters of no consequence to them. If we may be allowed to make a purely disinterested suggestion, we should say, that, without having made the question a study, it would be entirely safe to leave the subject severely alone and let it remain just where it is for a few years. Where one is in doubt what course to pursue, it is always safer to do—nothing.

Northwestern Lumberman.

The news from Washington the past week that Canada proposes to make the export duty on pine saw logs prohibitory has pricked up the ears of Canadian pine owners on this shore and they are a little uneasy. W. F. Whitney has just purchased 120,000,000 feet on a tributary of French river, and calculates to put in 8,000,000 feet of logs to be brought here; an Oscoda party proposed to operate quite extensively in long timber in the Georgian Bay region and raft the same to Oscoda to be sawed; the Emery

Lumber Company expects to put in 15,000,000 feet this winter to be brought over next season, and two or three Alpena parties proposed to operate extensively and raft the stock to Alpena. If the export duty is made prohibitory it will at once be seen that it will materially affect the calculations of these parties, and it will compel them to either suspend operations or build mills in Canada, as well as certain intended supply of mills on this side. The Emery Lumber Company wants its stock to supply its mills at East Tawas and Squaw but its timber lies along the line of the Canadian Pacific railroad, and it will possibly be forced to build a mill and manufacture there, and then there is a duty of \$2 a thousand of lumber imported into the United States. The Canadian people are determined to derive the benefit arising from the manufacture of a commodity, and the desire is natural.

American Builder.

The planing mill men and other wood workers of Cleveland, have been very greatly interested during the past ten days or two weeks, over one of the simplest and yet most wonderful machines ever set up. It is the Cyclone Dust Collector that has been steadily at work in Smeed & Co's. box factory. It is as all who see it admit, a final and complete solution of that problem that has been the great source of trouble, viz., how to send the wind in one direction and the shavings and dust in the other, after the fan has blown them to the shaving room or other place of deposit. The Cyclone Collector does it to a charm. The steam is blown into it, and while the shavings and dust are so quietly dropped that the fireman can feed from the room with the door open all day long, the blast is carried away through an opening in the top, and nothing else goes with it. It is difficult to make one believe that the machine will do what it does, yet the hundreds who have visited it are limited to a man in witness to the fact that it does it, and that too, all day long without a halt or a break. Several others have been ordered and will be set to work in Cleveland as soon as they can be manufactured.

### AN ADVENTUROUS VOYAGE.

The *Mary Graham*, a barque hailing from Quebec, laden with timber, has had an adventurous voyage. She has brought with her the *Ocean*, a Norwegian boat, which left Norway in May, with two men on board, with the idea of crossing the Atlantic. The *Mary Graham* picked her up 270 miles from land off the banks of Newfoundland, after being six days at sea. She measures 5 ft. 6 in. in breadth and about 15 ft. in length. Three days after the rescue the *Mary Graham* was running before a hurricane and shipped a tremendous sea, which carried away all her boats, smashed in the front of her cabin, and cleared out its contents, spoiling the provisions but a few tinned things. The captain was killed, and the second officer, with one man, was washed overboard. Most of the crew were severely injured, one man having his leg broken and another his arms. The deckload of timber was washed overboard.

### THE BIG TIMBER RAFT.

The work of repairing the broken cradle of the big timber raft, at Jogging, N. S., is being vigorously pushed, and from fifty to seventy men are engaged in the work. It is expected that a successful launch will be made in a few days. As before described in these columns, the raft is 410 feet long, 50 feet wide, 35 feet high, and contains 2,250,000 feet of lumber. The earth has been cleared away from beneath the huge structure sufficiently to admit new land-ways and supporting timbers. Narrow trenches are dug across in which the bed-timber is placed that support the shores and barge-timbers. Afterwards, the intermediate sections of earth are removed, the pressure upon them being relieved by the means of hydraulic jacks. Should the raft be safely launched and towed to its destination at New York, it will doubtless be the finest display of spruce timber ever seen in an American metropolitan market.



## SALUTATORY.

With the present issue we are called upon to assume the onerous duties connected with the editorial and business management of the CANADA LUMBERMAN. Whether or not we have mistaken our "calling" is a matter which time only and the readers of this paper can determine. We start out, however, in the hope that our past experience in trade journalism may fit us for the work we have undertaken, and that by a careful and practical study of the wants of the trade, we may from month to month fill the pages of the LUMBERMAN with matter best calculated to interest all those from whom this journal seeks recognition and support.

The LUMBERMAN has a broad field to cover, and it will be our endeavor to do equal justice not only to the lumbering, but woodworking industries as well. The news of the trade will be presented in a concise and readable form. Special attention will be given to reports from the various wholesale lumber markets throughout the world, together with reliable prices current. Editorially the affairs relating to the industries represented will be treated with all fairness and candor, in justice to all and with malice towards none.

Among the miscellaneous reading of the paper will be found from time to time valuable articles on technical questions pertinent to the lumbering and woodworking industries. This department is intended alike for the employer and employed, and will assist in disseminating the views of some of the best writers and thinkers on all practical questions.

Communications upon any subject in which the trade is interested are earnestly solicited. The columns of the LUMBERMAN are always open for the fair discussion of any subject in which its readers are concerned. Anyone desirous of expressing his views on any subject connected with the lumber and woodworking industries is at liberty to use these columns.

Our "Personal" department, and "Sketches of leading lumbermen," which we propose introducing in a future issue, will be found of considerable interest. We shall at all times be thankful for contributions from the trade containing personal notes, items of news, or information of any character.

In conclusion we would solicit the hearty co-operation of all interested in the branches of trade of which this journal seeks recognition, for its future success, and we shall do our best to please all.

A. G. MORTIMER.

The *Journal of Commerce*, Montreal, says of the Ottawa, Ont., lumber business that there is thought to be a prospect of trade looking up, and that its condition now is better than it was a year ago. The deal trade with Quebec is improving, but the export demand is otherwise light. Next year's stock, it is believed, will not exceed that of 1886, and probably less,

square timber will be gotten out, the market being already glutted with that kind of stock. Wages for woodsmen are about the same as last year, choppers getting \$20 to \$22 per month, and other laborers \$15 to \$20.

The *Toronto Globe* of recent date says that an agreement which was entered into a few months ago between the general freight agents and the lumbermen, by which all lumber shipped should be taken at an estimated weight, has fallen through. The lumbermen were dissatisfied with the arrangements, and on Thursday the old order of things was reverted to. All lumber will be weighed in Toronto in the same way as other freight. The lumbermen want lumber carried at so much per thousand, but as lumber varies so greatly in weight, the railway companies will not agree to this.

UNITED STATES Commercial Agent Hotchkiss, in the course of an exhaustive report to Secretary of State Bayard upon the lumber industry of Canada, says that while the increased export duty upon saw logs is published as being from \$1 to \$2 per 1,000 feet, board measure, it is evidently intended that when the exports become developed the duty shall be further increased to \$3, under the discretionary power vested in the Governor-General, which rate, it is supposed, will be prohibitory. "It is an indisputable fact," he says, "that this tariff will also be further increased if it shall become necessary to find the prohibitory point; for while the Government interposes no objections to Americans owning the timber, it is fixed in its determination that the Dominion shall have the resultant benefits arising from the manufacture."

The Lumber Manufacturers' Association began its annual convention in Chicago on Sept. 23rd. President A. G. Van Shaack in his address said the lumber trade since 1884 had been less profitable than it should have been. The quantity of pine lumber that will be placed in the market in 1886, he said, "is estimated at about seven billion feet, which, if correct, is evidence that the manufacturers of pine lumber, who now receive only the current price of 1880 for their product, donate to the consumers of their lumber all the advance in timber since 1880, in amount say \$14,000,000 for 1886." The timber supply of the Northwest, he said, is far too small for the prospective demand. Secretary Hotchkiss said in his report that if the estimates supplied by individuals were correct, the lumber producing regions of the Northwest had a hang-up stock of from one and a quarter to one and a half billion feet of logs on the first of the present month.

The office of the LUMBERMAN is in connection with the *Review* Printing and Publishing Company, George street, Peterborough.

## PERSONAL.

Contributions from or concerning our friends and patrons are freely welcome to this column. The name of the sender must always accompany such notices.

Mr. J. J. Taylor, for some years past associated with the firm of J. C. Wilson & Co., Picton, Ont., has ensconced himself into the manager's chair of the Rathbun Co.'s Agency at Napanee. Mr. Taylor is an obliging and courteous business man, and is pretty sure of making the Napanee Agency as great a success as it has been in the past.

Mr. James Breault has entered on duties in the Central Office of the Rathbun Company succeeding Mr. Wm. Deans, who has been promoted to the position of assistant to Mr. Rixen.

Mr. J. B. Miller, President of the Parry Sound Lumber Company, has removed his family to Toronto, where he intends to reside during the winter months.

Mr. W. C. Archer, who has during the past two years been connected with the stenographic staff of the Central Office of the Rathbun Company, left on Monday for British Columbia, where he makes his future home. Mr Archer made a host of friends when in Deseronto, and he departs with the best wishes of all. We wish him all success in the far west.—*Deseronto Tribune*.

We congratulate brother Dan. W. Baird, of the *Southern Lumberman*, Nashville, Tenn., on his able essay on the subject of "Class Journalism and Trade Papers," read before the Tennessee Press Association at its late annual meeting. Our thanks are due Mr. Baird for complete minutes of the convention.

## PROCESS TO TOUGHEN WOOD.

It is claimed that by a new process white wood can be made so tough as to require a cold chisel to split it. An exchange says: This result is obtained by steaming the timber and submitting it to end pressure, technically "upsetting it," thus compressing the cells and fibres into one compact mass. It is the opinion of those who have experimented with the process, that wood can be compressed seventy-five per cent., and that some timber which is now considered unfit for use in such work as carriage building could be made valuable by this means.

## THE LUMBER AND WOOD WORKING INDUSTRIES OF BROCKVILLE.

A representative of the *Lumberman* recently paid a visit to the beautifully situated town of Brockville, and while there visited the various lumbering and wood working establishments of which that town boasts. From his note book the following information is taken.

## KEARNS &amp; MARSHALL—LUMBER.

Perhaps the largest wholesale and retail dealers in Lumber throughout this section is the old established firm of Kearns & Marshall. Having been in business here for the past 14 years, these gentlemen have built up a trade of which they justly feel proud. The yards and business office of the firm are situated on the main street, near the centre of the town, and occupy a space of 175 x 300 feet. The stock usually kept on hand here consists of about one million feet of lumber, together with large quantities of laths, shingles, fence posts and hop poles. Across the St. Lawrence river, in the village of Morristown, N. Y., we also find

this firm operating a saw mill, with a capacity for turning out 10,000 feet of lumber daily, in addition to 10,000 to 14,000 shingles. The lumber yard at this point is much larger than the one previously referred to, there being in stock two and a half million feet of lumber. The trade done by Messrs. Kearns & Marshall is principally local, although considerable stock is annually shipped to the New England states. This business foots up to from \$10,000 to \$12,000 per month, and gives employment to 20 men.

## PETER McLAREN LUMBER.

Opposition, it is said, is the life of trade, and evidently this was the impression formed by Mr. Peter McLaren, when he opened out his extensive yards here two years ago. Being kindly received by Mr. Jno. Poverley, manager, and his assistants, Messrs. T. B. Moore and O. H. Storey, we took a tour of inspection through the various buildings and yards, which are stocked "mountain high" with every description of sawn and dressed lumber, laths, shingles, dressed sheeting, carpenters' lumber, flooring, roofing, scantling, sash, doors, mouldings, etc., etc. This is simply a branch of Mr. McLaren's extensive works, and the stock usually kept here is intended for local consumption only. The extensive saw mills operated by this well-known lumberman, are situated at Carleton Place and Mississippi, Ont., from which forty-five to fifty million feet of sawn lumber is annually produced. The manufacture of square lumber is even more extensive. The principal shipments of lumber from these mills are to New York, Portland, Boston, and other American cities, while the square timber is nearly all shipped via Quebec to European ports. The following figures indicate the ruling prices in Brockville during the past two months; Lath, No. 1, \$2; No. 2, \$1 75; Shingles, 18 in, \$1 25, \$2 and \$3; cull lumber, from \$6 to \$8; shipping cull, from \$12 to \$14; siding, from \$15 to \$18; bill timber (hemlock), \$12 to \$14; pine timber, \$17 to \$20.

## MCNISH &amp; MCKENZIE—LUMBER.

This firm have also been doing business in Brockville for the past two years, and although carrying on but a small trade compared with the firms mentioned above are nevertheless holding their own. The lumber on sale at the yards here is manufactured at the firm's saw mill at Algonquin, Ont. The capacity of this mill is about 7,000 feet per day. The manufacture of shingles, cheese and all kinds of packing boxes is also carried on. They also operate a small custom flour mill for the accommodation of farmers and whatever money they can make out of it. Mr. McNish attends to the business at the mill, and Mr. McKenzie has his headquarters at Brockville.

## JNO. BRIGGS &amp; SON—PLANING MILL.

Wood-working establishments always go hand in-hand with lumber as we find it in its rough state. From the log comes the lumber, and from lumber comes every variety of necessary and useful article for all branches of trade. The planing mill operated by the above firm has been running for the past 17 years, and does a full share of the trade of the town. The manufacture consists of sash, doors, blinds, mouldings, and, in fact, all kinds of house furnishings. The mill gives employment to an average of 16 hands. The best Canadian machinery is employed, and is contained in a building 35 x 65 feet, two stories high, with engine and boiler room adjoining.

## KEARNS &amp; CO.—PLANING MILL.

The above firm are engaged in the manufacture of the same class of goods as the one just described, and have large premises situated in the centre of the town. This business has been established since 1874, but has only been controlled by the present firm during the past two years. The main building is 40 x 60 feet in size, and stands three stories high. Near at hand are also two large sheds, used for the storage of lumber. The list of machinery used in the mill is complete and of the best Canadian manufacture. A considerable number of hands are employed.

The extensive building operations which have been going on in Brockville for the past year or two, have taxed the capacity of these mills to a considerable extent. Everything considered the lumber and wood-working industries of Brockville are in a prosperous condition.



## General News Notes.

COUNTRY shingle mills do not appear to be making much money this year.

McLENNAN'S mill at Kilworthy has cut 15,000,000 feet since the season began.

JOSEPH SONA, of Deseronto, had some of his fingers lacerated by a saw a few days ago.

THREE million feet of lumber will be required for the new Canadian Pacific elevator at Montreal.

W. A. HUNGERFORD has bought the mills situated at Gen Lewis, formerly owned by C. Wallbridge.

THE opening of the Murray Canal will be celebrated by a grand demonstration at Trenton or vicinity on Oct. 2nd.

SHIPPING at Ottawa still continues brisk in the lumber trade, and shows every sign of remaining so until the close of the season.

THE new forty cord brick kiln for burning charcoal at the Rathbun Co's works at Deseronto, is now completed. It is said to be a fine piece of workmanship.

THE Gilmour Company and the town of Trenton are at loggerheads concerning a water privilege asked for by the above firm.

GEO. GRAY'S sash and door factory at Harrisburg, Ont., was destroyed by fire on Aug 29th. Loss partly covered by insurance.

ALL the Chaudiere and Hull mills, on the Ottawa, Can., are running night and day in expectancy of a brisk fall demand.

IN the Ottawa district large numbers of shantymen are already being engaged to go to the bush to engage in lumber operations for next season.

ABOUT 1,000 railway ties and 1,200 posts are turned out of the Cedar Mill, at Deseronto, each day, besides shingles and dimension stuff.

ADVICES from Vancouver, B. C., state that the ship Beaconsfield is loading with 1,020,000 feet of lumber, value \$11,800, for Peru, and the barque Naniimo is taking 465,000 feet to Trenton, China.

BELLEVILLE was visited with a disastrous fire a fortnight ago, by which about 2,000,000 feet of lumber in Flint & Holton's lumber yard was burned. Loss, \$25,000; no insurance.

THE barge which was fitted up by Gilchrist & Co., of Alpena, Mich., to take over logs from the Georgian Bay, after having made one trip abandoned the project.

THE Rathbun Co., of Deseronto, has closed a contract with the Grand Trunk Railway Co., for 300,000 railway ties to be delivered during the coming fall and winter.

THE Dickson Company, of Peterborough, have constructed along the river bank at their property about seven hundred feet of piers this year, to protect the shores, and behind which to deposit mill refuse and thus make ground.

IT is claimed that cedar on Manitoulin island, Lake Huron, is getting low. Lately a propeller had to move from port to port along the shore of the island in order to get a full load for Chicago.

THE steamship Camco lately sailed from Montreal with 1,781,000 feet of lumber on board, shipped by Bryant, Powis & Bryaut, London. It was said to have been the largest cargo of lumber loaded in the St. Lawrence this season.

A GIANT oak weighing about 55 tons has been recovered from the bed of the Rhine, where it is supposed to have laid at least 3,000 years, and is on exhibition on a kind of Noah's Ark moored off the Cours-la-Rhine, Paris.

TO find the amount of water required for a condenser divide 1,100 by the difference between the temperature of the hot well and that of the injection water; the result is the number of pounds of water required to condense one pound of steam.

IF it is decided to maintain the Colonial Exhibition permanently in England it is, according to the *Manitoban*, probable that the Manitoba Government will have a space reserved for the products of that province. The land department of the M & N. W. Railway may also have a permanent space.

THE Northwestern Coal & Navigation Co., has offered to make a free grant of land and ten thousand feet of lumber for the erection of a hospital in Lethbridge, Man., provided that the residents will furnish the labor and other incidental expenses necessary to its erection.

FOREST protection has awakened so much interest in California that the legislature, at its last session, appointed a forestry commission, with instructions to investigate the extent character and rate of destruction of the timbered districts of the state.

AN Ottawa paper says.—"Less square timber than ever before has passed through the Chaudiere Slides this season. A large quantity has been taken over the Canadian Pacific Railway from Nipissing to Papineauville. This, combined with a smaller cut than usual, accounts for the small traffic through the Slides."

THE local news columns of the *Record*, at Selkirk, Man., show that there is a considerable fleet of steamers and barges on Lake Winnipeg, all largely engaged in the lumber trade between the mills located on that water and Selkirk. Apparently there has been an increase in the Lake Winnipeg traffic this season over former years.

MESSRS. SMITH, WADE & Co., timber merchants here are dissolving partnership at the end of the season, Mr. Smith retiring. It is understood that Mr. Wade, with Mr. Walcott, now with Messrs. J. Burstall & Co., will continue the business of the firm of Messrs. Smith, Wade & Co., which will be represented in Canada by Mr. Wade and in England by Mr. Walcott.

A RECENT letter from a correspondent at the Indian and Colonial Exhibition, says that there have been further enquiries for white oak staves, this time from Spain. The last enquiry was followed by a purchase on account of a New Orleans wine cask manufacturer. Mr. H. F. Coombs, of the Canadian section, has offered to supply all needed information on the subject.

AN oak stain can be produced by mixing powdered ochre, Venetian red and umber in size, in proportions to suit; or richer stain may be made with raw sienna, burnt sienna alone is very effective. To darken oak, strong coffee is sometimes used. To make it very dark, iron filings with a little sulphuric acid and water put on with a sponge and allowed to dry after each application, is good.

THE cut of square timber on the Ottawa, Can., has considerably fallen off of late, owing to the increased demand in Great Britain for sawed stock in preference to that in square form. A less quantity of square timber than ever before has passed through the Chaudiere slides this season, but the Canadian Pacific has taken large quantities from Nipissing to Papineauville, where the sticks are put in the water and floated to Quebec.

GRADING on the Deluth & Manitoba railroad between the Northern Pacific junction and Red Lake Falls, Minn., is about completed, and track laying is in rapid progress. The line between Red Lake Falls and Grand Forks, on Red River of the North, is under contract. Red Lake Falls promises to become an important mill point, since the Red Lake pine region is tributary by way of Red Lake and Clearwater rivers. The new road will furnish a shipping outlet for sawed product, east, south and west.

THERE is a change in the firm of Bewick Comstock & Co., of Alpena. Charles Bewick has retired from the firm, having sold his entire interest in the bank, the lumbering business here, as well as the pin lands of Canada and Mississippi, to A. W. W. B. and J. B. Comstock, who will hereafter carry on the business.

THE Bow River Lumber & Land Company, composed of a wealthy syndicate of Eau Claire, and whose scenes of operations is at Calgary Northwest Territory, are rushing the work on their new saw mill along with all possible speed. This will be the first saw and planing mill introduced in that section, and will have a manufacturing capacity of 125,000 feet of lumber per day. A battery of three boilers and the frame work for a gang saw for the mills is in course of construction in Saginaw.

THE prevailing wages for shanty hands now being engaged at Ottawa are as follows:—Choppers, \$15 to \$20 per month, coal cutters \$14 to \$17 per month, shanty foremen, \$36 to \$40 per month; shanty cooks, \$36 per month.

IN consequence of an arrangement between the Canadian Pacific railway management and the lumber firms in the Nipissing valley, Ont., in regard to transportation rates, two large mills will soon be built at McLeod's Bay, near Sturgeon Falls.

A BRITISH COLUMBIA paper says:—"Some fine sticks were cut yesterday at the Hastings mill, Vancouver, one of them measuring 100x24 feet square, and weighing nine tons. The logs are free from all knots and imperfection, no better ones having ever been turned out at any mill on this coast."

THE Lethbridge (Alberta, N. W. T.) *News*, says:—"The Company's sawmill is now getting out 15,000 feet of lumber per day and about 4,500 logs are on the bottom in the vicinity of the mill all ready for the saw. This is only about one third of the logs which came down on the drive this spring."

THE rain of the past few days has caused the Montmorency River, Quebec, to rise sufficiently to permit of the driving of the logs which have been stuck all summer, to the mill. It will be a boon to working class of timber men who have been out of work for several weeks. The rain has had the same beneficial effect on the Chaudiere.

"LATIN" out another railroad? "Surveying for one," was the reply. "Goin' threw my barn?" "Don't see how we can avoid." "Wall now, mister, I calkerlate I've got somethin' tew say 'bout that. I want you to understand' that I got somethin' else tew dew besides running out tew open and shet them doors every time a train wants to go throw."

IT is expected that the cut of logs in the Upper Ottawa country next season will be very large. Messrs. Lord & Hurdman have twelve shanties in the bush, and other firms are proportionately well represented. The wages paid lumbermen are good. There are 20,000 logs in the Des Joachim boom, which when passed through will finish operations there for this season.

THE Canadian government has made another increase in the export duty of logs. The tariff on pine logs has been placed at \$3 a thousand and on spruce \$2 a thousand. On shingle bolts a specific duty of \$1.50 a cord has been declared. This will interfere with the operations of the Michigan men, who have recently invested largely in timber limits on the north shore of Lake Huron.

THE Canadian lumbermen are not satisfied with the export duty on pine logs and have renewed their demand for its increase to \$3 per thousand feet. The original tariff resolutions brought down by the finance minister at the last session made the duty \$3, but it was afterwards reduced to \$2. Manufacturers of sawn lumber say that \$3 per thousand export duty on logs is not more than equivalent to \$2 per thousand import duty imposed upon lumber by the United States government.

A DEALER who had been scurrying around in the Saginaw valley, called at the *Northwestern Lumberman* office recently and had something to say about the tricks of manufacturers. "They have been charging all the schemes in the catalogue to the jobber, but now they are outo them themselves. Over in the valley it is amusing to notice how lumber is piled. The best edge of the board is 'out. Unless a man gets down in the pile to find it, he knows no more than the man who moon what kind of lumber it contains. On that account there are eastern buyers who have had it set to 'em finely. The face of the pile looked well; seeing is believing, they think, so they buy; but in good time they found out that they could see about as far into a lumber pile as they can into a grindstone. I don't go on the face of a pile worth a cent any more." Wonder if the Chicago dealer expected the Saginaw valley manufacturers would order all the best stock put in the middle of the pile and the poorest outside. As they buy by inspection they get what they pay for.

THE *Journal of Commerce* is authority for the statement that the cut of square timber has fallen away of late, owing to the increased demand for sawn lumber in the old country in preference to the bulk block. A less quantity than ever in Ottawa's history has passed through the Chaudiere slides this season, the Canadian Pacific railway taking large quantities down by rail from Nipissing to Papineauville, where the logs are rafted and floated onwards by water to Quebec. There is not at all a large cut expected this year, and on account of the railroad facilities a very much smaller proportion than usual will pass through the Chaudiere slides.

MR. R. REEVES, head boiler-maker at the Wm. Hamilton Manufacturing Co., works, Peterborough, has returned from Waubashene, where he has been engaged in putting in the high boiler made at the company's works, in the steamer Maganettawan, the property of the Georgian Bay Lumber Company. This boiler is the largest ever turned out of the Hamilton works. It is nine feet in diameter, twelve feet long, has one hundred and forty-seven three inch tubes, has two corrugated furnaces forty inches in diameter, and weighs forty four thousand pounds. Though made to carry one hundred pounds of steam, when tested by the Government Inspector, 160 cold water pressure was put on thus giving it a capacity of carrying one hundred and six pounds of steam.

ATTEMPTS have before now been made to utilize the water power of the falls of Niagara, but for some reason they have not been very successful. The new Manchester, which the imagination of its projector called into being, is far from being the scene of busy industry which he painted it. Now, a company has been formed with a capital of \$3,000,000, for the purpose of making a great hydraulic tunnel, a mile and a half long, on the American side, at a distance of about 400 feet from the river. Enough power will be obtained to set in motion 240 mills of 500 horse-power each. In cheapness, it will be difficult to compete with this power. The company has already secured a fair proportion of the land necessary to carry on its operations. By the proposed utilization of this force, the great altar of nature will be left intact and not be defaced nor deformed.

COL. WALTER C. LARNED, the famous art connoisseur, has been in San Francisco for several weeks on a curious mission. He wishes to transplant to the handsome lawn of his magnificent summer residence, at Lake Forest, one of the big California trees, and he has just closed a contract with the Wells & Fargo Express Company to this effect. Special cars are to be constructed to transport the tree across the plains and the umbrageous leviathan will have to be drawn by horse power after the Missouri river has been reached, because the obstacles in the way of railroad curves and bridges east of that point cannot be overcome. The tree which Col. Larned has selected is somewhat over 300 feet in height, is 98 feet in circumference near the base, and weighs about 40,000 tons. The cost of transporting this monarch of the forests will exceed \$18,000.

THE depression in the English timber trade, which has had so discouraging an effect on the American exporters during the season, still continues, and the London lumber journals of August 28 do not indicate that the cloud has lifted to any appreciable degree. Of the situation in London, *Timber* said:—"The consumption, as evinced by the dock deliveries, drags onward with monotonous sluggishness, and the latest returns render it impossible to gather either grounds for hope of better times or the reverse." *The Timber Trades Journal* also presents a very lugubrious picture of the situation, particularly in London, and of Liverpool says:—"The arrivals of wood-laden vessels have again been comparatively unimportant in number, when the season of the year is taken into consideration. A walk round the timber docks and the appearance of the quays and wharves at the various railway and canal companies reveals an amount of stagnation which it would otherwise be almost impossible to conceive when contrasted with the usual busy scene at this period of the import season."

## General News Notes.

MAYOR WALKER'S new saw mill at Kanauksis, Calgary district, is in full operation.

MR. E. B. EDDY'S new ash factory at Hull will be ready for occupation in a short time.

THE Rathburn Co. are busily engaged establishing their shanties for the coming winter's work.

SOOT, SCOTT & Co., the Medonte Lumber Mills, Elele, has cut 3,000,000 feet of lumber this season, and has 1,000,000 feet more to cut before the mill shuts down.

EXTENSIVE forest fires have been raging in the central and northern portions of Wisconsin. North of Milwaukee. Thousands of acres of valuable wood have been burned over.

GEO. GREY'S ash and door factory, at Harrison, Ont., was burned August 30th. Valuable machinery and a quantity of finished work was destroyed. The loss is heavy; partly insured.

LUMBERMEN get twenty cents a log at Wausau, Wis., for raising "dead" or water-soaked logs from the bottom of the Wisconsin River. They have already raised about 600,000 feet and logs that have been dead for twenty years are said to be as sound as the day on which they were cut.

THE Ottawa Journal says that forest rangers are at present inspecting, on behalf of Messrs. J. R. Booth & Co., a tract of timber fifty miles square in the Nipissing district, with a view to its purchase. The owners of the limit, which is deemed a very valuable one, are Messrs. Barnett & McKay, and their price is \$300,000.

THERE is said to be a small tree growing in a gulch near Tuscarora, Nevada, the foliage of which at certain seasons is said to be so luminous that it can be distinguished a mile away in the darkest night. In its season it emits sufficient light to enable a person to read the finest print. Its luminosity is said to be due to parasites.

UNITED STATES Marshal Crawford returned recently from an official visit to St. Mary's Lake, where he learned that citizens of the Canadian Northwest Territory are cutting timber on United States public lands by the wholesale, and are floating it down to Canadian territory, where it is cut into lumber, and sold to the residents of the North west Territory.

IT is understood, says the Port Hope Times, that the C. P. R. Co. and the lumber firms in the valley of the Nipissing are likely to agree on the subject of rates for transporting manufactured and unmanufactured lumber, and that upon the consummation of this most desirable arrangement, two superior saw mills will be erected in McLeod's Bay, near Sturgeon Falls.

IT is expected that the cut of logs in the Upper Ottawa country next season will be unusually large, says the Perth Expositor. Messrs. Lord & Hurdman have twelve shanties in the bush, and other firms are proportionately well represented. The wages paid lumbermen are good. There are 20,000 logs in the Desjardins boom which, when passed through this week will finish operations there for this season.

ON Tuesday morning the 7th inst., Mr. Wm. Blashill, met with a serious accident at Saunders & McPherson's saw mill at Burk's Falls, in having his right hand caught against the edging saw, by which he loses a portion of all the fingers of that hand. Mr. Blashill, says the Arrow, is a very careful, sober, industrious man, highly respected, and he has the sympathy of the entire community. It will be a long time before he can resume his duties and then likely with difficulty.

MR. J. R. BOOTH, the well known lumberer and mill-owner, of Ottawa, has purchased a timber limit on the Temiscamigue some 75 miles in extent, from La Banque Nationale, for which he paid \$77,500. Mr. Booth has made a number of purchases of limits recently. Every limit of any value that has been offered for sale of late has been readily disposed of, the mill-owners evidently realizing that a day is coming when those who do not own limits will find it difficult to obtain logs to keep their mills running.

THE biggest load of saw logs ever hauled over a road in Washington territory recently arrived at Seattle. There were eighteen logs ranking from 24 to 120 feet in length. The longest ones are intended for vessels, masts, and one has a diameter of thirty six inches and another forty eight inches in the middle. The latter contains 13,000 feet of lumber, and the total measurement is about 100,000 feet. Their gross weight is about 650,000 pounds, and they are to be shipped to the Atlantic coast.—New York Tribune.

COMMENTING on the sawdust nuisance, a Pembroke despatch tells how James Dempster, of Petawawa, was brought up before the police magistrate by fishery officer Grant, on the 1st instant, and was fined \$20 and costs, making in all \$24.45, for putting sawdust in Petawawa river. The Ottawa Citizen adds: "It is a pity that the law under which this fine was inflicted could not be put into operation in this city. There is no other way of disposing of the sawdust than throwing it in the river would be found."

OTTAWA millowners were not so busy last fall, nor are they this, as they were in previous years, this they attribute to the increase of railway facilities. In old days people had to obtain the whole of their winter stock before the end of the fall, but now with the increased powers of transit, they can receive lumber by rail at any time. This means increased employment at the lumber yards during the winter. The trade is steady at unchanged prices. But little lumber is obtained in Ottawa, the output having been principally disposed of for the American market. The local demand is moderate.

ON Saturday last a gang of men numbering 27, passed through here for Messrs. McLaughlin Bros.' limits on Pock Lake. Another gang of men for Mr. Moore will pass through to-day (Wednesday) for his limits on Byars Creek. Mr. Ed. Bloomer is "walking boss" on the Bonnechere this year for McLaughlin Bros. Messrs. R. Reeves & Co. have entered into a contract with McLaughlin Bros. to draw provisions to their different shanties on the Bonnechere and Madawaska rivers. The first consignment started from Cobden to day.—Eganville Enterprise, Nov. 22nd.

DURING the season of 1886 the Gatineau boom has been busier than ever, an immense number of pieces and logs having passed over the slide. The following are the number of pieces credited to some of the leading firms: McLaren and company 94,000, Boyle & McCracken 14,868, Edwards & Co. 65,000, Posey, 1,600 cedars, Gilmour & Co. 9,677, Rathbone & Co. 19,367, Hamilton Bros. 68,507, giving a total amongst these firms of 272,919 pieces. This does not, however, give the entire work of the season. A large quantity of odds and ends still remain in the boom to be sorted out and claimed. Messrs. Rathbone & Co., too, have brought down a great number of ties, whilst Messrs. Whitley & Booth have the making of a large raft still on the Madawaska river, which is uncertain whether they will be able to run through this season. The above returns are entirely distinct from the Ottawa slides, over which timber is still arriving.

ONE hundred and two thousand shingles have been shipped from Puget Sound to Port Moody for shipment across the Canadian Pacific to the east. This is only the beginning of a future great trade between the Pacific and the Atlantic coasts. Cedar grows here in abundance, and the shingles cut from the lumber are the most substantial in the world, tests having proved that, placed on tops of buildings, they can withstand the rain and tempests beating down upon them for 40 years. The shingles will not rot; the action of the weather wears them away, but decay never attacks them. Our eastern friends speak highly of the shingles turned out on this coast, and the first shipment of them over the C. P. R. is the beginning of an immense trade. The forests of Cedar in the Atlantic States are well nigh exhausted, but in British Columbia there are such immense supplies that a century will pass away before all the trees will have fallen under the unerring aim of the axeman.—Vancouver News.

CHIPPewa FALLS, Wis., claims to possess the largest water saw mill in the world, and it stands pretty well up with the largest saw mill run by any power. The mammoth institution is owned and operated by the Chippewa Lumber & Boom Company, and furnishes employment to over 700 men. Its annual capacity is the enormous amount of 65,000,000 feet of lumber; 16,000,000 lath; and 16,000,000 shingles, and from 1,600 to 1,000 horse power is required to operate the numerous saws, etc. A remarkably large manufacture by this mill is reported. The record for the two weeks ending July 31 was 3,220,830 feet, and the total cut of the season up to Aug. 1 amounted to 22,468,242 feet, or at the rate of nearly 270,000 feet per day. It is said that there is a 24 foot head of water at this point, and the lowest estimate of available horse-power is 80,000. The Chippewa River Improvement Company, the Chippewa Logging Company, the French Lumbering Company, the Mississippi River Logging Company, and the Chippewa Manufacturing Company have headquarters at Chippewa Falls, and the place contains two large flouring mills, planing mills, etc.

THE thriving little village of Scotstown, Que., in the township of Hampden, Compton county, is situated on the Salmon river, and has about 500 inhabitants. It is a centre for lumber and has two lumber mills owned by Messrs. Parker & Jencks, which are at the present time running night and day, and giving employment to some eighty-five people. One of these, is a steam clapboard mill and turns out upward of 10,000 boards per day. They make thirty-one grades of clapboards, and ship mostly to Boston. The other is a water-power board mill and turns out 35,000 feet of lumber per day, which is shipped mostly to Portland. The Scotstown Chemical Pulp company have their mills here. Your correspondent through the kindness of Mr. Arkley, their manager, had the pleasure of a trip through the mills and witnessing the process of reducing wood to pulp, which was very interesting. These mills were erected in 1884 and are run night and day, and give employment to thirty-five persons. At present they turn out three tons of dry pulp per day, but the proprietors are increasing their capacity so that in the course of a month they will be able to turn out over twice the present quantity. The pulp from this mill has a nice long fibre, and is the finest your correspondent has ever seen. There are only two pulp mills in Canada doing a shipping trade, although some paper mills manufacture some of their own pulp. These three mills comprise the principal industries of the place. There are two churches, nine stores, a post-office and two good hotels in the village, and these have mostly grown up during the past few years.—Montreal Gazette.

THE Peterborough Review scribe has been writing up the industries of Norwood, and has the following to say regarding the saw mill located there:—

MR. S. H. BROWN'S saw mill is the only one inside the corporation. It is a lumber and shingle mill, and also contains machinery for planing and turning. Mr. Brown suffered from fire a few years ago. He now occupies a building 60x30 feet and two stories high. Steam power is used, a fifty horse power engine being enclosed in a detached brick building. There are in the mill seven different kinds of circular saws, a planer, matcher, lath and rip and gig saws, etc. Mr. Brown has done a considerable business this year in sawing cedar paving blocks for Messrs. Van Vlack & Co., of Toronto the timber is procured in the vicinity of Norwood and is sawed at this mill. About 2,000 cords of the blocks have been sawn so far this season, and the prospects are favourable for a better season with them next year. Mr. Brown is preparing to erect another building, 20x50 feet and two stories high, which will be used for the planing and shingle mill. New machinery will be put in when it is completed, including a shaper, sticker and band saw.

## ENGLISH TIMBER MARKET.

Messrs. A. F. & D. Mackay's timber circular of the 4th September, 1886, contains the following:—"Those who profess to be able to gauge the reading of the barometer of trade and commerce believe that it indicates an improvement. This may be so; but it is manifest to those who are actually engaged in commerce, and have consequently a practical acquaintance with its working, that the improvement, if there

be any, is of a slight character. Still the small-  
out felt in the dark cloud of depression that has so long overshadowed trade will be gladly welcomed as a happy omen of the revival so long hoped for. In this respect the timber trade will form no exception. There would seem, from the statistics of consumption as if there was a tendency of an increased demand among the actual users and consumers of timber. The consumption of Quebec square pine in the last month was 205,000 feet, as against 264,000 in the corresponding month of 1885; New Brunswick spruce and pine deals: 1885, import, 12,051 stds, stock, 16,522, consumption, 7,678; 1886, import, 9,650, stock, 14,133; consumption, 9,307."

## GLUEING.

A furniture journal says: Experienced wood-workers have always contended that a glue joint properly done, is stronger than the wood itself. And yet joints often give way at the surface where the glue is used, which is accounted for by bad material. A similar reason is frequently the true cause, which few artisans wish to acknowledge. It is merely that skill is lacking. In glueing wood, it is asserted by competent authority, that bad work is produced by applying glue to both surfaces. A good job is secured by applying the glue hot, but not extremely so, to one surface, which should be cold, while the other surface should be heated at the stove, but should have no glue upon it. By this method the glue will permeate the wood and bind the surfaces together firmer than nature binds the fibers. It is said by good cabinet makers that if these precautions are taken, less difficulty will be found with glues which skillfully handled, usually will do the work required of them.

## THE AMOUNT OF SPACE STEAM OCCUPIES AS COMPARED WITH WATER.

Steam, as compared with water, occupies 1728 times as much space. A cubic inch of water will make 1728 cubic inches of steam at atmospheric pressure. Now, if this steam is compressed into half the space it occupies at atmospheric pressure, it will be double that pressure, or 15 pounds above the atmosphere; it will then occupy only 864 cubic inches. If reduced again to half its volume it will occupy 432 cubic inches, and will have 30 pounds pressure. Reduced again to half the volume the steam will occupy 216 cubic inches, and will have 60 pounds pressure to the square inch. We can go on reducing in this way until we find that a cubic inch of water turned into steam and compressed into a space of three cubic inches, will have the somewhat enormous pressure of 3840 pounds to the square inch.—Boston Journal of Commerce.

## WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the U. S. Patent Office, Sept. 14, 1886, is specially reported by Franklin H. Hough, Solicitor of American and Foreign Patents, 925 F street, N.W., Washington, D.C., who will furnish copies of patents for 25 cents each:—

- 349,143—Saw, G. N. Clemson, Middletown, N.Y.
- 349,180—Saw mills, feed-work for, B. E. Sergeant, Greensborough, N.C.
- 349,008—Stump-extractor, G. Y. Smith and E. A. Charles, Cedar Rapids, Iowa.
- 10,765—Lathe for turning spirals, V. Merkle, New York, N.Y. Re-issue.
- 349,365—Saw-mill, circular, W. F. Parish, Minneapolis, Minn.
- .49,601—Saw-set, P. A. Pottor, Wellsborough, Pa.

THE lumbering business at Sturgeon Falls, Ont., is commencing to boom again and promises to be brisker than ever this year.

Market Reports.

TORONTO.

From Our Correspondent.

SEPT. 9.—Our Industrial Exhibition being now in full swing, business has quieted down for the time being. Engine power being in demand for the conveyance of passengers and live stock, etc., lumber has to take a back seat for awhile. Trade has kept exceedingly good up to the present, and considerable lumber is now moving over our docks, having averaged during the past two weeks about one vessel cargo per day, the larger portion of which has not left the saw more than two months, and so far as I am aware, there is only one wholesale firm that have any dry lumber to place on the market, and that only in limited quantities. Figures at the yards keep the same, and there is no immediate prospect of any change in that respect. Although held more firmly by mill men, long bill stuff is about the only class of lumber having any money in it just now for the dealers, and manufacturers having a stock of long logs have a chance to realize well.

As predicted by me in a former letter, the new tariff adopted by the R. R. companies, in carrying lumber by the M, at estimated weights, has been of but short duration. Nothing more could have been anticipated as to the fate of so absurd a scheme. The carriage of lumber by weight is all right. It is the high rates charged per cwt. that is wrong, and which must eventually be lowered, if the coarser grades of lumber are to be brought to market and sold at a profit. If the R. R. companies can bring a car of lumber 100 miles for shipment to a foreign port for say \$16.00, why should they charge \$21.60 for a car intended to be used on the local market? It is not the former rate that is too low, but the latter that is too high, and such discrimination against a community having granted large bonuses to aid in the building of such roads, is a gross injustice which should not be tolerated, and could soon be altered if insisted upon by all who are interested. Let our Board of Trade take up this matter in a business-like spirit, and much more good might be done than by devising schemes to carry lumber by the M. Mill men and dealers alike are interested in this question. Green pine bill stuff and hemlock cannot be brought here and sold except at a loss under the present rates charged for freight, and it frequently becomes a question with the dealers as to accepting delivery of cars of green hemlock, or of letting the R. R. companies keep it for the freight, and it is useless to try and put a market value on this grade of lumber that it does not intrinsically possess. It can only be sold because it is of lower value than pine, and can therefore be sold in limited quantities.

SEPT. 24.—Our Industrial Exhibition being over business has returned to its normal condition once more. Our city

as a whole has no doubt received a benefit by the influx of visitors during the period of the fair, but so far as the building and retail lumber trade is concerned, it is simply a week lost, not to be regained by any after exertion.

Shipments from our docks have gone on steadily—about six cargoes per week. Nearly all of this passes through the hands of Messrs. Christie Kerr & Co., either as owners or shippers, much the larger portion of which has consisted of 1 x 10 in. and 1 x 12 in. com. stocks. The amount of clear, picks and out up coming forward is small as compared with the total amount being shipped. The reasons for this are two-fold: 1st, the danger to be apprehended from staining while in transit where not sufficiently dry; 2nd, the yearly decreasing yield of good lumber; 5 to 10 per cent. is now thought to be a fair yield, while a few years ago 40 to 50 per cent. clear and picks was frequently obtained from a stock. Such stocks will not again be cut in Ontario.

We now have plain sailing once more with the R. R. authorities, extremely little friction being observable between them and their customers, and so long as both endeavor to further each other's interests there will be but little to complain of. All that dealers require at the hands of the former now is, a lower freight on the inferior grades of wood, notably on hemlock, and the R. R. companies by taking this step will not lower their revenue by one dollar. Figures at the retail yards have, if anything, weakened, caused mainly by the return to the old tariff in R. R. freights. The rigid system of weighing in force for a time was not an unmixed evil, as it resulted in convincing the R. R. companies that their estimated weights on green, half dry and wholly dry lumber was above what it should have been, hence the more liberal usage now accorded to the shippers.

All the retail yards are carrying a fair stock, and sales from track side are good; dry 1 in. sidings and stocks are now difficult to obtain; long bill stuff is more plentiful, with prices lower. The supply of maple, elm, oak and ash is fully up to the demand. Only two or three firms here make a specialty of hardwoods, and therefore enjoy a monopoly in that line. Profits require to be large on this class of lumber, as the waste is large from various causes.

Table with 2 columns: Item description and Price. Includes items like Mill cull boards and scantling, Shipping cull boards, Scantling and joist, Cutting up planks to dry, and various flooring and dressing stocks.

Table with 2 columns: Item description and Price. Includes items like Clapboarding, dressed, XXX sawn shingles, Sawm Lath, Red oak, White, Basswood, Cherry, White ash, and Black ash.

LONDON TRADE.

The lapse of a month seems to have produced the impression of a changed prospect, both in this as well as in most of the principal wood-markets of the country, and men speak hopefully, as they have not done for months, of the improvement which, like the rising sun as it begins to gild the distant horizon, is just visible to those whom restlessness or extreme interest prompts to take the earliest observations. Early risers at high elevations profit by the fact of their exalted position in being able to descry the first promise of the coming sunshine; but it not infrequently happens that, even while they herald the hopeful prospect to their less observant brethren in the valley, the clouds are gathering which may shut off the anticipated sunshine before it has surmounted the surrounding peaks and penetrated the lower regions which it was expected to fertilize. Such may, perhaps not inaptly, be taken to represent the position of the wood-market at this moment.

The opinions of those whose position in the trade qualifies them to make a statement, based on a bird's-eye view of the present situation, unanimously incline to the prospect of improvement later on, although the more cautious among them do not hesitate to imply the danger of failure, should any of the present conditions, upon which such expectations have been formulated, become hereafter reversed through misguided action on the part of those whose province it is to supply this market. It goes a long way in favor of the uninterrupted development of this prospect, however, that all markets coincide in the outlines of such presumptive improvement; but still, at the best, a rise in values cannot be described more favorably than as "potential," which it is very necessary to remember that, should the ratio of import to consumption be even slightly interfered with, or should the future increase in stock come in the shape of reckless consignments, there must occur a relapse which would plunge the market into greater straits than it was before the prospect of better times was announced. —Timber, Sept. 18th.

MONTREAL.

Some facts relating to the lumber trade of Montreal are furnished in a recent issue of the Herald: "The Montreal trade is almost altogether in deals and lumber. The deals are chiefly sent to Great Britain and the lumber to South America and the West Indies. The deals are pine, and the greater part of them come from the Ottawa district; a small proportion is brought from Michigan. The great bulk of the deals is conveyed by water in barges; very few, comparatively, are carried by rail. As many as 80,000,000 feet of deals were exported

from the port last year, being one hundred per cent. more than the shipments of 1884. The exports of the current year will, before navigation closes, be considerably in excess of those of last year. Some idea of the importance to Montreal of this young and growing timber trade may be gathered from the fact that about fifty thousand dollars was paid last year for the labor connected with loading the deals. A considerable portion of the deals exported from Montreal is required for the match factories of Great Britain, where they are converted into matches and match boxes. Deals of all qualities are used for this purpose."

MONTREAL LUMBER MARKET.

MONTREAL, Sept. 25.—Quotations remain steady and unchanged, but the market is as has been for some time past decidedly active, and a brisk demand has kept up a cheering business at the yards. The imports are quite extensive, and large quantities are continually arriving per barges via the Lachine Canal. The increase in trade for September is generally from 40 to 50 per cent in excess of that of the corresponding month of last year. It is a marked evidence of better times, to see so many buildings in course of erection in every quarter of the city, and the suburbs are not behind hand in this particular. Orders continue to arrive freely from the country, and a good business is being done daily in carloads. The exports to date include 2,727,383 pieces deals, deal ends, boards and battens to Europe, and 13,156,400 feet of lumber to South America. Quotations for freights remain unchanged at 47s 6d. to 50s. per standard to the United Kingdom, and \$11 to \$12 per M. to the South American ports.

The following are the quotations at the yards:—

Table with 2 columns: Item description and Price. Includes items like Pine, 1st quality, Pine 2nd, Pine, shipping culls, Pine 4th quality deals, Pine, mill culls, Spruce, Hemlock, Ash, run of log culls out, Bass, Oak, Walnut, Cherry, Butternut, Birch, Hard Maple, Lath, Shingles, and Cordwood.

ALBANY.

Table with 2 columns: Item description and Price. Includes items like Pine, clear, Pine, fourths, Pine, selects, Pine, good box, Pine, common box, Pine, 10-in. plank, each, Pine, 10-in. plank, culls, each, Pine boards, 10-in., Pine, 10-in. boards, culls, Pine, 10-in. boards, 16 ft., Pine, 12-in. boards, 16 ft., Pine, 12-in. boards, 13 ft., Pine, 1 1/2 in. siding, select, Pine, 1 1/2 in. siding, common, Pine, 1-in. siding, select, Pine, 1-in. siding, common, Spruce, boards, each, Spruce, plank, 1 1/2 in., each, Spruce, plank, 2-in., each, Spruce, wall strips, each, Hemlock, boards, each, Hemlock, joist, 4x4, each, Hemlock, joist, 2x4, each, Hemlock, wall strips, 2x4, each, Black walnut, good, Black walnut, 1 inch, Black walnut, 1 1/2 inch, Scymore, 1-inch, Scymore, 1 1/2 inch, White wood, 1-inch and thicker, White wood, 1-inch, Ash, good, Ash, second quality, Cherry, good, Cherry, common, Oak, good, Oak, second quality, Basswood, Hickory, Maple, Canada, Maple, American, per M., Chestnut, Shingles, shaved, pine, 2nd quality, extra, sawed, pine, clear, cedar, mixed, cedar, XXX, hemlock, Lath, hemlock, Lath, spruce.



QUEBEC.

The following is a comparative statement of timber, staves, &c., measured and culled to 9th September, at Quebec.

Table with 3 columns: Item, 1884, 1885, 1886. Items include Waney White Pine, White Pine, Red Pine, Oak, Elm, Ash, Basswood, Butternut, Tamarac, Birch and Maple, Std Staves, W. I. Staves, Bri Staves.

OSWEGO, N.Y.

From Our Own Correspondent.

Table with 2 columns: Item, Price. Items include Three uppers, Picking, Cutting up, Fine Common, Common, Culls, Mill run lots, Siding, selected, 1 in., Mill run, 1x10, 13 to 16 ft., Shippers, Mill run, 1 1/2x10, Selected, Shippers, Mill run, 1 & 1 1/2 in. strips, Selected, Culls, 1x6 selected for clapboards, Shingles, XXX, 18 in. plno., XXX Cedar, Lath 1 1/2, No 1, No 2, Ash, 1st & 2nd 1 to 4 in., Basswood, 1st & 2nd, 1 & 1 1/2 inch., Hard Maple, Lath, Shingles, 1st, Shingles, 2nd, Long Maple, per cord, Long Birch, Long Beech, Tamarack.

GLASGOW.

The Timber Trades Journal of the 18th Sept., says:—Arrivals here of Quebec pine deals per steam liners continue ample for the wants of the market; a cargo of same by a sailing vessel is also included in the past week's imports at Glasgow, though nearly all the deals imported from Quebec and Montreal to Glasgow are now brought per steamer. Deliveries from Yorkhill Yard have been pretty active lately; the amount for the past four weeks being about 70,000 pieces deals and planks.

At the public sale here on the 15th inst. an attractive catalogue was submitted, comprising an extensive assortment of Quebec pine deals, various qualities, also parcels of U.S. black walnut, &c. Transactions publicly in deals were few, the greater part of catalogue being withdrawn, as offers did not come up to exporters' figures; of the other goods in catalogue a portion was put up without reserve.

There have been no arrivals of pitch pine at Clyde ports since beginning of August, and, as stocks are large, a cessation of imports for a time is desirable; the arrivals of pitch pine last year during six weeks from 1st August were eight cargoes.

The quantity of log timber imported from Quebec to Greenock is about a third under that of last year at corresponding date.

NEW BRUNSWICK.

St. JOHN, Sept. 1st, 1886.

Since my last communication quite a number of vessels have come to this port, and the harbour at the present time is busier than it has been since the spring fleet was here. There is quite a number of vessels due, and, as the deckload law comes into operation on the 1st of October, there is a feeling among dealers to hold back, as there will likely be a local demand for deals in order to give vessels a full deckload and clear them previous to the 1st prox.

At this writing wood goods are dull enough, and certainly the reports from Great Britain are not such as to warrant us in expecting any immediate rise in the price of our staple commodity. Dimension deals, that is 7, 9 and 11 in.,

can be bought at 8 dols. per m, and all width specifications can be procured at 7.50 dols. per m. This price is not remunerative to the seller, but even low as it is, and with the present depressed state of freights, the shipper cannot make any money with the English market as it is.—London Timber Trades Journal.

LIVERPOOL.

The business during the past week has been only of a limited description, and the quays and docks have had a very lifeless look about them. The import has been small, the chief items being a few cargoes of spruce deals, chiefly from St. John, N. B., but some of the vessels are of large size, their carrying capacity being six hundred standards and upwards. There is also a steamer just arrived with a cargo of pitch pine timber and planks. Some of the latter just landed appear to be of fine dimensions and excellent quality, and should readily find purchasers amongst contractors and builders.

There is a widely spread opinion that the steady improvement in trade in the manufacturing districts is likely to continue, and, should these anticipations be borne out, the effects will not be long before they are felt in our trade, though past experience has generally shown that it is one of the last to feel any upward movement.

PROVINCIAL FOREST AND PARK.

Mr. A. Kirkwood, in a letter addressed to Mr. Pardee, Commissioner of Crown Lands for Ontario, proposes to set apart for a provincial park and perpetual forest 330,000 acres of land and 60,000 acres of water. The declared object is "to set aside a forest reserve principally for the preservation and maintenance of the natural forest," and to protect "the head waters and tributaries of the Muskoka, Petewawa, Bonnechere and Madawaska rivers, wherein it shall be unlawful for any person to enter and cut timber for any private use, or disturb or destroy the fur-bearing animals." In this forest the wild animals are expected to be tamed and domesticated "to some extent, for use and profit." The preservation of these four streams in undiminished volume is pointed out as important to manufacturers. The lands which it is proposed to reserve have already been surveyed and comprise the townships of Coningsby, McLoughlan, Bishop, Frawick, Bower, the township south of Bower and east of Coningsby, Peck, the east part of Hunter and the southwest quarter of the township east of Bower. Here, within reasonable distance of civilization, Mr. Kirkwood proposes to establish "a national forest and park," to which he gives the name of "The Algonkin Forest and Park."

As the lands have been surveyed, full particulars of the character of the region is in possession of the government. The proposed selection, it may be taken for granted, contains much picturesque scenery, and would be found to be appropriate for the purposes designated as well as being easy of access. The lands are almost due north of Toronto, at a distance of about one hundred and fifty miles. A park formed there would be more central than one, for which a good site could easily be found, north of Lake Huron or Superior. A similar reservation might possibly follow north of one of these lakes, in course of time.

The proposal is one which will, we think recommend itself to public approbation, even in this money making age. Indeed, it is based chiefly on economic grounds. In carrying out the details some difficulties would be met. It would be hard to prevent the stealing of timber and harder still, perhaps impossible, to prevent the hunting of wild animals. Still, enough could be done to ensure the preservation of deer, which will otherwise disappear before long. But in the perpetual forest would be the greatest value of the park. The timber harvest could be gathered as it matured, and the young trees left to attain the size that might be made the standard below which none should be cut. Precautions would have to be taken against the ravages of fire, to which the park would be specially liable from the numerous camp fires that would enliven its gloom.

One of the four rivers which have their sources within the limits of the proposed park, the Muskoka, flows into the Georgian Bay; the

three others, the Petewawa, Bonnechere and Madawaska, empty into the Ottawa. The sources are near together; two of them, Island Lake, which starts the Muskoka, and Otter Slide Lake, the head of the Petewawa, are not half a mile apart. The height of each is over fourteen hundred feet (1,405 85-100) above the sea level.

Fish abounds in the waters, which include the great Opeongo lake. Here the momentary idler, snatching a short repose from exhausting business and toil, could amuse himself with fishing in the assurance that he would meet with fair success. The preservation of this forest would undoubtedly have an important influence on the rain-fall; its destruction would lessen precipitation and decrease the volume of the rivers.

As the author of the pamphlet is on the staff of the Crown Lands department, its publication is probably intended to feel the public pulse on the proposals made. The response can scarcely fail to be favorable. In any case an expression of public opinion will be evoked, and it will be useful as a guide to the government in making or refusing to make the proposal official.

The same kind of duty the Federal Government is going to perform, on a scale befitting the whole Dominion, amid the enchanting scenery of the Rocky Mountains, where nature displays herself on a colossal scale. The site of the new national park of the Dominion, now understood to be under survey, is in the neighborhood of Banff, on the Canadian Pacific. The prime condition of accessibility will therefore be secured. The two projects will, in some measure, mutually support one another; for, though each will be sustained on its own special grounds, the prime element of the national park is common to both.

NEW YORK LUMBER AUCTIONS.

Some time ago an institution was started in New York which had for its object the trial of a new plan of selling lumber—the auction method. The scheme appeared to flourish for a time, and the semi-monthly sales came to be looked upon in some quarters as noteworthy features of the market. A notice, however, lately sent out from this concern, by which its clients and customers were advised that the regular sales would be discontinued, and occasional sales substituted. The stock on hand being meanwhile advertised at private sale, would apparently indicate that the business done did not result satisfactorily. The Timberman of Chicago has heard rumours, heretofore, to the effect that the auction plan did not give entire satisfaction, at least to shippers. This may not be the reason the business has fallen into a decline, though it appears possible that such might be the case. Whatever may have been the direct cause of the failure of the scheme, its abandonment is not likely to prove a great detriment to the lumber business. Forced sales are not likely to lead to good results in any line of trade. They do not tend to a stable condition of values, nor to a generally satisfactory outcome for the owner of the property sold. When it is necessary to force goods upon the market, or for any reason a public sale is required, the auctioneer is a proper person to be employed, but in ordinary transactions, arising out of the natural course of business, the less resort that is had to the vicious and uncertain methods of which he stands as the representative, the better for all concerned. It may do very well for kinds of merchandise which are liable to a rapid depreciation unless promptly marketed; for such goods an auction mart, where they may be quickly got off at some price whenever they begin to show signs of slow sale in the regular way, may be the very thing. But lumber is an article of a different character. It is as staple as the stuff of which coins are minted. If it is not sold to-day, it will be no less in style, and no less valuable, intrinsically, to-morrow or next month or next year. There is no apparent necessity in this case for undue haste in selling, except when the holder is for some cause obliged to realize, and there are hardly enough of these to support a special auction for their accommodation. The result of the experiment referred to proves this, if nothing more.

NEW BRUNSWICK TIMBERS.

An endeavour is being made to introduce birch and maple staves into this country. The staves of this wood from New Brunswick are said to be highly suitable for vinegar casks, and Mr. H. F. Coombs, of St. John who is now over here, has a sample cask made of these staves on view at his stall in the machinery court, Canadian section of the Colonial Exhibition. The casks of birch and maple are being used now by local dealers in Canada for the purpose mentioned, and are taking the place of oak, on account of their cheapness. The sample staves we inspected appeared to be every way suited for vinegar casks, the wood is close-grained and free from knots, besides being pliable and tough. We understand that this wood can be put on the market here in its converted state, at a much lower price than oak. To those looking for other casks we recommend a visit to Mr. Coombs' stall, where they can inspect for themselves a sample vinegar cask of New Brunswick birch.

We also inspected some washbuts at Mr. Coombs' stall of New Brunswick cedar, which struck us as being a very useful wood to have over here. There is said to be any quantity available for shipment at Miramichi as well as St. John. A special tract composed of cedar has been opened by the Northern and Western Railway of Canada, constructed by Mr. Alexander Gibson, of Maryville, and Mr. J. F. Snowball, of Onatam. This wood is said to be practically indestructible, and is used for fence-posts and foundation timber, besides telegraph poles and railway sleepers. It is surprising that wood bearing all these attributes should have been so overlooked by consumers here.

Mr. Gibson has a very fine exhibit of the cedar in the ground near the agricultural trophy in the Canadian court, in the shape of shingles, and there seems to be no use to which it cannot be applied. For racing boats its extreme lightness makes it especially suitable, and some highly finished sailing canoes of this material are on view. Whilst speaking of Canadian wood products it may be interesting to mention the peculiar feature of the forest growth throughout the Dominion, and very likely in other countries as well, is that timber lands burn over, which prior to the destruction yields hard woods, have regrown pine and vice versa. Our forest friend might give us some useful information on this point.—Timber Trade Journal.

ADVERTISEMENTS

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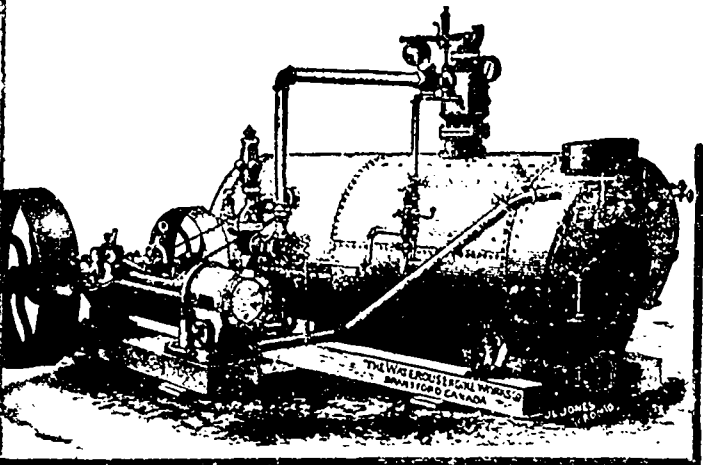
A. G. MORTIMER, Publisher, Peterborough, Ont.

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

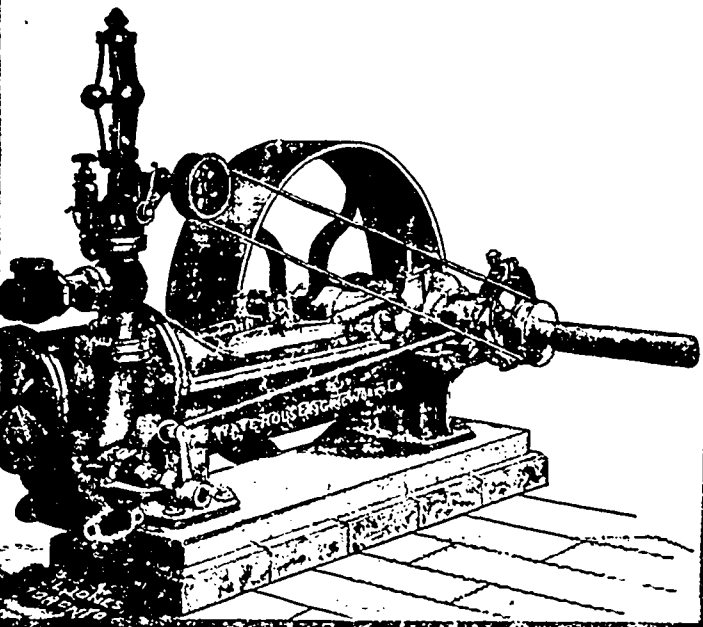
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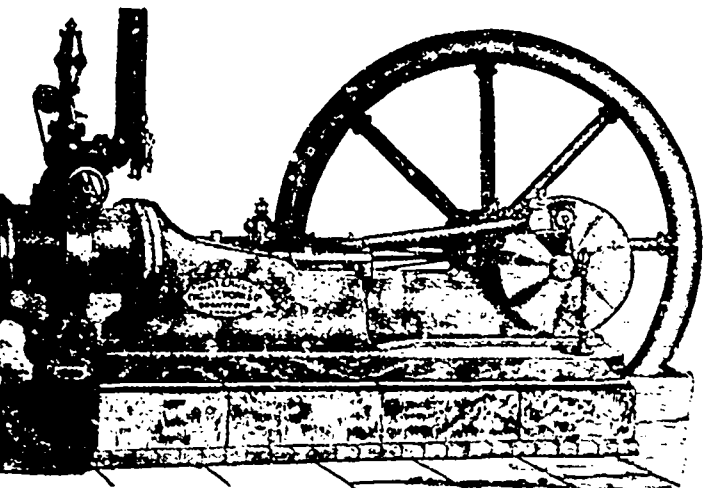
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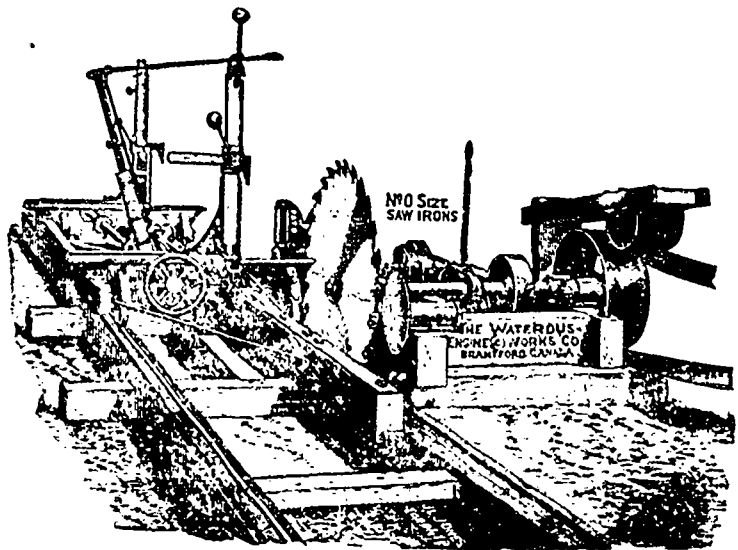


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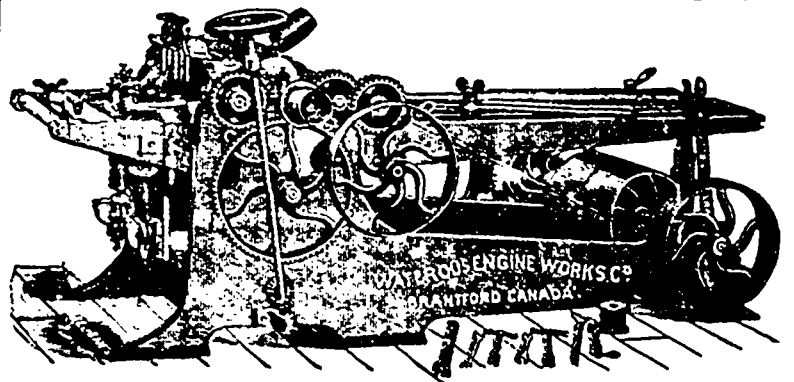


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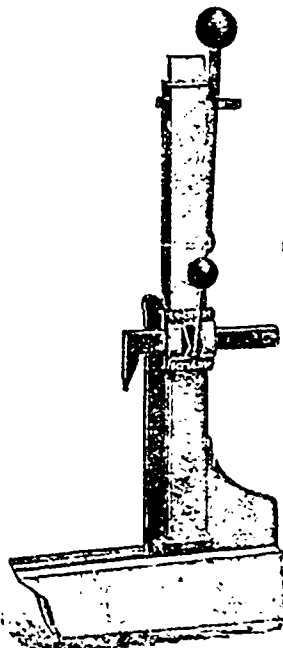
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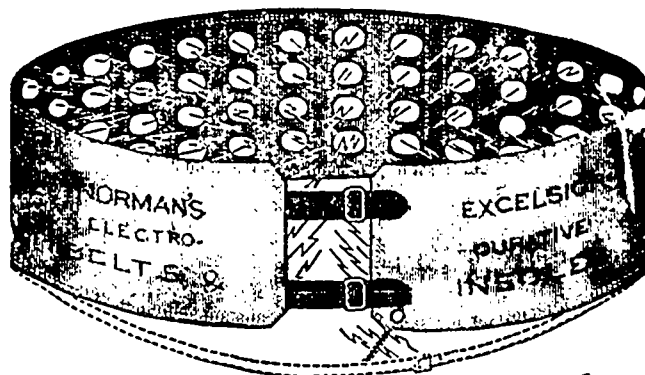
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# New York Lumber Auction Co.

(LIMITED).

OFFICE AND YARD, Foot West 21st Street, New York City.

REGULAR SALES will be held during the year 1886, as follows:

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| Tuesday, April 6th,        | Tuesday, August 10th, |
| do May 11th,               | do September 7th,     |
| do June 8th,               | do October 5th,       |
| do July 13th,              | do November 2nd,      |
| and Tuesday, December 7th. |                       |

Sales commence promptly at 10.30 am. Wm. Norman, Auctioneer

At each of these sales we shall offer a full and complete assortment of the best grades of

## HARDWOODS AND PINE LUMBER

Dealers and consumers will find it to their profit and advantage to attend. Catalogues giving the inspection of each lot offered can be had at the yard on the day of sale, or will be mailed on application. Address

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Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Ave. Office, 9 Victoria St. Telephone Connection.

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General Offices—Court St., Toronto, Ont. Telegraph Address—Agency, Toronto.

Having for its special objects the furnishing to subscribers of reliable information on the financial standing or otherwise of tradesmen and others, the collection of outstanding accounts, and the procuring of the most reliable information from independent sources of the value and condition of landed and other properties in any part of Canada and the United States, with correspondents in Great Britain and other parts of Europe.

Our method of procuring for our subscribers the most reliable information is through solicitors of the highest standing, and from other equally reliable sources in the several localities indicated, who are under contract with us to supply the necessary information promptly.

The Landed Enquiry Department of this Agency, the only institution of this kind known, is invaluable to Solicitors, Loan, Investment, and Insurance Companies, Estate Agents, and others, preventing fraudulent land transactions resulting from misrepresentations.

The Department for the collection of outstanding accounts is conducted on an entire change of the system usually followed by Collecting Agencies, viz.:—Subscribers may have their collections paid either direct to themselves, or to the office of the Agency, in which latter case remittances will be deposited to an account provided for that purpose, and immediately remitted to the parties to whom it is due, and will not be applied to any other purpose.

Another important feature in connection with this department is that subscribers depositing accounts for collection will, if requested, be furnished with a Form of Script, on which will be entered the name of each debtor, the amount owing, and a full report of the prospects of collection, and providing that the receipts thereof be paid to bearer only, thus enabling subscribers to realize on their outstanding accounts.

The Agency will forward at least once in three months, or oftener if desired, a report and statement of all accounts in hand.

NOTE.—The offices of the Agency are open to the Solicitors and subscribers for reference to our numerous maps, atlases, directories and correspondence, and for the transaction of business with their clients and customers when in Toronto.

W. SMITH, Manager.



## TIMBER SALE.

THE TIMBER on certain lots in the townships of Eastnor, Lindsay, St. Edmund, Albemarle, and Amabel, in the County of Bruce, and Keppel, in the County of Grey, in the Province of Ontario, will be offered for sale at Public Auction in blocks of 200 acres more or less, on the 12th day of October next, at ten o'clock a.m., at the Indian Land Office, in the Village of Wiarton.

Terms of Sale to be: A Bonus payable in cash, a License Fee also payable in cash, and dues to be paid according to Tariff upon the Timber when cut.

The purchasers of timber to have the option of purchasing, without any conditions as to settlement, the land on which it grows, at a price to be determined by the Department, and to be made known at the time of sale, and to be paid one-third down and the balance in two equal consecutive annual installments, with interest at six per cent.

For full particulars please apply to Wm. Simpson, Esq., Indian Land Agent, Wiarton, or to the Department of Indian Affairs, Ottawa.

No other paper to insert this advertisement without authority through the Queen's Printer,

L. YANKOUGHNET, Deputy of the Supt. General of Indian Affairs.

DEPARTMENT OF INDIAN AFFAIRS, Ottawa, 30th August, 1886.



## Notice to Contractors.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Breakwater, Port Arthur," will be received until FRIDAY, the 8th day of October next, inclusively, for the construction of a further length of

## BREAKWATER

AT

## PORT ARTHUR, THUNDER BAY.

according to a plan and specification to be seen on application to Mr. W. F. Davidson, Harbour Master, Port Arthur, and at the Department of Public Works, Ottawa, where printed forms of tender can be obtained.

Persons desirous of tendering are requested to make personal enquiry relative to the work to be done, and to examine the locality themselves and are notified that tenders will not be considered unless made on the printed forms supplied, the blanks properly filled in, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted the cheque will be returned.

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

By order.

A. GOBEIL,

Secretary.

Department of Public Works, Ottawa, 10th September, 1886.

# Wrought Iron Shanty Cook Stoves

The Best Article ever offered to the Trade.

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

Top surface contains six 10-inch holes, fire box 23 inches long, and one oven 19x34x23.

The Best Stove I have ever Used.

PETERBOROUGH, May 31, 1887.

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

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

PETERBOROUGH, June 3rd, 1886.

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

Yours truly, J. M. IRWIN.

Gives the Greatest Satisfaction.

PETERBOROUGH, June 3rd, 1886.

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

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

EVERY STOVE GUARANTEED

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

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