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# THE CANADA LUMBERMAN.

VOLUME VIII. }  
NUMBER 6. }

PETERBOROUGH, ONT., JUNE, 1888.

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## THE CANADA LUMBERMAN

PUBLISHED MONTHLY BY

ARTHUR G. MORTIMER.

OFFICE: SIMCOE STREET, PETERBOROUGH, ONTARIO.

### TERMS OF SUBSCRIPTION:

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THE CANADA LUMBERMAN is published in the interest of the lumber trade and of allied industries throughout the Dominion being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion of them by others.

Special pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information upon which it can rely in its operations.

Special correspondents in localities of importance present accurate report not only of prices and the condition of the market, but also of other matters specially interesting to our readers. But correspondence is not only welcome but is invited from all who have an information to communicate or subjects to discuss relating to the trade or in any way effecting it. Even when we may not be able to agree with the writers we will give them a fair opportunity for free discussion as the best means of eliciting the truth. Any items of interest are particularly requested, for even if not of great importance individually, they contribute to a fund of information from which general results are obtained.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN with its special class of readers is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements which will be inserted in a conspicuous position at the uniform price of ten cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for three successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

BELL & Co., of Guelph, Ont., organ manufacturers, have discovered that British Columbia spruce when properly seasoned is admirably adapted for sounding boards for their instruments. A large order was recently given by that firm to the Royal City Planing Mills, New Westminster. British Columbia cedar finds its way to Montreal for finishing work in first class residences, as well as to Ohio for railway carriage purposes.

THE miles of completed railways in Canada on the 30th June last were 12,292; that the tons of freight carried in the year amounted to 16,367,987. The passengers carried in the year numbered 10,685,508: that the receipts from passenger traffic were \$11,861,597 and from freight traffic \$24,581,047. The receipts per train mile were \$1.15½ and the expenditure \$2.1-10c. The percentage of gross receipts expended in working the railways was 71.12 per cent. The passengers carried were equal to two and one-fifth passengers per inhabitant. The freight to three tons and thirty-five one hundredths of a ton per inhabitant, and that the total earnings were \$38,841,609 and the total expenses \$27,624,683.

NEW BRUNSWICK lumbermen are greatly troubled over the stream driving prospects. They say that stream driving has not been so bad for years as it is this Spring. The little snow that fell during the past winter dissolved so gradually that it did not swell the waters in the streams, and from present appearances there will be very little stream driving this season. It is expected that the quantity of logs which will be hung up at the brows will be very large unless there should be a big rain-fall within the next week or two. On the Miramichi and its tributaries the driving is not good. In the main river there is fair water for driving and rafting, but the smaller streams are quite low. There is, however, a good deal of snow in the woods and a few days of warm weather will make a freshet.

THE improvements which the Montreal Harbor Commissioners have contemplated for some time will now it is understood be rigorously pushed forward. Work will be begun at Hochelaga, where a new shore wharf and five piers will immediately be put under construction. The increase of frontage for sea-going vessels will be about two miles. For the present an extension of 1,500 feet from the cotton factory, for the accommodation of the lumber trade, and about 1,300 feet with a pier for the sugar refinery will be built. It is estimated that between \$250,000 and \$300,000 will be expended during the present season.

ATTENTION is directed to two very important communications in this issue of THE LUMBERMAN, both touching upon questions affecting the lumber trade. The article on the Jamaica Trade, from the pen of Mr A. Spencer Jones, of Ottawa, will, no doubt, be read by many with interest, and we hope with profit also. To the lumber trade closer trade relations with the British West India Islands would prove of incalculable benefit. "Pinus" in another column makes some pertinent suggestions particularly adapted to the lumber trade of the Queen City. We freely invite a full discussion of the pros and cons of this important controversy.

THE case of St. Catharines Milling & Lumbering Company will be before the Privy Council early this summer. This is the case involving the title of Ontario to land and minerals of the territory formerly in dispute between the Province and the Dominion. Judgments in favor of the Province have already been given in the High Court of Justice, in the Court of Appeal and the Supreme Court, and it is probable that the Privy Council will give judgment on the same side. Hon. O. Mowat has gone to England to prosecute this case and on other public business.

OUR Buffalo contemporary, the *Lumber World*, is reproducing an extract from an article on Commercial Union from THE LUMBERMAN, inadvertently changes a single letter which misconstrues our meaning entirely. The extract referred to, as it appeared in this paper, read; "Nothing, we think, would benefit the lumber trade of Canada so much as the passage of a commercial union measure". Our contemporary, by substituting the letter "r" for an "f" makes the sentence read: "The lumber trade or Canada". Now while we are strongly of the opinion that the lumber trade of this country would be benefitted by C. U. we do not think that Canada, as a whole, would benefit by such a change. A single letter sometimes when used in the wrong place causes a serious blunder.

FROM our exchanges we learn that the American lumber trade while not very active, presents a satisfactory outlook for the future. In most of the Western markets stocks of lumber in pile have been considerably reduced. In the East the late warm weather has stimulated building operations, and it is believed that the consumption of lumber in this way will equal and perhaps surpass the record of previous years. Manufacturing has begun in a lively manner, although in some places high water has interfered with the operation of the mills. It is probable that railroad building will be carried on this year on an extensive scale, and thus afford an outlet for a large amount of lumber. Generally speaking the condition of the trade may be characterized as healthy and encouraging.

THE very important question of an international exhibition for Canada is now under discussion, and is evidently meeting with favor from all classes of the Canadian people. The Dominion in the past has always proved one of the foremost participants in events of this kind, and native products and manufactures have been exhibited with the greatest success throughout Europe and the United States. Several such enterprises have been conducted in Australia with the most gratifying results, and there is no reason why Canada, possessing as she does a location so much more central and accessible in every respect, should not enter upon a similar project under infinitely brighter auspices. The more the idea is looked into the greater seems the cause for surprise that an effort has not

been formulated at a much earlier date. An exposition, lasting for several months, could hardly fail to attract thousands of visitors to our shores, and the practical knowledge of the country thus disseminated would perform more good in one day than all the emigration literature ever published. Mr. Stevenson, secretary of the permanent exhibition in Quebec, who has been associated with all the Dominion exhibits in other lands, is one of the foremost advocates of the scheme, and he suggests that the summer of 1892 would be the most appropriate time for such an enterprise, as it would prove the 250th anniversary of the founding of Montreal—where such an event would in all probability take place—and the 400th anniversary of the discovery of America. This at first sight may seem a somewhat lengthy period to look forward to, but enterprises such as this require plenty of time to mature and become published abroad, and when the enormous duties and responsibilities associated therewith are taken into consideration, it will become generally recognized that the present is none too early a date to commence the agitation. Once the country and the several Governments take the matter in hand there need not be the slightest fear as to an ultimate and unbounded success.

SENATOR CLEMON is bringing up two very important matters in the Senate, in asking for information regarding the allotment of water-power at the Chaudiere, and the deposit of sawdust in the Ottawa from the saw mills there. The impression seems to prevail that the water power at the Chaudiere is not utilized to a reasonable extent for manufacturing purposes, as its availability seems quite limited. At the present time there are six or seven saw mills and a flour mill run by the Chaudiere power. The Ottawa is the only river into which lumber mills are allowed to discharge sawdust, but there is no other river which has such enormous lumber interests on its banks, and the Government has so far permitted the sawdust nuisance out of deference to the great interests concerned. If the report of the Government engineers who were sent out last year to examine the effects of the sawdust on river interests should take the view that the nuisance is not a very serious one, the public, it is said, will be content to let the matter go.

THE recent investigation by the Department of Public Works relative to the sawdust nuisance in the Ottawa river, has resulted in the discovery that the refuse is blocking up the river to such an extent that the channel is in many places gradually filling up, rendering navigation uncertain and perilous. Sawdust islands are forming, the refuse already fills the principal bays, and a stretch of sawdust extends about all the way from the Chaudiere Falls to Grenville, sixty miles below the City of Ottawa. Mr. Henry A. Gray, assistant chief engineer, who was appointed by the Government to make investigations, reports that the river is in a clogged condition between a point below the Chaudiere to the mouth of the Gatineau, a distance of two and a-half miles. Surveys of this portion of the Ottawa were made in the years 1857, 1859 and 1874. The soundings, taken by Mr. Gray enabled him to observe the marvellous growth of sawdust deposits in the river during the past thirty years. Sawdust fills the bed of the river below the island, opposite Parliament Hill, and at one point in the middle shows a depth of forty feet. The same state of affairs seems to exist, to a greater or less extent, for many miles. Some idea of the sawdust deposits can be gained when it is learned from official figures that last year's cut at the Chaudiere aggregated 365 million feet board measurement. This return is said to be some fifteen per cent. under the amount of previous years. It is estimated that at least 1/5 of the amount of material is cut in sawdust. Now taking the whole figures this cut equals 4,380,000,000 cubic inches equal to 2,534,722 cubic feet or 93,578 cubic yards, allowing that more is cut from the log than returned, and also that the above return is 15 per cent. under the amount of former years, there is at least 100,000 cubic yards of sawdust alone deposited into the Ottawa river every year from the Chaudiere mills in the process of cutting up the logs. The above is only sawdust. To this may be added slabs and edgings. Much of the slab wood is broken up by "hogging machines" and this increases

its damaging effect upon navigation. This operation causing it to be the sooner water-logged and consequently to sink. If the stuff was allowed to go into the river as slabs it would be picked up for firewood, now it is useless and sinks to the bottom, forming with the other materials a mattress, which in course of time cannot be broken up or lifted by dredging.

THE Chaudiere lumbermen, says the *Ottawa Journal*, are up in arms over the proceedings of the sawdust committee. They held a private meeting and decided to lay their views on the matter before the public. A deputation of lumbermen, headed by Messrs. J. R. Booth, and Ald. Henderson representing Messrs. James McLaren & Co., waited on Sir Hector Langevin, Minister of Public Works, on the subject. What transpired all parties declined to say, but it is said that Sir Hector was informed that the channel of the Ottawa was not affected by sawdust deposits, that the prohibition by the Government of the use of the river as a dumping facility would probably force some of the lumbermen to remove from the Chaudiere, as the facilities there for disposing of refuse by burning were anything but satisfactory.

NOTWITHSTANDING a determined opposition the Upper Ottawa Improvement Company succeeded in securing an extension of their charter during the session of Parliament just closed. This company is composed of the leading saw mill men of the Ottawa Valley, and it evidently does not enjoy the good-will of outside lumbermen, who claim that extending the charter was simply taking from the Government the control of a great natural highway, and handing it over to a monopoly. The company also applied to the Government to purchase the Cheneaux boom, through which all the saw logs above the Calumet, some sixty miles above Ottawa, have to pass, and which was originally built by the Government; but so determined was the opposition to the bill that the minister of public works declared in committee that the Government had no intention to sell or otherwise dispose of any of the government works to any company. This declaration caused a quietus to another scheme which was under way. The government has made extensive improvements, slides, dams, booms, etc., on the Madawaska river, one of the largest tributaries of the Ottawa, which have cost upwards of a quarter million dollars. Finding that the government would not extend the works sufficiently far up the stream to guarantee the sure driving of the river from the higher limits, a company was recently organized to construct the necessary works, for which purpose a charter was secured from the Ontario Government, and last winter considerable money was expended on the work. Owing it is said to the economical manner in which the Upper Ottawa Improvement Company handle the logs on the Ottawa. The new Madawaska company considered that if they could purchase the government works, and by this means obtain the control of the stream, they could handle the logs and timber to greater advantage and at a much smaller cost than the 4½ cents per log now charged by the government for the use of their works. This scheme failed to mature, however, through the opposition of lumbermen who, although invited to do so, refused to take stock in the company, and the declaration of the Minister of Public Works was stated above.

THE British Consul at Vera Cruz, in Mexico, Mr. Gordon, speaks in his official report of portable wooden houses as a profitable article of import. Though there is a high tariff in Mexico, ready made houses of wood or iron are so much required that they are admitted free of duty. The wooden houses are, however, far preferable to those of iron on account of the heat of the climate. So great is the present difficulty in obtaining what is wanted in this respect that we are told one may often see well-to-do and decently dressed artisans and peasants living in rough board houses, or huts constructed of rafters and sugar-cane. Evidently they would be glad of something a little better. Mr. Gordon says the houses best adapted for supplying this great want would seem to be two-roomed dwellings with spacious porticos and overhanging eaves and roofs high enough at the ridge to give adequate ventilation. All the parts should be so constructed as to be easily put together, and easily carried to the selected site either by rail or by road, the windows not too large, and fitted flush into the panels so as to be easy of transport and safe without much packing. Mr. Gordon says that the roof is a difficulty, as owing to the great heat of the sun corrugated iron is found to be too hot, while unprotected wood is apt to warp and shrink, but he suggests that a wooden roof might be thatched, the material being cheap, if so constructed as to render thatching easy while maintaining a decent appearance on the inside. Another suggestion he makes is that it would be a great advantage if the wood employed could be impregnated with some chemical making it capable of resisting water, fire and vermin without increasing too heavily the cost of the house.

This may be considered authoritative and trustworthy information, being embodied as it is in the official report of a gentleman in Mr. Gordon's responsible position. But it is not only in Mexico that these ready-made houses are required. There would also be a demand for them in some parts of South America and no doubt in some of the West Indian Islands. Once well introduced and carefully adapted to the local requirements an extensive and profitable business might soon spring up. One of our young lumbermen with a taste for travel and some aptitude for designing might do worse than take his holiday in the south this year and see for himself just what is required, also learning at the same time what there is in it. Perhaps in Canada we are a little slack about manufacturing to the most profitable stage, being content to ship the roughest goods and leaving to others the greater profit of further manipulation. In the matter of these ready-made wooden houses Canada ought to be able to compete with advantage against any other country.

#### LUMBERMEN'S WAGES IN NEW BRUNSWICK.

Five members of the Dominion Labor Commission visited Chatham, N.B., recently and examined several witnesses. We extract the following from a local paper, having special reference to the lumber trade.

Ernest Hutchinson, an in the lumber business; employ about 85 or 90 men and boys in the manufacture of deals, shingles, box shooks, etc.; gangmen are paid \$1.50 to \$1.75; tailmen, \$1.30 to \$1.40; patent edger men, \$1.50; lath sawyers, one man, \$2 and others lower; bedmen, \$1.20; surveyors, \$1.50. Pay of log scalers at the brooms is regulated by law, but I think they get 10c. to 15c. per M. The lather pays the scaling fee. Our men are employed from 6 or 7 months a year at the mill and I employ some of them all winter; some of them go to the woods, where they get from \$14 to \$18 a month and found. Our millmen are paid every two weeks. In the woods they are paid as they require pay, and balance, if any is due, at end of season. Perhaps half of the laboring men of Douglastown, where I live, own their dwellings. I do not think wages have increased of late; rather decreased; 10 hours comprise a day's work. Lumber manufacture has decreased here of late. I think this is due to decrease of price. I don't think the high stumpage has anything to do with the depression of the lumber trade. The decline of shipments has been very marked during the last few years. They amounted to 130 millions feet in 1877, 155 millions in 1880, 149 millions in 1883, 37 millions in 1885, 72 millions in 1886, and 68 millions in 1887. The decrease is on account of the limited demand. What affects other parts of the country in the lumber trade affects us. Money was made here some years ago in the lumber trade.

Theophilus Desbrisay, foreman in Mr. Snowball's business; we have between three and four hundred men employed; about three quarters of them live in Chatham; gangmen (head) get from \$1.50 to \$1.60; tailmen, \$1.30 and \$1.10; head circular men, \$1.40 to \$1.50; bedmen, \$1.10 and \$1.20 and \$1.00; filers, \$2; engineers, \$2 to \$2.50; lathmen (highest) \$1.30; we make palings, chiefly, rather than laths. The men work 10 hours a day. We work day and night for part of the season. Some of the men go to the woods in the winter and some fishing. Shipmen (outside) get \$1.20 to \$1.40. Stevedors (inside) \$2.00. The price for loading is about \$1.25 per standard; some vessels are loaded for \$1 a standard because it is a part of their charter. The vessels are principally loaded from the wharf in Chatham. Steam is used sometimes in loading. We pay our men once a fortnight; some families get advances in the form of orders on the store. If anything is coming to the men on pay day they get it in cash if they want it. The orders given are in the way of an accommodation for those who wish to anticipate their wages. We start at half past six for night work and run to 6 a.m.—working 10 hours.

#### A PROGRESSIVE COMPANY.

The Rathbun Company, says a Brockville paper, have been making extensive improvements in their premises on William street. The large planing mill and sash and blind factory has been further enlarged by an addition 25 by 102 feet and several large sheds have been built. These sheds, which enclose two sides of the property, are in all 300 feet in length with a storage capacity of 250,000 feet of lumber. Thus all dressed lumber is kept under cover. Wagons can drive through the mill, through the yard and all the sheds without leaving the plank roadway. On the William street part of the property a fine two storey office, 22x40, has recently been built, the interior arrangements of which are very convenient and handsome. A very handsome counter with wire railing divides the main room and part of the front is taken up by the manager's private office. The finish is ash and cherry, giving a very pleasant effect. The mill itself is splendidly equipped, both as a planing mill and sash and blind factory. The dry-kiln is

one of the best in the country and with some of the latest scientific arrangements as to carrying off the moist air not usually found. A side track of the C. P. R. is being constructed through the large yards on the east side of William street, where a very heavy stock of lumber and mill timber is kept. Altogether the capacity and equipments of the Rathbun Co.'s Brockville branch is excelled by few if any similar establishments in the country.

The company has been fortunate in the selection of its staff. Mr. V. R. Marshall, of the late firm of Kearns & Marshall, is the agent in charge and no more able, honorable or popular man could be found to fill the position. Mr. R. C. Calhoun, in charge of the office, has been only about a year in Brockville but he has already established an enviable reputation. The shipping and yard is in the charge of Mr. Sam. J. Geash, who occupied the same position with Kearns & Marshall, and who is well and favorably known to our citizens. The factory is managed by Mr. Fred. Kearns, who though a comparatively young man, has already a good standing as a thorough business man. The business done here is a very large one. Besides the wholesale trade in car lots several teams are kept busy delivering goods in town.

#### AMONG THE MANUFACTURERS.

We understand the Canadian Rubber Company through their Toronto agent, Mr. J. H. Walker, have secured the contract to supply Messrs. Gooderham & Worts with all the belting necessary for their large new elevator now nearing completion in Toronto.

We are in receipt of a copy of a new 16-page Sectional catalogue of B. F. Sturtevant's Steel Pressure Blowers, which illustrates these well known machines with all their latest improvements. Mr. Sturtevant's catalogues have always been celebrated for the valuable tables relating to the properties of air in motion, and in this are to be found a number which render this catalogue of great utility to foundrymen, blacksmiths and iron workers of all classes. A copy will be mailed upon application to B. F. Sturtevant, Boston, Mass. Ask for catalogue 33.

The late shipment of belting to the Lake of the Woods Milling Company's new mill in Manitoba, is perhaps the most extensive ever turned out in Canada for a single concern. The well-known manufacturers, Messrs. Robin & Sattler, of Montreal and Toronto, filled the order throughout and in accordance with their usual custom have given entire satisfaction. Included in the shipments were about 7,000 feet of all sizes, ranging from two inches to two feet in width. One piece was a double leather driving belt 24 inches wide, and 360 feet long, weighing about 1,400 pounds.

The Hart Emery Wheel Co., limited, of Hamilton, report business very brisk, their sales this year so far, exceeding those of the same period in any year since they started. The demand for the Hart Wheel is steadily on the increase. A strong wheel—quick, cool, cutting and durable — it is a great favorite amongst lumbermen. They advertise this month a line of saw-filers that is attracting the attention of saw mill men. The Rogers' filer, made in three sizes, takes the place of files on the one hand and of the large expensive automatic saw filer on the other. So far they have not been able to keep up to the demand, but they are increasing their facilities and will soon be in a position to largely increase their output.

#### NEWS NOTES.

—The new pulp mill at Ottawa is expected to commence operation about June 1st.

—The Emery Lumber Co., of Parry Sound, recently lost several dwelling houses by fire.

—Andrew Boudreau has commenced operations on his new sash and door factory, at Chatham, N. B.

—The Vancouver *B. C. Herald* says:—In the boom of logs which the Beaver brought in on Friday were two logs of immense size. One was 100 feet long, 4 ft. 9 ins. in diameter at the small end and 9 feet at the big end. Another log 24 ft. long has been cut from the same tree, and like the former was entirely free from knots or flaws. The tree contained 18,000 feet and weighs 40 tons. Two "hand" loggers felled this giant of the woods after which it was taken to the water's edge by means of jack screws.

—The shingle mill of W. P. Christie, of Severn Bridge, was totally destroyed by fire, on the 12th May. The mill was only newly built, and fitted with the latest requisite machinery. The fire originated in the engine-room, when all the employees were away to dinner, with the exception of the foreman, who was busy filing the saws, and did not observe the fire until it was beyond control. Although every possible assistance was rendered, in twenty minutes the structure was a smoking ruin. Mr. Christie intends to rebuild at once, and has the most of the building material on the grounds, and the carpenters busy framing a new and larger mill.

—Alfred McGrath, while working in Laurent LeBrane's saw mill at Chockosh, near Buckingham, had his right hand cut off by a circular saw.

—Mr. D. E. Sprague is rebuilding his planing mill, in Manitoba, that was recently removed to make way for a building of the Northwest Navigation Company.

—Mr. Walter Beatty, of Pembroke, who had his planing mill destroyed by fire last October, has just completed the erection of a new and larger edifice, fully equipped with the best wood-working machinery. He will commence active operations again shortly.

—The St. Lawrence Lumber company has been registered in London to carry on in Canada and Liverpool, the business of timber merchants and dealers, with a capital of £50,000. Kennedy Burns, of Bathurst, is a director.

—Chas. R. Palmer, with a crew of nearly 100 men, is at work upon his drive of 7,000,000 on the west branch of the Meduxnekeag, N. B. W. H. & J. Rourke's drive, containing three and a half millions has arrived at St. Martins.

—The Lindsay Post says that Mr. John Dovey had a narrow escape from death whilst looking after some of his logs at Kinmount. The logs were being run through the slide at that point and in some way Mr. Dovey lost his footing and was precipitated into the water and was carried over the chute amongst the logs. He was under the surface for a considerable time, and the spectators even lost all hopes of seeing him again, when a log running underneath him ran to the top, and he was pulled out insensible. A doctor was summoned and after considerable labor he was revived but was unable to stand the journey home until Tuesday. He is improving slowly. The old adage that "misfortunes never come single" has been amply verified in Mr. Dovey's case. On Wednesday, the day after he was conveyed home from Kinmount, his son George, aged about 21, who works in his father's mill here and who had last October several fingers of his left hand cut off at the second joint by coming in contact with a saw, again met with a similar accident to the hand, this time amputating the four fingers clean. A mitt, worn on account of the fingers still being tender, caught the jointing saw and drew his hand in.

—We learn that some large rubber belts, ranging in width from 20 to 48 inches, five, six and seven ply thick, one of them weighing six tons, have recently been supplied to elevators in different parts of Canada by the Canadian Rubber Company, of Montreal and Toronto.

The following letter speaks for itself:

ROCKLAND, ONT., May 29th, 1888.

The Wm. Hamilton Mfg. Co., Peterboro', Ont.

DEAR SIR:—We will say this that unless we are very much mistaken you have built us a Band Mill that will do you credit. So far it has gone right on cutting up whatever comes along, rough logs or smooth, without any hitch or delay of any kind. How long would it take to get up another shingle machine if wanted? Yours truly, (Signed) W. C. EDWARDS & Co.

The above was an Allington Band Mill.

**Railway Construction.**

The prospectus of the Ontario, Manitoba & Western gives an estimate of \$25,000 a mile for the whole 380 miles of road, or about \$15,000,000 for the whole. The road will run through an exceedingly rich agricultural, mineral and timber region.

A private despatch from Minneapolis says, on the authority of Mr. Pillsbury, that one thousand shares more than the controlling interest in the "Soo" road has been sold to officials of the C. P. R.

**HENRY PORTER**

MANUFACTURER OF

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Mill Owners will do well to write for estimates before placing their orders.

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- Horizontal Boring Machines; Upright Boring Machines; Facing Machines.
- Iron Turning Lathes; Iron Column Drilling Machines.
- Iron Punching Machine; Punching and Shearing Machine.
- Key Seat Cutting Machines; Cutting and Shearing Machines.
- 22 Spindle Gang Drilling Machine; Power Shears.
- Large Iron Shaper, English Make; Milling Machine.
- Schlenker Patent Bolt Cutting Machine.
- No. 6 Northey Steam Pump; Large Heavy Tumbling Barrels.
- Steam Heater, 51x72 inches.
- Bradley Cushioned Trip Hammer; Iron Boring Lathes.
- Foundry 3 Legged Drop, 35 feet High 1,100 pound Drop, 37 inch Gear Wheel.
- Steel Boiler, 68x168 inches.
- Horizontal Engine, Cylinder 18x36.
- Turret Head, Brown & Sharpe, Mill Screw Machine.
- Leffel Water Wheels; Portable Engines.
- Fairbank's Platform Scales; Steam Pipe and Fittings.
- Fire Extinguishers: Sand Blast for sharpening and cleaning Files.
- Belting, Shafting, Hangers, Pulleys, Couplings.
- Wrought Iron Heater for Glue and Wood; Circular saws.

JOSEPH HALL MACHINE WORKS,

OSHAWA.

JOHN LIVINGSTONE, Trustee.

- H. W. PETRIE'S** list of Sawmill and general Wood-working Machinery, for quick delivery.
- ONE new 2 or 3 block sawmill with 61 inch saw
  - ONE sawmill with timber limit, in Parry Sound.
  - ONE 2-block mill, small portable size.
  - ONE automatic sawing machine, Bayley make
  - ONE 66-inch inserted and one 64-inch solid saws.
  - TWO stave cutters with parts.
  - ONE gang lath mill, new
  - ONE Waterous self-feed lath mill and bolter.
  - ONE Goldie & McCulloch Hall self-acting shingle machine.
  - ONE self-acting shingle machine, Green Bros' make.
  - ONE Waterous self-acting shingle mill and jointer.
  - ONE Eureka self-acting shingle machine and jointer. J. Frenchette, maker, St. Hyacinthe, P.Q.
  - TWO Doherty hand swing machines
  - ONE upright swing with 40-inch saw.
  - EIGHT wheel jointers, various makers.
  - THREE dry saw machines.
  - ONE 24-inch planer and matcher, Rogers' make.
  - ONE new eclipse planer matcher and moulder, Galt make.
  - ONE 24-inch planer and matcher, Picton make.
  - TWENTY-FOUR-INCH planer and matcher.
  - EIGHTY-EIGHT-INCH planer and matcher.
  - LITTLE Grant pony planer and matcher
  - NEW Economist 24-inch planer and matcher.
  - ONE 27-inch revolving bed double surfacer. Galt make.
  - ONE 24-inch surfacer, McKechnie & Bertram.
  - ONE 24-inch pony planer, Frank & Co. builders.
  - ONE 20-inch pony planer, Frank & Co. builders.
  - TWENTY-FOUR-INCH surfacer, Kennedy make
  - TWENTY-FOUR-INCH surfacer, hardwood bed
  - TWENTY-TWO-INCH surfacer, wood bed.
  - EIGHTEEN-INCH surfacer, all iron and steel.
  - SIXTEEN-INCH buzz planer, Galt make.
  - THREE-SIDE moulder, all brass heads, Rogers' make.

- THREE-SIDE moulder No. 2 Cant Gourlay make.
- TWO one-side moulders, McKechnie & Bertram make.
- ONE one-side moulder, wood frame
- NEW 2-side moulder, Cant Bros' make, Galt.
- TENONING machine, double cope, Goldie & McCulloch.
- ONE J. A. Fay tenoner, small size.
- TWO Ross tenoners.
- ONE double cope tenoner, McKechnie & Bertram.
- BLIND slot tenoner, Cowan build.
- POWER morticer, Goldie & McCulloch make.
- TWO power morticers for heavy work.
- LARGE stock of foot morticers, new, at \$15 each.
- UPRIGHT boring machine with column.
- SIX power scroll saws, various makes.
- ONE 34-inch band saw, Hamilton Tool Co.
- TWO new band saws, Galt make.
- NEW 34-inch pedestal and 24-inch bracket band saw
- ONE upright Goldie & McCulloch shaper.
- NEW iron top shaper, Cowan make.
- SHARPER, heavy iron column, Cant Bros' make Galt.
- ONE wood frame shaper and counter shaft.
- ONE velocipede foot power shaper, Barnes.
- ONE automatic handle lathes, Sheldon Bros.
- ONE handle or gauge lathes, Bailey.
- ONE axe handle or spoke lathes, new
- ONE Blanchard spoke lathes, Fay make.
- ONE broom handle lathes, wood frame
- NEW wood splitting machine. Send for photo.
- BOBBIN lathes with cutters for cotton and woolen mills.
- ONE iron bowl machine, American make.
- SET of hoop machines, Goderich make.
- SET match machinery for round matches
- LOT of lumber and log cars for sawmill use.
- FOUR pole road cars, 7 feet 10 inches gauge
- SANDPAPERER, new, Galt make.
- FOOT mitring machine, Cant Bros' make.
- ONE choir mortising and boring machine.
- ONE set spoke machines, Fay make, Cincinnati.
- ONE knife grinder, Galt make.
- SIX saw benches, cut off and ripping.
- ONE hand wiring machine
- TWO new wood turning lathes with rests, etc
- ONE beading and moulding attachment for planer and matcher.
- LOT of moulding and matcher cutter heads.
- SEND for list 13 and 14 and mention wants.
- Address H. W. PETRIE, Brantford, Ont.

**RARE BARGAINS**

— IN —

**MACHINERY**

- 1 Yankee Gang and Slabber.
- 1 Circular Rig to cut 45 feet.
- 3 Large Log Dogs and Steam Canter.
- 1 Double Edger.
- 1 Slash Table.
- 2 Siding Saws.
- 1 Sett Butters.
- 1 Lath Machine.
- 1 Emery Trimmer
- 1 Press Punch.
- 1 Filing Table and Saw Anvil.
- 7 Large Circular Saws.
- 10 Small Circular Saws.
- 6 Gang Saws.
- 2 Mulay Saws.
- 1 Pony Planer.
- 1 Shaper.
- 1 Swing Saw.
- 1 Rip Saw.
- 1 Matcher.
- Belting, Shafting, Tools, etc
- 1 Fifty-Horse Power Waterous Engine and 3 Boilers.
- 1 Twenty-Horse Power Waterous Engine and Boiler.
- 1 Four-Horse Power Engine and Boiler
- 1 Seventy-five-Horse Power Marine Engine and Boiler.
- 1 No. 2 Heavy Circular Saw Mill with Prescott's Direct Acting Steam Feed to cut 30 feet.
- 1 No. 2 Heavy Circular Saw Mill, to cut 20 feet. (Rope or Steam Feed).

We have received instructions to close out the above Machinery, all of which is in good running order, without reserve. To any one building a Mill this is a rare chance.

**PAXTON, TATE & CO.,**

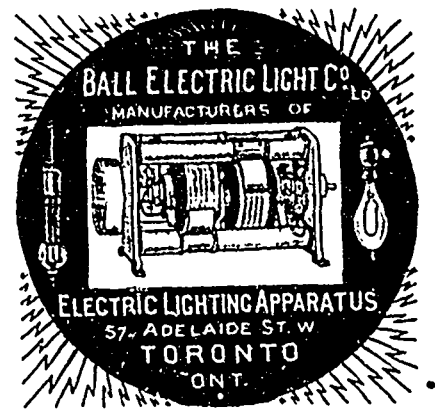
PORT PERRY.

**TO LUMBERMEN.**

Young man, (20 married), would accept permanent engagement. First-class penman, accountant and correspondent. Thorough practical knowledge of every department in the trade—the woods, the mill, the yard and the office. Good salary expected. Unquestionable character and references.

"BETA."  
Care of CANADA LUMBERMAN.

**J. K. POST & Co.,**  
**LUMBER MERCHANTS**  
And Shipping Agents.  
OSWEGO, N. Y.



**NOTICE.**

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Indian Supplies," will be received at this office up to noon on THURSDAY, 27th June, 1888, for the delivery of Indian Supplies during the fiscal year ending 30th June, 1889, consisting of Flour, Bacon, Groceries, Ammunition, Twine, Oxen, &c., duty paid, at various points in Manitoba and the North-West Territories.

Forms of tender containing full particulars relative to the Supplies required, dates of delivery, &c., may be had by applying to the undersigned, or to the Indian Commissioner at Regina, or to the Indian Office, Winnipeg.

Parties may tender for each description of goods (or for any portion of each description of goods) separately or for all the goods called for in the Schedules, and the Department reserves to itself the right to reject the whole or any part of a tender.

Each tender must be accompanied by an accepted Cheque in favor of the Superintendent General of Indian Affairs on a Canadian Bank, for at least five per cent of the amount of the tender which will be forfeited if the party tendering decline to enter into a contract based on such tender when based upon its own or when he fails to complete the work contracted for. If the tender be not accepted, the cheque will be returned.

Each tender must, in addition to the signature of the tenderer be signed by two sureties acceptable to the Department for the proper performance of the contract.

The lowest or any tender not necessarily accepted.

This advertisement is not to be inserted by any newspaper without the authority of the Queen's Printer, and no claim for payment by any newspaper not having such authority will be admitted.

L. VANKOUGHNET,  
Deputy of the Superintendent-General of Indian Affairs.

Department of Indian Affairs, }  
Ottawa, May, 1888. }

**Lumbermen**

SHOULD SEND FOR A COPY OF  
**Scribner's Lumber & Log Book.**

OVER ONE MILLION ALREADY SOLD.  
Price 35 cents post paid.

\*\*\* ADDRESS \*\*\*  
A. G. MORTIMER, PETERBOROUGH, GNT.

## THE NEWS.

## ONTARIO.

—17,000 railway ties await shipment at Stayner.

—Waubushene mills run ten and a half hours a day.

—F. Baechler, saw mill, Ben Miller, is offering to compromise.

—An addition of 200 feet is being put to the mill wharf, Waubushene.

—The demand for hand saws at the present time seems to be increasing.

—A new saw mill is to be built at the head of Kempenfeldt Bay, Lake Simcoe.

—The Rathbun Company have made great improvements in their docks at Rossmore.

—Peters & Cairn's mill at Midland is expected to cut 4,000,000 feet during the season.

—Mr. W. C. Harrison, Norwood, is putting a 50x15 foot addition to his sash factory.

—William Ellis had two fingers cut off in Shire's mill, Bracebridge, a few days ago.

—Bronson & Weston, of Ottawa, have placed a hand saw in their mill at the Chaudiere.

—C. Young, of Young's Point, has increased the capacity of his shingle mill to 25,000 daily.

—Large shipments of lumber from Parry Sound to Oswego, N. Y., are being made this spring.

—Mr. John Shaw, of Forest, has disposed of his retail lumber business to his son, Fred W. Shaw.

—Extensive alterations and additions are being made to Mr. W. Sparling's planing mill, at Pembroke.

—All the mills at the Chaudiere are running full time day watches, but as yet no night work is being done.

—The Rathbun Co., of Deseronto, have purchased Thompson & Avery's cut of ash lumber of over 300,000 feet.

—Mr. Singleton Brown's new shingle mill at Bracebridge is running and has the prospect of a prosperous season.

—A young man named Fox had all the fingers of one of his hands cut off by a saw in the Gilmour lath mill, Trenton.

—The Rathbun Co., are driving briskly over the Sectt limits. They have over 20,000 logs coming down a new and improved stream.

—A Hamilton firm is about to erect a mill at Falkenburg this summer. The firm will buy and ship cordwood, stove wood and tanbark.

—The sawmill of Messrs. Troup Bros., at Sherkston, near Welland, was destroyed by fire April 21. Messrs. Troup will rebuild immediately.

—Mr. Wm. Parker, of Stevenson, has taken out a million feet of logs this winter. They will be manufactured at his mill in that township.

—Mr. John Munro and his staff are busy at work on the new planing mill, at Midland. It is expected to be ready about the end of May.

—Casey Bros., a planing mill firm, of Hamilton, have made an assignment for the benefit of their creditors. Liabilities about \$8,000; assets, \$3,500.

—The Rathbun Company, of Deseronto, have now three thousand men in their employ. This will give some idea of the magnitude of their operations.

—Vigars Bros., of Port Arthur, have doubled the capacity of their mill by the addition of new machinery. They will cut about 3,000,000 feet this season.

—The Dickson Company, of Peterborough, have purchased from Mr. D. Ulyott the balance of his interest in the pine timber limits of the township of Anson.

—H. Sherman, aged seventy-eight, died at Windsor. He was a wealthy lumberman and cheese manufacturer. One of his sons is professor of mathematics at Dartmouth college.

—Ottawa builders say that lumber of all kinds has risen \$1.50 a thousand feet, caused no doubt to some extent by the large amount of building that is being done at the capital this year.

—The Blind River Lumber Company has made a great improvement in their mill this spring and now have it running and intend doing a large business this season in lumber, lath and shingles.

—A. & P. White, of Pembroke and Deux Riviere, have taken out a full supply of logs and dimension timber this season and are now busily cutting. They anticipate a brisk season's business.

—John Ashcroft's cabinet factory at Wiarton was burned

May 16th. The fire started in the drying kiln. Loss \$5,000; insured. The small G. T. R. hand engine did good service, saving the adjoining property.

—A drive of logs, consisting of 300,000 pieces, is now on its way down the Trent river. It is said to be as large as any one drive that has ever run over these waters, and will take two or three weeks to pass any given point.

—Mr. A. M. Dodge, of New York, President of the Georgian Bay Consolidated Lumber Company, has made extensive improvements to his summer residence at Waubushene, and will reside there for some months.

—Messrs. Hurdman & Co., of Ottawa, have commenced running their new circular saw mill. The firm expect that the little mill will get through a large amount of light work, leaving the gang saw free for heavy cutting.

—Mr. John Church has sold his saw-mill at West Point to the Neebing Lumber Co., who will take it to the neighborhood of Fort William. The company is composed of Messrs. McCuaig, Low, Carter, Richards, Lingham and others.

—Messrs. John Craigie & Son have opened up a box factory and planing mill at Penetanguishene, Ont. They will manufacture upwards of a million feet of lumber in their factory this season, and will give employment to about ten men.

—The Messrs. Brown Bros., Toronto, have sold all their standing pine and oak timber at Limehouse station, near Acton and Georgetown, to Messrs. Taylor Bros., of Toronto, who have erected a steam saw mill, and work will be proceeded with at once.

—Ice fourteen inches thick and covering an extent of 1,500 feet on the Ottawa river at Hull, was thrown high up in the air with a terrific report the other night. Gas generated in sawdust beds at the bottom of the stream is supposed to have caused the explosion.

—The pumping and engine house, the property of the Collingswood Dry Dock and Ship Yard Company, situated at the dry dock, was totally destroyed by fire May 17th. Loss, probably \$1,500; insured for \$600 in the Royal, \$300 in the Royal Canadian.

—Belleville dealers will this year bring from Ottawa upwards of one million feet of lumber. In the past this city has been considered an important lumber manufacturing point, but the quality of the cut has of late years deteriorated very greatly and the best lumber is all sought for the United States market.

—Messrs. White & Son, proprietors of the flour and saw-mills at Orwell, met with a serious loss some days ago when, without warning, the saw-mill dam gave way, and half a million feet of logs and twenty thousand feet of lumber were swept into the lower dam, which also gave way. The loss is estimated at \$20,000.

—The *Intelligencer* says that all the saw logs of last year's drive are now below the lower bridge at Belleville and will be passed through the boom by Saturday. The first of this year's logs will reach Belleville in ten days, as the first of them have passed Stoco Lake and the tail is below High Falls. The water in the Moira is keeping up satisfactory.

—Messrs. H. L. Lovering & Co. have been making large cutting records in their saw mill at Coldwater this spring. Last winter the mill was thoroughly refitted, the machinery being in a large measure replaced by new, and several improvements made by which the mill will now cut more lumber for the number of hands employed than any small mill in the district.

—The shrill note of the steam whistle, and the hum of the buzz saw are now heard in the land, and everywhere signs of the season's busiest operations present themselves. The roll of the truck, the voice of the duckwhopper, the familiar tread of the lumber gang, and various other signs of activity fall on the ear, and all betoken the sway of spring. So says the *Penetang Herald*.

—The Canada Atlantic railway is making a bid for the lumber carrying trade from Ottawa to New York. They offer to carry it to the latter city for \$35 a car, or about fifty cents a thousand feet less than boat rates. This, it is said, will not affect forwarders very much this season, as they have had their contracts made some time ago, but the business of American boat orders will suffer.

—The demand for good, clean square timber seems unusually keen this season. Agents of buyers have been everywhere in the woods viewing the timber on the rollways, and many sales have been made. Indeed it is rumored in well posted circles that of the entire cut of the Upper Ottawa only a couple of lots remain unsold. Figures are not obtainable, but they will doubtless soon leak out.

—Application for letters-patent is made by the Western Lumber company, limited, capital \$300,000, for the purchase of timber, limits and real estate of every description, and the

manufacture of timber into logs and of articles to be made into firewood, etc. The operations of the company are to be carried on in Ontario, Manitoba and the Northwest Territories. The chief place of business is Toronto.

—The Maganetawan river, at Burk's Falls, has overflowed and risen to the highest mark attained for years. Wood and lumber piles have been thrown down, houses floating turned over or floated off. The old hull of the "Ada," thought to be high and dry, was carried by the current down the river. A family living near the river have been compelled to remove to the second storey, and get to and from by boat.

—Hardly a week passes by without one or more accidents occurring in one or other of the large mills at Deseronto. In one issue of the local paper of that town we are told that one man was struck in the stomach by a knot hurled from a saw and severely bruised; another, while removing a piece of wood stuck a tie-hook through his great toe; one had three fingers of one hand cut by a jointer in the cedar mill; another had his fingers jammed between the couplings of two cedar cars; and still another had the heel of his boot caught in a piece of machinery, and but for timely assistance he would have been torn to pieces. The people of Deseronto had better get an ambulance wagon and a hospital right away.

—A correspondent writing from French River, says: The Victoria Harbor Lumber Coy's and McLean Bros' drives are down. One of the Ontario Lumber Coy's drives, in charge of J. Brennan, which was hung up last season, is reported to be in safe water, and all the other drives likewise. Tugs have been running on the French for the past two weeks and rafting is already begun. There is every indication of a busy season here, as both the large mills have been refitted and enlarged, and will commence cutting in a few days. There is also a large fleet of fishing boats now stationed here. Shipping has already commenced and the American steamer "Remora" arrived to-day with a full list of passengers.

—Many people in the District of Nipissing, says a local paper, are enquiring why the proceeds of the recent sale of timber berths should not be, at least to some extent, expended in subsidizing the North Bay and James' Bay Railway. They think that the expenditure connected with the opening up of this new territory is a legitimate claim on the proceeds of such sales. The sums appropriated for roads and bridges in this District by the Provincial Government recently, are proper outlays in this direction, but the amounts granted are insignificant in comparison with the income which the Provincial Treasury receives from the sale of our pine timber. Nipissing calls for a subsidy for the North Bay and James' Bay railway, and its people will press the claim.

—Large quantities of spruce timber in blocks four feet long and not less than six inches thick, are being shipped by the Northern railway from Trout Creek station to the paper mills of Ontario, where it will be reduced to pulp and mixed with cotton fibre in the manufacture of paper. The *Nipissing Times* suggests that the people of that district should enquire how far they can utilize their spruce and poplar woods for this purpose. There may be money in this thing. Another important industry has arisen in this vicinity since the completion of the Northern railway. Hardwood lumber, birch and maple chiefly, is being shipped from the south side of the lake by the car load to Winnipeg, for the manufacture of furniture, and satisfactory returns are being realized.

—The total cost of construction of slides and other works to facilitate the descent of timber and sawlogs on the Ottawa river and its tributaries, up to the 30th of June last, has been close on a million dollars, as shown by a return submitted to the House, the figures for each being as follows:

Ottawa River	\$370,062
Gatineau	67,077
Madawaska	104,073
Colouge	62,252
Black	13,822
Petewawa	77,090
Riviere des Prairies	13,840
South Nation	1,188
General expenditure	232,459

Total.....\$942,237  
Of this amount, \$719,247 was expended prior to confederation.

## QUEBEC.

—A new saw mill is being erected at Sawyerville.

—Lumbering operations will be brisk at Buckingham this year, nearly all the mills having already commenced sawing.

—A dynamite explosion in the logging camp of King Bros., at St. Pascome, county L'Islet, is reported. Sixteen men are reported as badly injured.

—We learn that several sales have been made by Quebec shippers to London importers, 3rd and 4th quality, chiefly the latter. Prices are understood to be about the same as last year.

—The Quebec Timber Company's accounts are said to show a debit to profit and loss at the close of last year of £7,705;

the balance of loss from 1886 to 1887 brought out in the revenue accounts in £314.

—Mr. J. Fish, Lachute, has sold his grist mills to Mr. Peter Campbell for \$20,000, and his sawmills to Mr. John Campbell for \$8,000. There is talk of two sawmills being built at Lachute the coming summer.

—Messrs. Mercier & Dudley, of Lake Megantic, have shut down on birch, as they think they have as much as they can handle for this year, and it will not answer to allow birch in the round log to lay over. They have taken out in spruce, pine, birch and ash, nearly nine million feet.

—The leading Quebec houses have lately made extensive purchases of new rafts for European ports about August next; the prices are in some instances reported to be an advance of about 5d. per foot on last year. The estimated manufacture from the Ottawa is put at 2,000,000 feet of square pine, waxy pine 700,000 feet. There has been a good demand for first class square in the Clyde during last winter, and considerable sales of this class of timber have been made.

—Several sales of Quebec spruce lumber have been made lately at very good prices; in some cases \$1 per 1,000 feet for mill cut, culls out. This is about \$1 better than last year. Pine lumber, however, is quite a drag both here and in the United States market. There seems to be a feeling in the United States markets that things are more likely to become worse than better; the effects of the strikes now so prevalent in the States are beginning to be most seriously felt, and large operators are getting very cautious when buying for future delivery. There is a fair demand for spruce lumber for the United States' market, and also for common grades of pine boards, otherwise business is very dull.

#### NEW BRUNSWICK.

—Messrs. J. & J. H. Titus, Smithtown, are making extensive repairs at their mill. About twenty-five feet of an addition is being constructed for the purpose of putting in a lathing machine.

—Haley Bros. & Co., who have been operating a planing mill at St. John, have dissolved partnership. The business will be continued as usual.

#### NOVA SCOTIA.

—The great timber ship which the New York man, Robertson, intends to tow from Nova Scotia to New York is now more than half completed at Joggins, and it is expected that she will be launched early in June, and start on her voyage immediately afterwards.

#### MANITOBA AND THE NORTH-WEST.

—The machinery for a new saw mill at McLeod has arrived, and the mill will soon be running.

—Mr. Blanche, of Springbank, is putting up a portable steam saw mill on the Elbow River about fifteen miles from Calgary.

—Dick Banning & Co., of Winnipeg, will cut this year from 8 to 9 million feet of their own, and three million additional from Minnesota. They report prospects for business very good.

—In consideration of a vigorous protest on the part of Winnipeg lumber dealers against the use of British Columbia cedar for block paving purposes, the City Council will use pine grown within the Province.

—It is said that Mr. John A. Christie is about to open up the saw mill at Brandon. He visited Birtle recently to make arrangements regarding logs, which he intends floating down the Assiniboine River to this point.

—A planing mill at Brandon, which has been standing idle for some years, was destroyed by fire a few days ago. The property was owned by a Mr. Griggs, of London, Ont. The loss will be light, without insurance.

#### BRITISH COLUMBIA.

—Vancouver is coming to the front as quite an important lumbering centre.

—Leamy & Kyle, who have a saw mill at Vancouver, have lately formed a partnership with George Cassidy, of New Brunswick, for the establishment at Vancouver of a sash and door factory on an extensive scale. It is understood the factory will be supplied with the most modern machinery. The main building will be 60x75 feet, clear of boiler room, drying rooms, etc.

—Twenty cargoes of coal, lumber and merchandise were exported from ports in this province during the month of April. The aggregate quantity of lumber taken is: Burrard Inlet, 3,555,075 feet; Chemainus, 1,038,000 feet; total, 4,593,076 feet. Seven cargoes of coal were exported from Nanaimo, aggregating 25,310 tons; and from Departure Bay, 16,470 tons; Port Moody, 2,250 tons; total, 34,030 tons.

The coal was valued at \$209,000; the lumber at \$39,709; total value of lumber and coal exported during the month of April, 268,709; total tonnage engaged in carrying the above cargoes 29,185.

—Mr. C. D. Rand, of the well-known firm of Rand Bros., has been the medium through which a large transaction in timber lands in British Columbia has been effected, the sum involved being stated on reliable authority to be in the neighborhood of \$40,000. Mr. James McLaren, late of Perth, Ont., who takes a leading place in the lumber interests of that province, is the purchaser. The purchase consists of over 2,000 acres of timberlands along the coast district, and belonged to Messrs. J. C. Prevost, of Victoria, and W. J. Goepel, and it will probably not be long before Mr. McLaren with his great enterprise will commence operations on his property and thus give an impetus to the lumber trade.

—At the last session of the British Columbia Legislature lately adjourned, a new land act was passed which is of special interest to lumbermen. By an act passed in 1887, the sale of timber lands was prohibited, and such lands were only permitted to be leased. After a short trial, this regulation is now abolished. The new act permits the lease of Government timber lands for a term of years for the purpose of lumbering at an annual rental per acre, and a royalty on all lumber manufactured. Lands so leased will be held for a sale by pre-emption, for settlers, but pre-emptors will not be allowed to cut timber on leased lands, excepting what they may require for their own use. Special licenses will be granted to cut timber on an area not exceeding 1,000 acres, and for a period not exceeding one year.

#### AMERICAN NOTES.

—In the forests of New Hampshire the snow is still three feet deep.

—Alpena has shipped 1,160,000 feet of lumber and 370,000 pieces of lath this season.

—The log cut in the Duluth district, Minn., is reported as aggregating 230,000,000.

—The saw mills throughout the Mississippi valley are suffering from too much water.

—Reliable estimates show that 8,000,000 hoot calks are used by the lumber trade annually.

—The English trade papers report a good business doing in walnut logs, and prices for them are fully maintained.

—The firm of John McLennan & Son, of Bay City, have about 7,000,000 feet of hardwood to handle this summer.

—Ten to thirteen million feet of lumber was burned at Big Rapids, Mich., May 3rd. Loss \$120,000; insurance \$100,000.

—At Muskegon the lumber shovers' union is still resolute and refuse to make any cut on their demand for \$5 per day for loading vessels.

—Some of the Southern papers are raising their protest against the extensive purchases being made by Northern capitalists in timber lands.

—The outlook for the season just commencing would seem to be more than ordinarily favorable for every branch of the lumber trade, including shingles.

—La Crosse (Mich.) mills employ large numbers of girls in edging or knot-sawing and packing shingles. Bay City millmen are about adopting a similar practice.

—The John Spry planing mill at Sault Ste. Marie, Mich., has been sold to J. B. Sweath, of Marquette, who will enlarge and increase it into a \$50,000 sash and blind factory.

—During the past two years sawing capacity to the extent of 80,000,000 feet per annum has been destroyed by fire in the Saginaw valley, Mich. Only two new mills were put up in that period.

—A writer on saw mill building says: "Put a corrugated iron roof on your mill. It won't cost much and you won't have to keep a man on the roof with a pail of water, putting out fires that are bound to start." That is good advice.

—A couple of Michigan men have taken out patents upon a hand rail carrying two saws, which is designed to cut in both directions, so that no time is lost in the process of giggering back. A board is cut from the log in running one way by one of the saws, and another by the saw in returning.

—There is such a demand for Maine spruce gum that there are fears expressed that the trees are giving out. A correspondent suggests that they may be coaxed to give more if treated as the gum trees of the East are. The natives hack the bark with their hatchets, and in due time the tree weeps gum.

—Vermont is the first state to announce the result of the maple sugar season of 1888. The output is estimated at 15,000,000 pounds, the value of which is \$1,250,000. To obtain that amount of sugar 5,000,000 trees were tapped. It

is thought that were all the full grown maple trees in the state utilized, the sugar production would be 50,000,000 pounds—150 pounds to every inhabitant of the state.

—Hemlock has been for some years working into an established position in the western lumber trade, and although it does not get very much notice, there is no doubt but that it is making material progress all the time. It has become a regular item of stock with leading western dealers, mainly in the shape of dimension, but occasionally as boards. It does not yet rank up with pine, generally selling from \$1 to \$1.50 below for similar stock.

—A singular circumstance exists in connection with the lumber business in the Saginaw valley this season, which places very many operators in a quandary. The water in the lakes is pronounced a foot lower than the ordinary stage; this naturally affects the streams emptying into the lakes, and the result is that great difficulty is already being experienced in "log running," and it is predicted and greatly feared that it will result in hanging up a considerable portion of the anticipated stock for the mills.

—Some months ago, says a Michigan paper, a party working in the lumber camp of Wm. Coach, on the Sturgeon River ordered 31 tenth ticket in The Louisiana State Lottery. One of these was a tenth of ticket No. 71,575, which won the first prize of \$150,000, in the drawing of the 7th of February, giving the handsome sum of \$15,000 to be divided. There were sixteen in the club, the tickets being sent to Geo. J. Johnson, of Baraga. Three of the holders were of one family, being John Bowen, his wife and child, who thus secures a good share.

#### EUROPEAN NOTES.

—Pitch pine cargoes to the Thames are arriving freely.

—Imports to the London market begin to show a marked increase especially from the Norway ports.

—Reports from shipbuilding centres are encouraging, and the majority of yards are well occupied with work.

—Somewhat more animation is noticeable in the free-on-board trade, both in London and on the coast.

—Denny, Mott & Dickson's London circular, under date of May 2nd, reports nothing doing in Canadian timber, pending fresh season's arrivals.

—Liverpool reports state that the first arrivals of pine deals, boards and sidings, from Montreal and Quebec, by the regular steamship lines came in during the month just closed. Business, though quiet, is steady, and a fair consumption seems to be going on.

—The *Globe's* London cable says: "The Glasgow Exhibition was opened May 8th by the Prince and Princess of Wales. The weather was lovely. The Canadian exhibit, in charge of Captain Clark and Thomas Graham, includes cereals, timber, minerals, natural history, paintings and photographs. The exhibition promises to be the most successful ever held in Scotland."

#### CASUALTIES.

George Metcalf lost a third finger from his left hand the other day while working a circular saw at a Penetang, saw mill.

John Hearty, a shantyman, was drowned in Trout Lake some days since. The body was taken to Vinton where he formerly resided.

A workman named Wilson, employed in a saw mill at Deseronto, had one of his thumbs torn off by a sawdust carrier. Amputation of the thumb below the elbow was found necessary. The injured man lives at Campbellford.

About a fortnight ago, W. J. Brown, while working a large shingle press in Toronto, had his left hand caught in the machinery and crushed to a jelly. It is said that the poor fellow bore his agony manfully until released. He was taken to the hospital, where the hand was amputated, and he is now doing well.

A young man named Ernest Grant was instantly killed in a Warsaw (Ont.) mill some days ago. The employees were engaged in siding railway ties when by some means the saw caught a tie after the dog holding it on the carriage had been loosened and throwing it back struck the young man on the temple. He immediately sprang to his feet, put his hands to his head and dropped over dead.

Henry Jones, employed in Graham's planing mill, Brantford, Ont., got under the floor to adjust a belt. Somehow his clothes caught in the revolving shaft, and when he climbed up into the shop again he was attired only in his socks and boots the rest of his clothes being whirling around the shaft at the rate of two hundred revolutions to the minute. He was only slightly bruised, so that after borrowing some clothes he was able to walk home.

### HARDWOOD LUMBER AND ITS MANUFACTURE.

If the manufacturer of hardwood lumber would pay the same attention to his business as the pine man does his, there would be less dissatisfaction about the inspection of his lumber. If he learned the requirements of this or any other market he would know that to please, he must send his product in good condition. There are too many sawyers of hardwood who have merely "picked up" the "trade," the result is that many a No. 1 log which if handled as a pine sawyer would handle it would turn out valuable lumber, but instead it is not sawed with judgment and the result is one-half its value is gone, and even the good is not extra. To know how to properly put a "carriage" and its foundation so that it will run true; to know how to set a saw with just enough "set" to cut smooth, even lumber; to know how to put a log on the carriage to cut as few "heart" boards as possible; to know when to "turn" a log—in short, to know how to get the best results out of logs is not in the power of him who has merely "picked up" his trade, and the sooner this is learned by the manufacturer of valuable lumber, the better for the credit side of his bank account.

The prevailing custom of paying a stated price per thousand feet for sawing, is another cause of much poorly sawed lumber. The sawyer may know his business thoroughly, but to work up to his knowledge may require more extra time than he is willing to devote to "the other man's" interests, and the result is he does a good day's work in the number of feet he has sawed, but the man for whom the work was done doubly pays for it. How much better it would be for both mill owner and the man who is having the work done, could they agree on a stated price per hour. It may seem a broad assertion, but I venture to say that by this arrangement the man for whom the sawing is done—providing the logs sawed be valuable timber—will gain enough to pay for the whole day's saw bill even though he has a third more thousand feet, than though he has paid a stated price per thousand feet. By this plan the sawyer can see advantages to be taken of a log which never would have occurred to him if quantity instead of quality were taken into consideration. The mill owner who saws his own logs, need not be told that care must be taken, and yet many will "butcher" their own timber as though they were not sawing money out of their own pockets every hour they run their mill. These are the men who want the lumber buyers from the large markets to pay them the same price that the careful sawyer gets for his products, and will think he has not been fairly dealt with if he is made to pay for his own mistake.

I have tried many ways for getting the most good lumber out of logs, and find this is best: first take off a slab, turn the slab side down upon the carriage, and saw the log through past the heart until you get a clear face, if the log be a good one, then turn it over against the head blocks until you have a wide, clear face, which may leave a plank two, three or four inches thick, owing to the size of a log. Then take the sawed boards or plank, and after running the head blocks back 24 or more inches, place the boards or planks, whichever you have sawed, so that the saw will edge them properly. To determine just where the saw will come may be done by sighting, or better still by the man at either blocks using a two foot measure, which placed across the board, back to the block, will show how far out to place it (at board); treat the other edge the same way, and if the heart runs straight enough not to cut away too much lumber, saw it out. A better way to edge lumber, but requiring extra machinery, is to have attached to the mill an edging saw mill. In this way the lumber can be edged as fast as the log is sawed, and where a mill can be so provided the result will show that it pays well.

Of course when the logs are poor so much care is not necessary, but one thing I have paid dearly to learn and that is, no log can be too poor to neglect to saw full thickness. Thousands of dollars have been lost in not urging upon the sawyer the great importance of sawing full. There is a double loss in thin lumber. It drops one grade if inch, and will often be refused altogether, while on the other hand, if a car load of lumber be plump, but really a little inferior, its thickness will often sell it, so that a manufacturer can not urge too emphatically upon his sawyer to be liberal in thickness. A stout 1-16 for 3/8, and one inch and a scant 1/8 for inch and a quarter and inch and a half, and full 1/8 for two-inch; for three and four-inch 3-16 is not too much; better too thick than too thin.

A careless sawyer will often allow his log to "cant" out, making one edge of the board plump while the other edge may lack just enough to spoil the board for the grade into which its quality would place it. This same result more often occurs from the carriage not being properly set in place; or again, the saw may heat and "run." A good sawyer will see that everything is kept in perfect order, and stop at once to adjust his mill at the first mis-cut board.

Not a mill man in the country, but who can tell just how to

properly stick lumber, and when to stick it, and yet when the lumber is marked, it shows that some of the many have made a grave mistake, especially so in the case of poplar and other light colored lumber. In sawing poplar, when it is green with sap, it should be stuck up at once, as if left piled together it will "sap color" in a few hours. "Haven't time," will not answer! If you care to get the full value of your lumber, you must stick it up as fast as sawed. This is true of oak, and in fact of all lumber affected by sap. Lumber manufacturers often wonder why their stock is not as bright and nice as some they have seen. If these same men continue to saw their lumber and pile it close together, and leave it until they have time to stick it up, then I can assure them they will spend the rest of their days wondering. This should be the order in importance with them, first how to keep the lumber bright, then how to saw it properly.

Use narrow strips, and under no circumstances may they be green, as they will most certainly color the wood wherever they touch, and if left too long will rot it. If you have no dry sticks and are on a railway line, buy a car load and run them to your mill; it will be money well spent, and the first sawing you do let it be on a good supply of sticking lath, which will soon be dry enough to use.

Walnut should be piled together as soon as sawed, and will receive no injury if not stuck up for some time after sawing. The sap seems to dry out faster when finally the lumber is put on sticks, than if stuck right from the saw.

If you have plenty of mill yard room, pile your lumber thus: Set the piling blocks at least a foot from the ground, and with sufficient fall to let the rain run off readily when the pile is finished and covered. Begin by laying the first course with the boards six inches apart, if wide and narrow ones, put two together, and build the pile in this order, so that when finished the spaces started in the first course will run to the top of the pile. The openings will be so many chimneys, drying out the lumber more in one month than in three months the old way. Start the next pile at least 20 inches away, and so continue covering your yard, and you will be surprised how soon you can begin shipping dry lumber. One point more in the sticking of lumber in which there are sappy boards; instead of placing these boards away in the center of the pile they should be put on the outside as far as possible so that they will get the more air; and again these boards should be laid the sap side down. (I am indebted to one of our large dealers for this last point. Until recently he has been one of the most extensive manufacturers of poplar lumber in the west. He fully sanctions all I have said on the sticking of lumber.)—*New York Lumber Trade Journal.*

### THE JAMAICA TRADE.

To the Editor of *The Canada Lumberman.*

SIR,—Gen. Lauric's motion for all correspondence relating to the official visit to Ottawa in 1885 of the Jamaica commissioners is, I trust, the unostentatious beginning of a most important movement. Few persons, not directly concerned, are aware that the resolutions of the Jamaica Legislature authorizing the appointment of the commissioners empowered them to discuss with the Canadian Government the admission of Jamaica into the Dominion as well as Commercial Reciprocity on a basis somewhat similar to that of the Elgin Treaty of 1854 between Canada and the United States. Fewer still are aware that within a few days of the unanimous passage of these resolutions the Jamaica Legislature, the Legislature of the Leeward Islands, also passed unanimously resolutions couched in almost identical terms. The visit of the Jamaica commissioners being temporarily, and from no fault of theirs, a failure. Those delegates from the Leeward Isles were not sent, though the resolution authorizing their appointment is still unrescinded. Two of the Jamaica commissioners hold Cabinet positions in the Government, the third, Hon. C. S. Farquharson, is a Legislative councillor of the island, and the fourth, Mr. Charles Levy, is a wealthy sugar planter and the head of a large London firm of merchants and ship-owners, which for over a century has traded extensively with Jamaica. Their high culture, polished manners and intimate knowledge of the questions they came to discuss created a more favorable impression among those who met them in Ottawa, Toronto, Montreal, Halifax, and St. John, in which cities they were warmly received and welcomed by the Boards of Trade, thus sowing the seeds of closer relations between the continental and insular portions of British America, of which Gen. Lauric's motion is, let us hope, the first little spring blade, the modest forerunner of a great and abundant harvest.

The temporary failure of the mission of the Commissioner was due to a despatch of Lord Derby which, with colonial office ignorance of colonial affairs, stipulated that any arrangement entered into between Canada and Jamaica should be open to acceptance by the other British West Indian Islands. The products and circumstances of Jamaica are so different from those of the other islands, that the absurdity of such a

stipulation would strike anyone having the least knowledge of the West Indian archipelago. In fact, had the dispatch reached Jamaica a few hours sooner the commissioners would not have sailed. At this distance of time there is no impropriety in mentioning that Mr. Levy assured me, when meeting him at the Ottawa station, that he feared its being fatal to the success of the negotiations. And so it proved. The Dominion Ministry very properly declined to abandon the entire revenue (about \$3,000,000) derived from sugar which the Jamaica proposals—if opened to acceptance by the other islands—would have necessitated, and the commissioners have returned home unsuccessful and greatly disappointed. Until Lord Derby's obnoxious proviso is rescinded it is safe to predict that reciprocity in natural products between Canada and Jamaica will not be attained. As for political union, it was, I believe, never formally discussed between the commissioners and the Dominion Ministry. The time is unsuitable for such a discussion. The expiring embers of the Riel rebellion were still aglow and the first duty of the hour for those to whose hands were entrusted the destinies of Canada, was not to enlarge the bonds of the Dominion, but to restore peace and prosperity to the vast domains already acquired. Of the admission of Jamaica into the Dominion I shall in this letter say nothing, though I hope shortly if granted space in your columns, to publish something on a subject which I firmly believe will, in the early future, become a most important issue in Canadian politics. In the present letter I shall restrict myself to giving a few statistics, showing the value of the trade that, without any special treaty and under the present heavy tariff of the island, can be done with Jamaica, and will also endeavor to point out how that trade can best be developed. My arguments will apply to a large extent to the development of our trade with the other islands, but I confine myself for the present to Jamaica, it being by far the largest, most populous, and also the most varied in productions and resources of the British group.

By the last census (1881) the population of Jamaica was 580,804, of whom 14,432 were whites, 11,115 East Indian coolies and Chinese, 554,132 black and colored and 1,125 not stated. In 1886, that year being the latest of which I have statistics, this population consumed of imported food stuffs a total value of £539,116; being from Great Britain, £50,007; from the United States, £319,831; from Canada and other British colonies, £168,267, and from other countries, £1,010. Of household furniture, £21,039 worth was imported: being from Great Britain, £10,958; the States, £1,722; Canada, etc., £9, and other countries £351. Of clothing and shoes the total imports were £351,186; of which Great Britain sent £337,551, the States, £11,468; Canada and other colonies, £1,204; and other countries, £984. Building materials, including lumber, amounted to £49,232; being from Great Britain, £8,123; from the States, £34,541; from Canada, etc., £6,500; and from other places, £47. The total value of estate machinery and supplies imported—other than foodstuffs and liquors—was £24,324; Great Britain sending £12,541; the States, £10,185; and Canada, etc., £1,598. Other machinery and tools amounted to £15,052; of which there came from Great Britain, £13,070; from Canada, etc., £11; from the States, £1,592; and from other countries, £378. Coals and coke, chiefly for steamers and gas, came to £38,277; being from Great Britain, £37,145; from the States, £615; from Canada, etc., £166; and from other places, £531. Books and other printed matter reached a total of £9,534; the value from Great Britain being £8,275; from the States, £1,207; from Canada, etc., £14; and from other places, £38. The total value of hardware and ironmongery imported was £68,545; of which Great Britain supplied £53,261; the States, £14,328; Canada, etc., £503; and other countries, £93. Of liquors, the total value imported was £47,443; of which our temperance friends will be glad to learn that the share of Canada and the other colonies was only £175; Great Britain sending £44,091; the States, £1,103; and other countries, £2,074. Jamaica, although tobacco is grown there quite equal to that of Cuba, imports £11,226 worth of the manufactured article, of which Canada sends none; the States, £9,631; other countries, £1,291; and Great Britain, £314, probably for troops and fleet. The miscellaneous imports—so classed in the returns—came to £150,618; of which there came to from Great Britain £82,695; from the States £50,170; from Canada, etc., £4,403; and from other countries £13,350. The total imports of the island for 1886 amounted to £1,325,603, or in round numbers about \$6,500,000, of which Great Britain supplied a percentage of 5.13; the States, 34.1; Canada 11.1; and other countries, 3.4. The total export of Jamaica were £1,280,118, or about \$6,400,000, of which the percentage sent to Great Britain was 39.7; to the States, 44; to Canada, 3.5; and to other countries, 11.8.

Now what is this miserably small—and I may almost call it—shamefully insignificant volume of Canadian trade with out

greatest tropical island colony chiefly, if not solely, due to? Our dairy products, our flour and our tub are equal in quality to those of the United States, and yet Canada's export of foodstuffs to Jamaica is not quite one half of that of her Southern neighbors. Of household furniture, how comes it that the energetic and tasteful manufacturers of Montreal, Toronto, and a dozen other places have only been able to sell \$43 worth, while the American sales reached \$8,500, and the British \$43,500. Of the million and three quarters of dollars spent on imported clothes and shoes, surely Canada might secure more than \$6,000. Of building materials, including lumber, Canada ought certainly to supply Jamaica with as much as the United States does. She now sends not quite a fifth of the quantity furnished by her rival. She ought, too, to send as much coal as the States, instead of only a fourth; and the same may be said about manufactured tobacco and cigars, of which she does not send a dollar's worth, while the American trade in this commodity amounts to \$48,000. As to hardware, tools, ironmongery and machinery, etc., I have given the figures, and people will readily see that our export to Jamaica of many of the articles enumerated ought, at least to be trebled, and would be, were suitable steam communication provided. The steamers should be fast and should be fitted with Blackman's patent exhaust or other similar apparatus for the preservation of fruit on the return voyage. Though mails and passengers should be carried, freight should be the chief object aimed at. If of sufficiently light draught, some of the smaller ports of the island might, in time, occasionally be visited with advantage. From the shape of Jamaica, long, narrow and intersected through its entire length by a high mountain range, the traffic of the island will always be chiefly coastal. Jamaica has but one short railway, and the ordinary roads across the island are steep and rugged. Coastal steamers now ply round the island every ten days conveying freight and passengers between the southern ports and Kingston. A line of subsidized steamers would probably at first only be able to touch at Kingston, as other West India islands would have to be visited, and would be supplied by these coasters with fruit and other homeward freight. But with increased facilities of transport the Jamaica trade would speedily require steamers exclusively devoted to it, and then the smaller ports might be called at, and the cost of transshipment saved. We Canadians scarcely know even by name many of the tropical luxuries, such as yams, guavas, pawpaws, shaddockes, etc., which a steam line would bring cheaply to our tables, and for which a large demand would speedily be developed among us. A line of steamers traversing the 1,700 miles that separate us from Jamaica would take our lumber, our staves and our fish, our boots and shoes, our dairy produce, oats and hay, our furniture and agricultural implements, our paper, glass, wire fencing, nails, cordage, cottons, tweeds, soaps, candles, canvas, carriages, apples and potatoes, and would bring in return, cheap enough for ordinary use on the tables of our farmers and mechanics, the bananas and oranges, the limes and guavas, the yams and plantains of the tropics. The growth of trade that steam communication would secure for us is no merely fanciful speculation. In the three years (1880-83) that the Cunard service between Kingston and Halifax was subsidized by the Imperial Government the trade from Jamaica to Canada increased from 6.2 per cent. of the whole export in 1880-81 to 16.66 in 1882-83, when as being inconsistent with Free Trade theories—the subsidy was discontinued, and the trade to Canada at once fell, amounting in 1885-86 to only 3½ per cent. of the total export trade of Jamaica. This is pre-eminently a farmer's and working man's question. Steam communication with our fellow subjects in the tropics means better markets, increased work and wages, and cheap luxuries for the Canadian masses, whether ploughing the soil, toiling at the loom or the forge, or wielding the axe in the snow clad forests of our northern or eastern wilderness.

Yours, etc.,

A. SPENCER JONES.

Ottawa, May 10th.

#### BRITISH COLUMBIA.

Mr. J. S. Chase of this city, who has spent the major part of the past eighteen months on the Pacific coast, returned only last month, has again taken his departure for that section, which he will make the scene of his further labors. In many respects Mr. Chase thinks that the Pacific coast, and particularly the Puget Sound country, is one of the finest sections of the globe. Its business advantages, in their rapid development, offer inducements to men of energy and capital (and to energetic men of small capital as well), unsurpassed by any section of the land. There is money in its timber and its minerals. In some sections of the mountains gold and silver lays around loose on the surface of the ground. Unfortunately for the seeker, it is not minted to his hand, and like all other valuable commodities, takes time, patience and a

considerable expenditure of money to separate from the rock with which it is amalgamated. In one of his trips through the mountains Mr. Chase came across a vein of mineral of which he picked up a half dozen specimens from the surface and submitted them to the government assayer at Victoria, obtaining the following report: No. 1 assayed at the rate of 29 ounces of silver and 13 ounces of gold to the ton; No. 2, 37½ ounces of silver and 2½ ounces of gold; 3, 43 ounces of silver and eight-tenths of an ounce of gold; No. 4, 27 ounces of silver and 1½ ounces of gold; No. 5, 35 ounces of silver and 5 ounces of gold; No. 6, 49 ounces of silver and half an ounce of gold. These were surface pickings, and but tend to indicate what might be the result of a close research. In our own wanderings in the mountains of British Columbia, we became perfectly satisfied that the whole country was auriferous, and that the time would come when machinery could be so economically availed of that in connection with improved facilities of transportation, the precious metals would be developed to an extent never exceeded in gold or silver mining. The coal of British Columbia is another mine of wealth, its quality being superior to even the highly esteemed bituminous coal of Pennsylvania. Iron and copper mines are found upon Vancouver Island of great richness, awaiting a larger population for utilization. The yellow cedar of the coast is almost, if not fully, equal in closeness of grain to the Holly of the South. It is one of the most difficult woods to find, there being but few tracts of land upon which it grows in any quantity. In fact, one tract of 160 acres on the main land of the Gulf of Georgia and a few scattering forties on Vancouver Island is all that is known to exist in bodies of any extent. It is worth \$60 per M in sawed lumber on the coast; as a trimming for contrasts in fine work it is not equalled by any timber known. The fir of the coast has not been exaggerated either for size or quality. Its extent is not so great as is by many supposed, as the large and good timber is confined to a territory west of the coast range of mountains and mainly on a belt of not more than from one to fifteen or twenty miles in depth, largely in a broken and mountainous region where the cost of lumbering would exceed the profit. The timber of the interior does not compare for size or quality with that of the coast, unless we except the red cedar, of which an occasional tract of comparatively small extent is to be found, and when found shows trees of enormous proportions.—*Lumber Trade Journal.*

#### THE HEMLOCK.

This, which has hitherto been one of the most abundant trees in the forests of Maine, as in those of the maritime provinces of Canada, is fast disappearing, as well beneath the axe of the woodsman, as from the results of the destructive effect of forest fires, to whose action it is very susceptible.

There are two varieties of this tree known to eastern woodsmen—the sapling, or white, and the black, or coarse-barked hemlock. The former is usually the smaller tree, attaining, however, a greater altitude in proportion to the size of its trunk. Its bark is also smoother and whiter. It seems very commonly to follow the banks of rivers and streams, or rather the sides of ridges adjacent to the shores of streams and lakes.

One of the best localities for this wood is to be found on the shores of the Avon river, and its branches, in the vicinity of Windsor, Nova Scotia. It occurs also in many other parts of the interior of that province, as well as in New Brunswick and Maine. In the two places last mentioned, especially in New Brunswick, vast forests, chiefly consisting of rough-barked hemlock, were overthrown, some twenty years since, by a storm, which is locally known as the "Saxby gale," from the fact that the date of its occurrence had been predicted by Lieut. Saxby, of the Royal Navy of England. The destructive effects of this gale, which extended a distance of more than 90 miles up the St. John river from its mouth, may be estimated from the fact that shortly after its occurrence the writer was called upon to examine and report upon some timber land which had been subjected to its influence. Two days were spent in such inspection, during which time he failed in traveling to exceed a distance of from three to four miles a day, the roots, tops and trunks of blown trees meeting him at every few steps, presenting formidable obstacles to anything like a rapid advance.

The gale had been more destructive to this than to any other forest tree, on account of its heavy and spreading top, which offered great resistance to the wind. As the roots ran along near the surface of the ground, where the trees were blown down, they brought with them masses of earth, which formed one of the chief obstacles mentioned above.

The wood of the black hemlock is nearly always more or less shaly, these shakes sometimes extending from the base of the tree to the limbs.

Hemlocks which grow on wet land, as well as those which are found on the low, sandy ridges of carboniferous rocks which occupy the central part of the province of New Brun-

wick, are usually very shaly, while those which are found on the boulder district of that province, which covers probably 100 square miles of its area, are especially good. Excellent trees may be seen standing where it would in many cases puzzle one to secure a shovelful of earth, and where indeed one might walk for a long distance by stepping from rock to rock, without ever once setting foot to the ground. In such a place the writer has counted, without moving from where he stood, ninety full-grown hemlocks, standing within a very limited radius.

The boulders which cover the extensive district in New Brunswick now alluded to, are composed of granite in nearly all cases. These are frequently porphyritic, enclosing crystals of feldspar of large size. The cause of the abundance of this tree, and of the good qualities of its wood in so unpropitious a locality, may perhaps be the result of the decomposition of this feldspar, under the action of changes of temperature and atmospheric agencies which by mechanical and chemical means combined, may have set free from its silica and alumina the 16 or 17 per cent. of potash which the feldspar of the granite contained, to be thus rendered soluble and fitted to be drawn up by the roots into the body and limbs of the tree.

In the maritime provinces of Canada, no attention is being paid to the protection of this tree on the property of the government; on the contrary, settlers are invited to occupy the poor and sandy ridges on which it grows, with the result of poverty to them and their families, and destruction of the surrounding forests from the spread of fire from the clearings.

Several large manufactories have been erected in the province of New Brunswick, for the purpose of extracting the tannin from the bark of the hemlock, the result of which has been that whole forests of this valuable wood have been cut down for the bark only, while the tree itself has been left to rot or act as fuel for the fires which every now and then rage in spring or autumn among the forests of this country.

The supply of hemlock of the eastern states and maritime provinces of Canada will in all probability fail long before that of the spruce, from the fact that while the hemlock grows very thickly in certain localities, these are limited in extent. On the contrary, spruce trees are found scattered all over the country. The hemlock also is much more easily destroyed by fire than the spruce, and does not replace other forests which may have been destroyed nearly as readily as the spruce.

The young hemlock is a remarkably pretty tree; as it grows older, however, its branches frequently die and the dead and often barkless top of the aged tree gives a by no means agreeable appearance to it and its surroundings.—*Edward Jack, in New York Lumber Trade Journal.*

#### EXCHANGE ECHOES.

Quebec Chronicle.

From some of the Quebec lumbermen who have lately returned from England, it is understood that although the condition of the European markets is not perhaps quite as promising as it was a couple of months ago, there is no reason to anticipate anything but a fairly prosperous season. The demand for Quebec oak at the principle shipbuilding centres has apparently been satisfied. The anxiety and rush to sell during the boom in prices of the month of February last, produced the natural result of lower prices, and the then existing demand was satisfied in a shorter time than had been anticipated. Even the shippers, whose interests on this side never permit them to paint the condition of affairs in England in very bright colors, admit the present prospects on the other side are rather more promising than they have been for the past few weeks. Prices of deals are now at least ten per cent. higher than they were at this time last year, and stocks in England are known by the Canadian manufacturers to be much lower than they have ever been before, at least for many years back. This should be one of the most promising features of the present outlook. The American demand for boards continues to be more satisfactory than was anticipated, and is fully equal to that of last year, notwithstanding that the Presidential election year is generally most unfavorable to business with the United States.

London Timber Trades Journal.

The placing of lumber on the free list by the United States government will be—should such a measure pass—an immense stimulus to the Canadian timber trade, with a consequent all-round advance in values, through the introduction of United States capital, in the shape of numerous mills, and a large absorption of Dominion forest limits by the lumber manufacturers from Chicago and Michigan. As far as relates to the wisdom of this step towards free trade by the United States legislature we cannot say much, the tendency of such a measure being to divert capital from their own side to that of the neighboring country, and though, perhaps, the interest on it might return in the shape of cut lumber specially manufactured in the States, the principal would be lost for all time, sunk in lending its assistance in the furthering of Canadian



prosperity. We might just as well argue that capital leaving this country and taking their money with them for carrying on trade abroad were doing so for the benefit of the British empire, but it would not take long before the results disproved our reasoning. Capital has been too fond lately of leaving our shores, and we have felt the ill effects in the long interval of paralyzed trade under which the country has groaned. Canadians may pretend what they like, but we question very much if they would not welcome with open arms the new men and money which directly the bill passed, would hasten to bestow themselves upon her. The Southern trade, including the immense range of coast line in the Gulf of Florida, would be neglected for more profitable and better paying fields, and the capital which would otherwise have given spirit to the pitch pine trade be distributed over a foreign land. We can hardly believe that the bill will be carried by the free-traders, who form a very small minority of the United States legislature, though in the interest of Canada we trust that by some accident the measure may pass into law. There is an immense amount of unemployed capital in America, which would speedily be brought into use, buying up forest limits in Canada, where labor and plant are so much cheaper than in the States, and standing pine more plentiful and acceptable in the neighborhood of navigable streams.

#### Mississippi Valley Lumberman.

The consolidation of the Minneapolis, Sault Ste. Marie and Atlantic, the Minneapolis and Pacific, and the Aberdeen, Bismarck and Northwestern railway brings under a single management about 950 miles of track. It extends the influence of the Sault as a distinct factor in the world of railway traffic, not only across Wisconsin and the upper peninsula of Michigan, but across Minnesota and carries it into the very heart of Dakota. It is easy to foresee what further extension and additions will naturally be made, as time progresses, to the main line now completed. The announcement of the consolidation is coupled with the further statement that very close relations have been established between the "Soo" and the Canadian Pacific. There is in this statement more of importance even than in the announcement of the consolidation of the line has been effected, because it bears out the opinion that the Canadian Pacific system is to be supplemented by a series of feeders stretching into the states, upon much the same plan as the Northern Pacific has provided its main line with feeders. It is difficult to predict just what significance this consolidation and traffic arrangement will have for the lumber trade. The manufacturers along the "Soo" will undoubtedly be provided with a double outlet—an eastern outlet for their upper grades, and a western field of distribution for their common grades. But should the duty on Canadian lumber be removed it is easy to foresee as direct competition with Canadian lumber in this, and some of the Wisconsin markets, as is anticipated at Chicago and at some Lake Erie points. On the same theory upon which Chicago bases some of her hopes for continued supremacy and greatness as a lumber market, when the barrier of duty is removed, St. Paul and Minneapolis can, thanks to the Soo, reasonably anticipate some addition to the volume of their growing importance as a point for the distribution of lumber.

#### Ottawa Journal.

The Chaudiere lumbermen have, it is satisfactory to note, opened the season's campaign under fairly satisfactory auspices. They are in good heart to their prospects, in proof of which extensive improvements and additions have been made to the mills. It is true the mill owners are a little anxious about the lowness of the water this spring, and it is feared that trouble may be experienced. It is very important that no delay occurs to the log drive, as the reserve of logs from last season is very small and may not be sufficient to keep the mills busy till the drive logs arrive at the Chaudiere. The cut this season by Messrs. Booth, Perley & Pattee, Bronson & Weston, Hardman & Co., Pierce & Co. and E. B. Edly Manufacturing Company, is estimated by the lumbermen at about 375,000,000 feet, if no delay occurs from low water.

#### Lumber World.

While "trusts" are multiplying on every side, it may be proper to suggest that it is time to form a "trust" of wood-workers. There is room for a "trust" of sawyers, of machine builders and of manufacturers of all lines of wooden wares. Who will start the ball rolling? The "lumber trust" should be the greatest on the list. Strike while the iron is hot.

—We extract the following from a letter recently received from a London lumber firm:—Prospects for trade here this season are not very encouraging. Sales are slow with a great scarcity of money. Though prices in other places are apparently advancing our people here are cutting and slashing. Where there is sure pay prices are cut so low that to find the margin one has to look through a microscope.

### SOME PERTINENT SUGGESTIONS.

Editor Canada Lumberman.

In these days of combines, public morality has received so many shocks that any abuse, except of the most startling kind, fails to arouse indignation. In the name of business, practices, by no means honorable, are resorted to for the furtherance of ends which in and of themselves are laudable. That monstrous doctrine: the end justifies the means, is firmly believed in and acted upon by men who affect to feel great regard for the morals of the public.

A disagreement, relating to the use, or rather the abuse, of the N. R. yard, has arisen between the wholesale and retail dealers of lumber, or, to put it more correctly, an old grievance has at last found expression. The wholesale-retail dealers have for years made this yard their piling ground and retail yard, rent and taxes free, in which they transact their business, thus coming into competition with the retail men. The retail men are extremely desirous that this order of things should be done away, and that no lumber be piled off for the purpose of being sold in small quantities, or in other words, retailed.

When we consider that the retail man is working at a great disadvantage compared with the quasi wholesale dealer, it is not at all surprising that he wishes such unfair competition stopped. It is unjust to the dealer who has his yard in the northern, eastern or western part of the city, that a consumer can go down to the R. R. yard and buy lumber at \$1.00 per M lower than the retailer, with the necessary expenses of a yard, is able to sell.

Rent, taxes, insurance and other expenses and losses such as breakage are heavy items in the course of the year, and have to be added to the cost of the lumber, from all of which except \$1.00 per car unloading charges, the wholesale-retail man is exempt.

There exists no reason whatever that any firm or firms should be in possession of so valuable a privilege. The demands of the trade do not require it, the growth of the city does not depend on it, the R. R. Co. does not profit by it, the development of the lumber industry of this country is not advanced, in fine it is a privilege which none should possess, not even by purchase. To do business on what may be called public property, like vendors of pean-uts, is not at all creditable to our wholesale lumber dealers.

What is wholesale dealing? A car of 10,000 feet? Twenty-five or thirty years ago this quantity might possibly have been so imagined, but not at this date. No man in making such a statement, except his ideas are small, very small, can reasonably expect to be understood seriously. A quantity to be considered as a wholesale transaction must be commensurate with the volume of trade done, and we think in this case that the quantity ought to be not less than 100,000 to 150,000 feet if not more.

Another matter in connection herewith, is that some of the lumber billed to the docks, which means a lower rate of freight, is disposed of in the city. For this an excuse might possibly be found, but the point is—was the regular rate of freight paid on removal? Would an investigation into this matter be productive of a dividend to the shareholders of the absorbed N. & N. W. R.?

All and any use of the docks should be prohibited except the one for which they were originally built, that is for shipping; and the right to ship permitted to all so desiring. Not one, two or three firms should enjoy a monopoly, else the time will soon arrive when these lumber firms will raise the plea of vested rights and claim compensation when required to surrender the Company's property. Squatter sovereignty and all that implies, would be practically illustrated in Canada.

That such a state of affairs should be tolerated says very little for the efficiency of the officials of the quondam N. & N. W. R. Granting privileges to one set of men as against others in the same line, the latter contributing largely to the revenue of the Co. requires explanation of no ordinary kind.

We confidently expect now that the G. T. R. has absorbed the N. & N. W. R. that these exclusive and prejudicial privileges will be withdrawn. By far the greater quantity of the lumber sold is carted to the outlying districts or suburbs, and comparatively little sold in the city proper.

The necessity does not exist that the N. & N. W. R. yard should be converted into a market for the especial benefit of a few men who are not enterprising enough to establish first class yards, of which Toronto does not possess one, but one satisfied to exist on sufferance and at the expense of others in the same line of trade. It is, to say the least, a most beggarly way to do business.

TORONTO, May 15.

PINUS.

—Letters patent of incorporation are asked for by the R. H. Smith Co., limited, to manufacture saws of all descriptions, files, mechanics' tools and implements of all kinds. The chief place of business is St. Catharines, capital stock, \$75,000, and the applicants are all St. Catharines men.

### THE WESTERN MACHINERY DEPOT.

The Brantford *Telegram* of a late date contains the following reference to the business of Mr. H. W. Petrie, an old-time advertiser in THE LUMBERMAN:

Nothing shows the steady growth of Brantford better than the continued solid growth of her institutions. Brantford has always been known as an emporium for iron goods of every kind, and the firms which handle that class of wares have obtained a world-wide celebrity. Foremost among those firms which handle machinery exclusively is that of H. W. Petrie. Last fall Mr. Petrie was compelled by his ever increasing trade to erect a substantial three-storey brick addition to his already large warehouse on Dalhousie street. In the front of this addition is the general office, and immediately behind is Mr. Petrie's private office. The offices are fitted with the latest conveniences for assisting office work, while a large Goldie & McCulloch vault insures the safe keeping of valuables. Through a door in the general office one enters the shipping room, which will in a few days be fitted with a complete set of steam hoisting machinery, so that the heaviest machinery may be brought in, unloaded from the drays, and whisked off to the second or third storey, or put in any desired position in the show room, without the need of a hand being laid to it. Next to this is the show room, extending the full depth of the building. Here is gathered together machinery from all parts of the Dominion, the greater part on this flat being perfectly new, and ready at any moment to be shipped away. Besides handling new machinery of every description, Mr. Petrie probably buys, refits and sells more second-hand machinery than any other dealer in the province. Back of the show room is the repairing shop, in which every second hand machine that comes in receives a thorough overhauling. The machinery on the ground floor is mostly of the heaviest description, planers, saw mills, engines, boilers, and lathes for wood and iron. In the shipping room are boxes of machinery waiting to be shipped to different parts of the Dominion. Here is a saw mill which will shortly be engaged in waging a battle against the Douglas fir of the Rockies. It is addressed to Lillooet, B. C. Beside it is another addressed to Stittsville, among the pineries of the Ottawa valley. Another lot is designed for the Muskoka district, and still another for Richibucto, N. B. These, with a host of others intended for places nearer home, show the extent of Mr. Petrie's trade. Upstairs the wood-work and painting is carried on. Here, spread out on the floor, are the parts of two saw mills which are being arranged before being shipped away. Near them is a broom handle machine which will turn out finished, tapered handles at the rate of six hundred per hour, and beside it is another of still newer pattern, which turns out a continuous stream of handles. On this floor is a collection of small engines designed for running a row of sewing machines and turning coffee mills. These compact little engines run from half a man power to four horse power, and are one of the most interesting features of the immense collection. Here also is an axe handle machine which will turn out thousands of axe handles per day, all moulded to pattern. Passing to other rooms on the same flat we find an immense collection of leather and rubber belting, and rubber hose of every description. Next to this there is a collection of several thousand drills for iron work. Back of this again is another room crowded with all sorts of light machinery. Here are machines that the uninitiated never dreamed of. For instance, here is a green corn cutter for the purpose of cutting green corn for canning factories. This machine removes the soft kernels from the corn as careful as the most fastidious housewife would require, and at the rate that would astonish the average housekeeper. Here is a machine for drawing by suction sawdust and shavings, a quarter of a mile if needs be, through pipes to the furnace of some vast saw mill. There is a machine for cutting barre heads, this one husks, and that one grinds cob and kernels at once into meal for cattle. This contrivance of wheels and bars cuts out spoons almost by the bushel, while over against the wall is the pilot wheel and anchor of a steam yacht; hence the expression "from a needle to an anchor," may be applied correctly here. The third flat is a repetition of the first and second, except that the machinery there is somewhat lighter than that below. One of the rooms on the second flat gives us an insight into the methods that have enabled the proprietor to build up this magnificent trade. From top to bottom of the room are shelves fitted with illustrated catalogues, in which every machine in the building is exactly described and numbered. Advertisements are inserted in all the great papers of Canada, and a number of those of the United States, and when a query is received as to some particular piece of machinery, off goes a copy of the catalogue, giving the illustration and description. Last year 20,000 of these catalogues were printed, which proving insufficient, a further supplement of 5,000 was obtained. The majority of the buyers never see Mr. Petrie, the buying being done by letter, and it speaks volumes for the integrity of the proprietor.

that he has thus been able in every case to satisfy his customers.

At the Market street station the firm has another large ware house, where the heaviest kind of machinery is stored. A switch runs right alongside this warehouse, so that boilers, engines, etc., weighing many tons can be handled to and from the cars with the greatest ease. Inside the warehouse as we enter there is a hundred-horse power engine, which in a few days will be shipped to Colpoys' Bay, to run one of the giant saw mills that are to be found in that region. Outside on the platform is the fly wheel for this engine some ten feet in diameter, and weighing some four or five tons. Near this is a biscuit making machine, fitted up with all the devices for turning out every kind of biscuit known to the trade. Further down in the shed is a hand engine, which has just come in from some village that has become ambitious enough to buy a steam engine. Near it are several threshing machines with their complement of traction engines to draw them about in the fall. There are also here a number of portable engines on skids, which are intended to run saw mills, stone crushers, etc. Near the door is a planer and matcher, which will shortly be shipped to Hastings county, and near it is a stave cutter intended for the north-western part of the province. Outside are a pair of hydraulic rams, quiet enough now, but powerful lifters when put in action. Water wheels of every kind, size and description are piled up around, while a part of the yard is especially devoted to boilers of the largest kind. On the platform near the south is a hundred-horse power boiler, ready to be shipped to the north, where it will keep the saws of a monster mill in motion. Smoke stacks of all sizes and lengths are piled up, ready to go out with the engines and boilers. On the platform, too, are several large drills and planers for heavy iron work, and near them is a curious machine that will turn out a steady stream of barrel hoops. By its side is a solid, grim looking machine of iron and steel, whose ravenous jaws will shortly be put to work grinding cinders for the asphalt sidewalk of the city.

Altogether this is one of the most bustling and busy establishments of our city, and as for the rest, Mr. Petrie's name is synonymous for reliability and square dealing throughout the Dominion.

#### TEACHING A NOVICE.

"Will you kindly advise me if I can get any book giving instructions by which a novice may acquire proficiency in estimating stumpage, or number of feet per acre of standing timber. What is the best and cheapest work, and where can it be had?"

We do not know of any such book outside of a good lumber journal. Aside from these, a book about five feet six high, weighing from 150 to 175 pounds avoirdupois, capable of swallowing about four pounds of salt pork a day, and rivaling the pedestrians who recently walked 100 miles a day in New York, in point of endurance. A book written upon the brain of a man who has made his home in the wild woods, is the only work of any reliability of which we have knowledge. Our advice would be: 1st. Get such a book (?) 2nd. Go yourself. 3rd. Send a boy. If you adopt the second or third propositions, you will first need an outfit. This is not to be found in the parlor of a \$4 a day hotel, nor in smoking 25 cent cigars. Get a pair of army blankets and a packing strap, a frying pan and a tin pail, a big chunk of salt pork or bacon, a few quarts of beans and a bag of flour (some land lookers carry their flour in a bottle, claiming superior virtue in the extract.) Don't forget a plug of black tobacco and a briar-wood pipe. An axe and a rifle come handy. If you are a novice with the axe don't take a double barreled (beg pardon, double bitted) one, lest when you come to use it, you find it making more time in your leg than in a tree.

Thus provided, with a folding rule, a log book and a memorandum book in your pocket, you start for the forest. You strap the goods, made up into a pack weighing 75 to 100 pounds, upon your shoulders. If you have no suitable packing strap, take off your drawers and pass the legs through the ropes and over your shoulders; it makes a good substitute. Thus equipped you are ready for an exploring trip. Calfskin boots and morocco slippers are not recommended for woods wear, and kid gloves are out of place. First find a section corner to make sure you are on the right land. Look the ground over for awhile, pick out an average spot of timber, pace off 72 paces square, and cut down an average size tree. If you don't manage to lodge it in another, and it don't kick back and knock you down, measure it off into 16 feet lengths, and by your log tables find out how many feet there is in it. Count the trees on the acre, and you can figure out how many feet they will probably scale. If there are punk knots in sight or any other defects which will make the lumber cost more than it will sell for, it is not advisable to count the tree. By the time you have tramped over 40 acres your "novice" will probably enjoy his pork and no less his "dudeen." When the shades of night fall about him, he will be a fit sub-

ject for gathering up a handful of pine spines for a feather bed, and after hunting up a soft rock or a pine log for a pillow, say his prayers and enjoy the sleep of the just. We would not care to buy stumpage on the estimate of a novice from the results of one day's experience, but if he sticks to it long enough, he in the course of a few years would be likely to become an adept if he has the stuff in him that land lookers are made of.

There is another way in which estimating is often done, borrowed from methods often adopted by United States surveyors, but it has its drawbacks, and these sometimes culminate in a drawback toward the penitentiary, and is therefore not to be recommended to "novices." By this method a pleasant room, well lighted, a large table and plenty of writing material and requisite. A large map of the territory to be estimated or surveyed is spread out, and the lines laid out dividing it from other lands, then it is the easiest thing in the world to mark off section lines, which can never be found, and to estimate quantities of timber that never existed. There has been too much of such surveying and estimating, and the outcome has never been satisfactory. Concisely to answer our correspondent's question, timber estimators are born rather than educated, and must learn from experience rather than from books. — *Chicago Lumber Trade Journal.*

#### PRACTICAL MILLING.

It has been the policy of "the country saw mill" owner to buy that which was cheap. We have reference more particularly to their first plant—their mill, engine and boiler. Let a man want to engage in the saw mill business, nine cases out of ten he counts the profits first, then the costs, and, as he is "a little short," he tries to economize by buying his outfit second-hand. He starts out on a cheap plan, and scours the country for some mill that has passed through the fire, or whose owner has found it far more profitable to let it lay up than to attempt to run it.

He visits the city and looks through the second-hand machinery stores. He looks at one or two new mills, gets completely muddled, and, disgusted, starts off home and buys "Jones' old mill." It has not been run for two or three years, but he can save one hundred or possibly two hundred dollars in this his first purchase. He is told that it is a little behind the times, but then it will do him.

Now all that is wanted is to secure an engineer and head sawyer who is in keeping with the mill, and we have a full-fledged mill to help him cry "hard times," and although gradually, it will soon cause him to feel that saw milling is not what they crack it up to be.

At last he finds an engineer who has done almost everything. He comes along, or, rather, "turns up," and wants a job. He has been used to large mills, big pay and his fireman, but has had a "streak of bad luck" and will take hold of this mill, put it in order and show what can be done. In not a few cases our engineer imparts "his bad luck" for he knows nothing of engineering, and but very little of firing. Our new proprietor is new at the wheel, and does not discover that his engineer is second-hand until reminded of it by repeated accidents and mishaps that suggest something wrong. A broken ring is looked upon as a necessity, hot wrists result from the mill laying up, steam escaping from nearly every joint of pipe, the piston rod, valve rod, and the several conditions soon suggest that something is not what it should be.

Strange as it may seem, hundreds of men start out thus, holding a penny so close to their eyes as to lose sight of a dollar with their reach. Poor tools make poor workmen, and a more fallacious policy was never pursued than economizing in the plant—getting something cheap regardless of worth. The best is the cheapest, applying this both to tools, mill and labor.

The older mill men, even some who have been looked upon as "full-fledged," have erred to their sorrow, in moving too soon from a good site. They have cut out certain qualities of timber that they have depended upon largely for their run, and without fully investigating whether it would pay to cut other lumber, have hunted up other sites and moved; and in not a few cases to their detriment. It has come under our observation of late, to note where several mills have moved back to their original sites, re-buying timber that they had passed over unnoticed at their first sitting, and, where the strange part comes in, paying for this second cutting a little more than they originally paid for the first, land and all. A little forethought could have saved them money, trouble, time, and expense of two moves.

It takes experience. The practical man studies not only the present but tries to anticipate his future wants. The practical miller counts nothing too good for him, and looks upon the best as the cheapest. He wants good tools, good saws, good files, the best of lacing and belting, and good, steady, experienced men. He knows how to keep them, and they recognize

in their employer a man who masters and understands his business. It's a satisfaction to them to work for such a man. It is rarely such a man fails; success is too near the surface. *George Fisher, in the Woodworker.*

#### SPRUCE LUMBER.

There is no lumber growing in America to-day, which sells at so low a price in comparison with its intrinsic value as spruce. We know of no wood that could fill its place for light frames or for general building purposes where strength, stiffness and lightness are to be combined in one kind of lumber. Spruce lumber has always been supplied so cheaply to builders that its real value has been underestimated or perhaps overlooked. It is a lamentable fact that the grand spruce forest of northern and eastern New England have been largely sacrificed without any corresponding gain to owners, operators, mill men or even to lumber dealers.

The principal growth of spruce in America is confined to Maine, New Hampshire and Vermont, the Adirondack region in New York and to Lower Canada, including New Brunswick and Nova Scotia. There is little spruce west of New York state and of the Ottawa river in Canada. Spruce is in much smaller supply on this continent than either pine or hardwood, and is of much slower growth than sapling pine. A scarcity of spruce, which is not likely to occur this generation, would, however, prove a most serious inconvenience to builders.

The supply of pitch pine in the southern states is greater than the aggregate growth of spruce in the northern states, and for many purposes in heavy mills, bridges and warehouses the former is the better wood. On the other hand, in the construction of ordinary dwelling houses, roofs and light work, spruce is preferable. It is light, strong and easily worked. When spruce can be used it is much more economically handled and framed than southern pine. A carpenter would hardly take the gift of southern pine for the plates, girts and posts of an ordinary frame house if he could buy spruce at present rates. Norway pine has only about two-thirds the transverse strength of spruce; sapling pine is deficient in strength in comparison with spruce, although easily worked.

The great development of southern industries has infused new life and enterprise into the lumber manufacturing of that section. Northern capital and machinery, tram railways, improved logging, manufacturing and freighting facilities, have reduced the cost of southern pine lumber delivered in northern markets. Again, during the past few years the pitch pine business has been overdone, and many a cargo has sold at less than cost. Yet a singular fact has developed during the last year or two, and that is that in New York and Boston markets the price of large-sized spruce dimensions has reached within a very few dollars per thousand feet of wholesale rates on ordered lots of southern pine. This shows that dealers and builders will have spruce lumber even when its cost nearly approaches that of the southern lumber. The days of extreme low prices for spruce have gone, never to return. The demand now fully equals the supply, and timber land owners and mill men are beginning to appreciate the situation and to act accordingly.

#### RUNNING THE RAPIDS.

The first man to accomplish the daring feat of running the Arnprior slide on a stick of timber, says the *Chronicle*, was Alexander Oran, foreman for Conroy Bros. It was shortly afterwards performed by our Mr. James Havey, Jr., and "Chain Lightning Stewart," who went through safely on the same stick. It was a very common thing for Stewart to do, and many a time he did it, just for amusement. Stewart was a remarkable man, and it is said that he did many daring acts on the river. He could handle a log or stick of timber, as fast as any one, and it was a common thing for him—in the shanty, during the winter season—to mount the grindstone and have the boys run it as fast as they were able, so as to give him feet practice for the spring drive. He came very near losing his life several times through his fool-hardiness. Once, I think it was on a slide somewhere in the vicinity of Black Donald Creek, Stewart undertook to run through on a stick of timber. It was a rough place, and the logs were very often broken after they got through, so steep was the pitch at the end. Stewart was warned by his companions not to make the attempt, but warnings were not new things to him, and, watching for a good piece, he jumped on it and was soon sliding along the narrow passage at a lightning speed. His comrades shouted at him to jump for they well knew that to go over that frightful pitch was certain death. At the end of the slide was a projecting beam, and when Stewart neared it, his well trained eye measured the distance, and making a bound, alighted safely on it. It was well he did, for if he had struck the timber his reckless career would certainly have terminated there and then.

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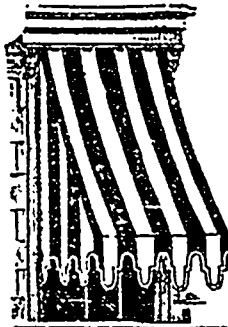
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J. B. CARLILE,  
Managing Director.

MESSRS. WILSON & MORRISON,  
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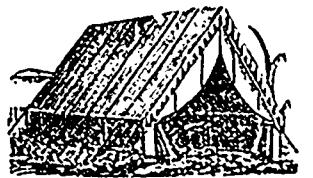
# PETERBOROUGH TENT AND AWNING FACTORY.

J. J. TURNER, Proprietor.



The subscriber would call particular attention of Surveyors, Lumbermen and Prospecting Parties, to his facilities for the manufacture of every description of common Water-proof Tents, Awnings, Horse and Wagon Covers, Tarpaulins, Rick Cloths, Portable Store and Private Window Awnings, from English, French and American Stripes and White Duck.

Law and Camping Tents, in every variety of Style and Color. Refreshment Tents, Photographers' Tents, and all kinds of Waterproof Clothing in stock and made to order. American and English Oakum. All kinds of Rope spliced. Orders by mail promptly filled. Tents of every description to rent.



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LOG BOOK

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G. W. FISHER, Box 238, Rochester, N. Y.,  
or A. G. MORTIMER, Peterboro', Ont.

# 1888.

MAP OF ONTARIO,  
Railway and Commercial,  
Brought Down to Date.

THE COMPLETE RAILWAY SYSTEM, in operation or projected (Hudson Bay, and Brockton, Mr. Westport and New Railway, etc. The American connections at the Sault Ste. Marie, the new Ontario Territory, the Algoma and Free Grant District, etc.

Map has been most carefully drawn and printed in five colors; size, 33x45.  
Plain or varnished for wall . . . \$3.00  
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ENGINE AND  
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Pin Lubricant,

Which is specially adapted for engines and shafting, and is a saving of 50 to 75 per cent. over oils.

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# LEATHER \* BELTING

IF YOU WANT BELTING

Which will Run Straight on the Pulleys,  
Which is Thoroughly Well Stretched,  
Which will not Tear at the Lace Holes,  
Which will give Complete Satisfaction,

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RELIABLE! RAPID! CHEAP!

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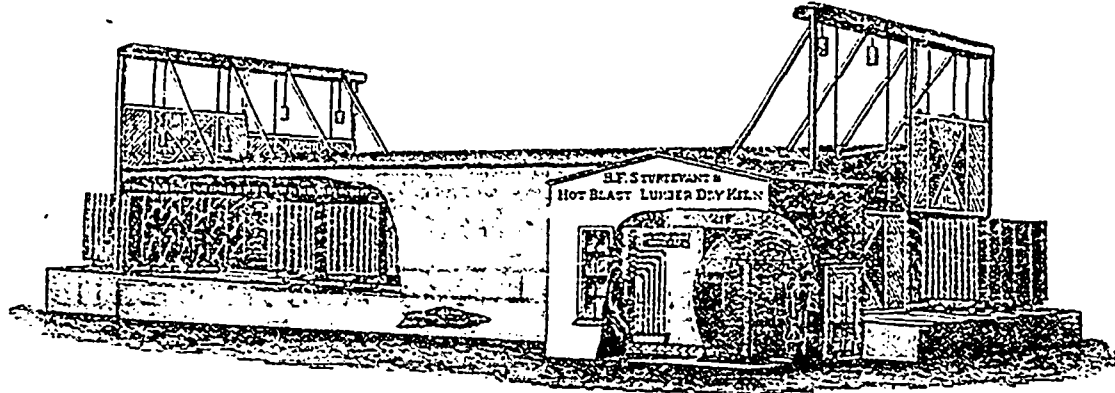
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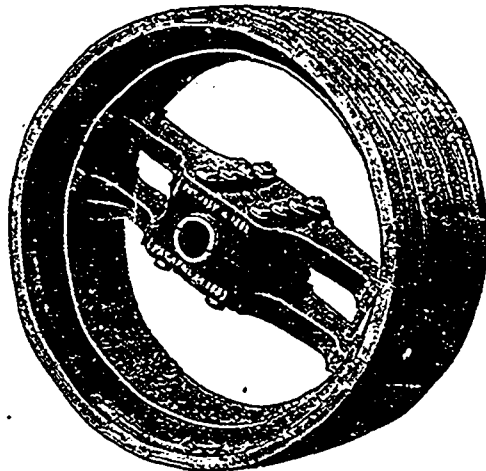
Patent Hot Blast

Steam Heating Apparatus.

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B. F. STURTEVANT, Patentee and Sole Manufacturer, BOSTON, MASS., U. S.

## DODGE PATENT WOOD SEPARABLE OR SPLIT PULLEYS.



BEST BELT SURFACE, LIGHTEST, STRONGEST, BEST BALANCED AND MOST CONVENIENT PULLEY IN THE WORLD.



With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.

As a material for pulleys wood is better than iron from the fact that it holds a belt much better. Most good mechanics are aware of this fact, but it may not be generally known how great is the difference, and for the benefit of our readers we give the result of two tests made and published by two of the most eminent mechanical authorities :-

Portion of Circumference embraced by belt.	Rel. value of leather belt		Portion of Circumference embraced by belt.	Rel. value of leather belt	
	On Wooden Pulleys.	On Iron Pulleys.		On Wooden Pulleys.	On Iron Pulleys.
.20	1.56	1.42	.20	1.90	1.40
.30	2.43	1.69	.30	2.40	1.70
.40	3.26	2.02	.40	3.30	2.00
.50	4.38	2.41	.50	4.40	2.40
.60	5.88	2.87	.60	5.90	2.90
.70	7.90	3.43	.70	7.90	3.40

Morin. - Appleton's Encyclopedia of Mechanical Arts. Haswell - Engineers' and Mechanics' Pocket Book

A Dodge Patent Wood Pulley is better than iron from the

fact that it can be made very much lighter and thus save weight on the line shaft and bearings, thereby saving in expense from a saving in friction.

The advantages of the separable pulley are very apparent. By its use the necessity of taking down shafting already up for the purpose of putting on additional pulleys when needed, or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the centre, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are : It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or

set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft ; also a key unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

Haswell the acknowledged authority and most quoted by American mechanics, summarizes thus : The ratio of friction to pressure of leather belts, when worn over wooden pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

We also manufacture GROOVED HARD WOOD PULLEYS FOR TRANSMITTING POWER BY MANILLA ROPES (tallow laid) by the Dodge Patent System of applying the ropes and taking care of the slack.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to

The Dodge Wood Split Pulley Co., 89 Adelaide St. W., Toronto.

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A. GOODBY,

Manager.

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BOWDEN & CO., 59 Adelaide Street, East, Toronto, Ont.

TRADE REVIEW.

Toronto, Ont.

TORONTO, May 30th, 1888.

CAR OR CARGO LOTS.

Table listing various lumber products such as '1 1/2 and thicker clear picks', '1 1/2 and thicker, three uppers', etc., with prices in dollars and cents.

YARD QUOTATIONS.

Table listing yard quotations for products like 'Mill cull boards & scantling', 'Shipping cull boards', 'Scantling & joist', etc.

Ottawa, Ont.

OTTAWA, May 28th, 1888.

Dimensions, Inches. Per M.

Table listing Ottawa lumber prices for 'Mill culls', 'Cull strips', 'Scantling', 'Laths', 'Stock shorts', etc.

Hamilton, Ont.

HAMILTON, May 28th, 1888.

Table listing Hamilton lumber prices for 'Mill cull boards and scantling', 'Shipping cull boards', 'Scantling and joist up', etc.

St. John, N. B.

ST. JOHN, May 29th, 1888.

Deals, Boards, Scantling, etc.

Table listing St. John lumber prices for 'Spruce deals', 'Pine', 'Deal ends', 'Scantling', 'Shingles', 'Clapboards', 'Flooring, Dressed', etc.

Goderich, Ont.

GODERICH, May 28th, 1888.

PRICES IN CAR LOTS.

Table listing Goderich lumber prices for '1 inch Mill Culls', '1 1/2-8-10 & 12, common', '1 1/2-8-10 & 12, dressing', etc.

Montreal, Que.

MONTREAL, May 28th, 1888.

Table listing Montreal lumber prices for 'Pine, 1st quality', 'Pine, and', 'Pine, shipping culls', etc.

Saginaw, Mich.

SAGINAW, May 26th, 1888.

CARGO LOTS.

Table listing Saginaw cargo lot prices for 'Uppers', 'Common', 'Shipping Culls', 'Mill Culls'.

YARD QUOTATIONS—CAR LOTS DRY.

Table listing Saginaw yard quotations for 'Clear, 3/4 in', 'Flooring and Siding—Dressed', etc.

Philadelphia, Pa.

PHILADELPHIA, May 28th 1888.

White Pine.

Table listing Philadelphia lumber prices for 'Mich. uppers, 1 to 2 in.', 'Yellow pine edge bds', 'Edge board', etc.

Hardwood.

WALNUT.

Table listing Philadelphia hardwood prices for 'Nos. 1 & 2, 1 in., good', 'Nos. 1 & 2, 3/4 in., good', etc.

Cypress.

Table listing Philadelphia cypress prices for 'Nos. 1 & 2, 1 in., good', 'Nos. 1 & 2, 3/4 in., good', etc.

Walnut.

Table listing Philadelphia walnut prices for 'Nos. 1 & 2, 1 in., good', 'Nos. 1 & 2, 3/4 in., good', etc.

Oak.

Table listing Philadelphia oak prices for 'Nos. 1 & 2, 1 in., good', 'Nos. 1 & 2, 3/4 in., good', etc.

New York City.

NEW YORK, May 28th, 1888.

Black Walnut.

Table listing New York City Black Walnut prices for '3/4 in., all clear', '1 and 1 1/2 inches', etc.

Poplar or White Wood.

Table listing New York City Poplar or White Wood prices for '3/4 in. to 10 inches and over', '1/2 in. coffin boards', etc.

Dressed Poplar.

Table listing New York City Dressed Poplar prices for '3/4 inch panel', '3/4 inch panel', '3/4 inch panel', etc.

Ash.

Table listing New York City Ash prices for '1 inch, white', '1 1/2 to 2 inch', '2 1/2 to 4 inch', etc.

Oak.

Table listing New York City Oak prices for '1 inch plain sawed', '1 1/2 to 2 inch', 'Thicker', etc.

Cherry.

Table listing New York City Cherry prices for '3/4 in., white & clear', '1 inch', '1 inch strips', etc.

Miscellaneous.

Table listing New York City miscellaneous lumber prices for 'Chestnut, clear', 'Chestnut common', 'Basswood white', etc.

Boston, Mass.

BOSTON, May 29th, 1888.

Western Pine—by car load.

Table listing Boston Western Pine prices for 'Uppers, 1 in.', '1 1/2, 1 3/4 & 2 in.', '3 & 4 in.', etc.

Eastern Pine—Cargo or Car Load.

Table listing Boston Eastern Pine prices for 'Nos. 1, 2 & 3', '4', 'Ship'g bds & coarse refuse', etc.

Spruce—by Cargo.

Table listing Boston Spruce prices for 'Scantling and plank', 'random cargoes', 'Yard orders, ordm.', etc.

Lath.

Table listing Boston Lath prices for 'Spruce', 'Pine, 1 1/2 in. extra', 'Pine, No. 1', etc.

Shingles.

Table listing Boston Shingles prices for 'Spruce', 'Pine, 1 1/2 in. extra', 'Pine, No. 1', etc.

Oswego, N. Y.

OSWEGO, May 30th, 1888.

Pine.

Table listing Oswego Pine prices for '1 1/2, 1 3/4, 2 and thicker uppers', 'pickings', 'No. 1 cutting up', etc.

Brown Ash.

Table listing Oswego Brown Ash prices for '1 1/2, 1 3/4, 2 & 3 in. 1st & 2nd quality', 'culls', etc.

Basswood.

Table listing Oswego Basswood prices for '1 & 1 1/2 1st & 2nd quality', 'culls', etc.

Shingles.

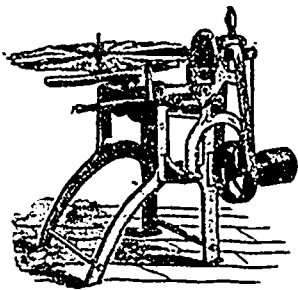
Table listing Oswego Shingles prices for 'XXX 1 1/2 inch pine standard thickness to 2 1/4', 'XX', 'X', etc.

Lath.

Table listing Oswego Lath prices for 'No. 1 1 1/2, 1 3/4', '2', etc.

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Complete with 3 Emery Wheels

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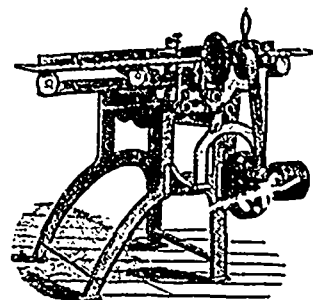
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THEY ARE ENDORSED BY LEADING LUMBERMEN

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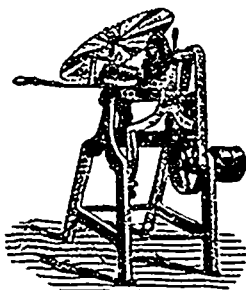
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**CO. LIMITED.**



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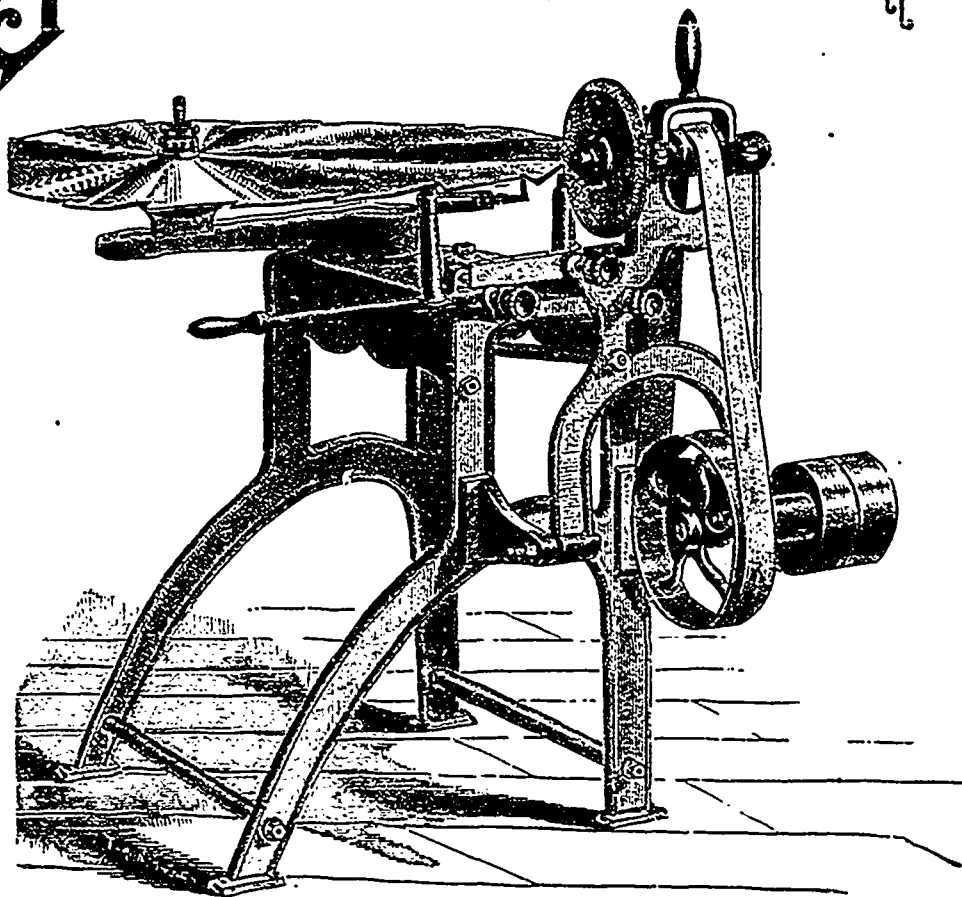


Set for Cross-Cut Saws.

Complete with 3 Emery Wheels

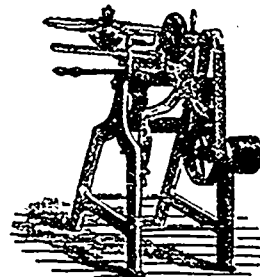
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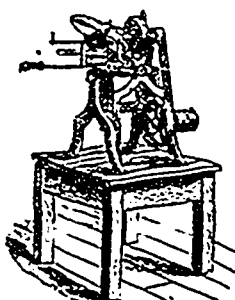
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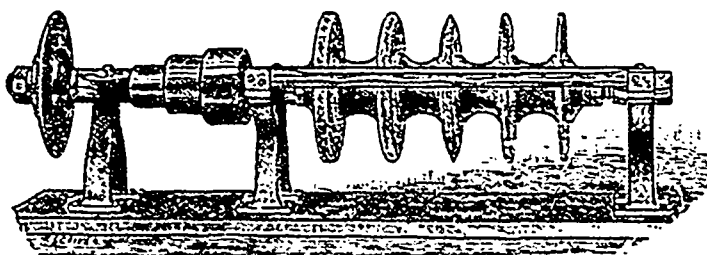
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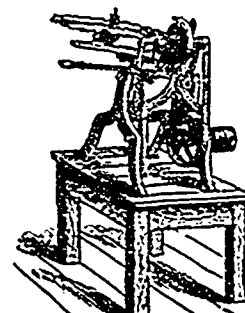
For Sharpening and Grinding Mouldings, Bits, etc.



PRICE \$35, WITH COUNTERSHAFT AND WHEELS.

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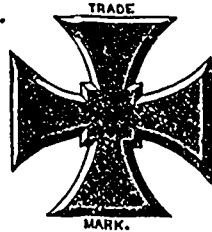
Offices : 43 YONGE STREET, TORONTO.

Factories : PARKDALE, ONT.

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Our celebrated "Maltese Cross" Rubber; "Baker Fabric" and Ajax Cotton; "Giant" and Light Linen, and Fire Hose constantly in stock.

LUMBERMEN'S HEAVY RUBBER CLOTHING, OUR OWN MANUFACTURE.

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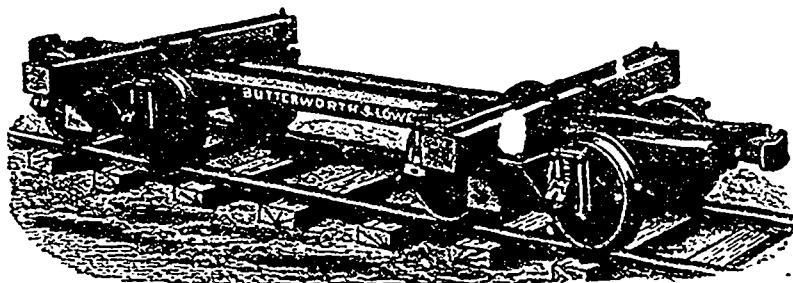
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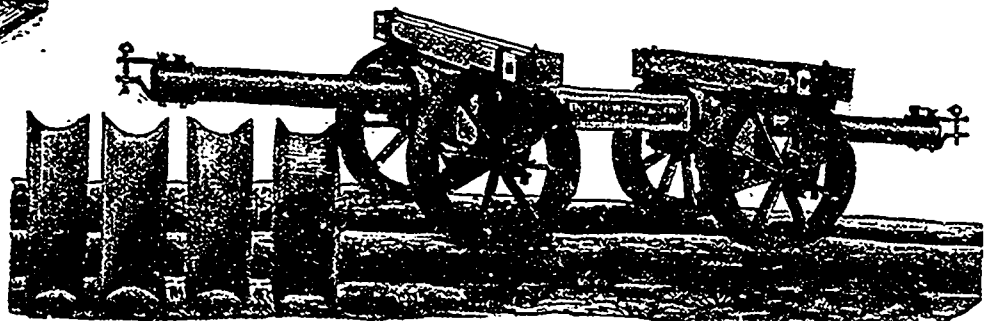
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Announcements in this department will be inserted at the uniform rate of ten cents per line, each insertion, payable in advance.

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CHEMUNIS SAW MILL, B.C.—FOR SALE—a saw mill; nearly new, fully equipped, with water-power and steam-engine, a powerful steamer, scows, large real estate and timber leases, also hotel, store, manager's and workmen's houses; capacity 50,000 feet per day. Apply to Croft & Angus, Victoria, British Columbia.

FOR SALE—CHANTLER'S MILL.—SHINGLES and lumber mill, never been run, owing to death of owner; will be sold cheap, and liberal terms will be given, good chance for party with small means. This mill is situated five miles from Bracebridge, on Lake Muskoka; logs can be had from any point on the lake with excellent booming ground. Apply to S. C. Kanady & Co., 18 Wellington east, Toronto, or G. W. Taylor & Co., Gravenhurst, Ont.

ATTENTION, LUMBERMEN—FOR SALE—at a sacrifice—new saw mill and one thousand acres pine timber; Parry Sound district. Geo. Coote & Son, Dundas.

SAW MILL—IN WESTERN TOWN—WITH woodworking machinery, mostly new; suitable for furniture or planing mill; a bargain; lithograph of buildings and particulars on application. Box 504, Globe office, Toronto.

TOMILLERS, LUMBERMEN AND OTHERS having capital awaiting good investment; splendid chance to purchase a 1 patent process flour mill, together with saw mill and timber limits on easy terms. Apply for particulars to Drawer 9, Minnedosa, Manitoba.

FIRST-CLASS LUMBER AND SHINGLE mill doing large trade; also, timber limit and large number of logs; for Toronto real estate. J. Huggard, 162, Dundas street, agent.

A LARGE PLANING FACTORY—WITH lots of power—adjoining our summer storage yard. William Leak & Co., Dundas street, Toronto.

1,000,000—FOR SALE—ONE million lath. F. O. B. cars at Gravenhurst, Donogh & Oliver, Lumber Dealers, Toronto.

FOR SALE—STEAM SAW MILL—IN GOOD repair; Lowmoor boiler, 30 h.p., and inspirator; engine 25 h.p., saw rig and carriage, edger, butter, shafting, belting, saws, patent canter and bull wheel; would take part lumber or city lots Box 60, Uxbridge.

LUMBER INSPECTOR WANTED—IMMEDIATELY—one thoroughly up in inspection of pine and hardwood lumber, and who has a good general knowledge of the business. Apply by letter only to F. W. Walker, No. 4 Imperial Bank Buildings, Toronto.

TIMBER LIMITS FOR SALE. QUEBEC AND MANITOBA. W. J. FENYON & Co., 50 Adelaide Street, East, Toronto.

FOR SALE CHEAP. WATERPOWER CIRCULAR SAW AND Shingle Mill with ten acres of cleared land, log house and stable situated on South river, about 4 1/2 miles from Trout Creek Station on the Northern Pacific Junction R. R., convenient to School, Church and Post Office and a large settlement in Hainsworth. Also about 30,000 feet of dry Hardwood lumber, cut and piled about two years, and about 30,000 feet of Hardwood sawlogs, principally Birch. If not sold sooner, will cut to order this coming summer. For information apply to THOMAS CORKERY, Barrett, Ont.

SAW MILL FOR SALE. FOR SALE, IN THE VILLAGE OF BELMORE. Sawmill in first class running order. Will be sold with or without stock. For terms, apply to H. R. PERKINS, Belmore, Ont.

PINE TIMBER LIMITS FOR SALE. Two choice Timber Limits in Northwest Territory, Canada, 100 square miles each; great bargains. Also, limits in Georgian Bay, Algoma and Muskoka districts for sale. JOHN SCULLY, Toronto, dealer in Pine Lands and Lumbermen's plant and supplies. Light iron and steel rails in stock.

LOCOMOTIVES FOR SALE. Three second-hand locomotives in working order, rails and other equipment. One locomotive boiler suitable for saw mill purposes. JOHN J. GARTSHORE, 49 Front Street West, Toronto.

CHARLES A. BRAMBLE, D. L. S. Fredericton, New Brunswick.

SURVEYS AND REPORTS UPON TIMBER Lands in any section. Can effect sale of properties occasionally if desired. References from former employers.

Our readers will confer a favor by mentioning this Journal when writing to Advertisers.

IN THE MATTER OF GEORGE BAPTIST, SON & CO., OF THE CITY OF THREE RIVERS LUMBER MERCHANTS,

INSOLVENTS.

TENDERS will be received by the undersigned JOINT CURATOR until

SATURDAY, 30th JUNE, 1888, AT NOON.

for the purchase of the following ASSETS belonging to above Estate. Tenderers may offer for the whole en bloc or for each lot separately.

Table with 2 columns: Lot Description and Miles. Includes items like '1. TIMBER LIMITS' and '2. ISLAND MILL PROPERTY'.

3. THE GRAIS PROPERTY, comprising the "Poste de Les Grés," with Saw Mill, Stores, Workshop, Stables, Dwellings, Barns, etc., containing in all 731 5/9 acres of land more or less.

4. RAT RIVER FARM, at the junction of the Rat and Wessonneau Rivers, in the Township of Turcotte, in the County of Portneuf, containing 5,110 acres, more or less, with Store, Dwelling, Houses, Barns, Stables and other buildings thereon erected.

5. IMPROVEMENTS AT MATTAWIN RIVER Buildings erected on South Bank of the Mattawin River at its confluence with the St. Maurice River.

6. PROPERTY IN CITY OF THREE RIVERS (A)—Lot No. 2, 194 St. Ursule Ward, fronting on Notre Dame street, known as "Old Fuel Yard," containing 34,178 feet.

7. FARM LOTS, ETC. 71—Lots 159 and 160 in the Parish of Mont Carmel, Rang les Grés.

8. SHIPPING Steamer "Arthur," 9 Batteau, 1 Cordwood Chaland, and 2 Jolly boats.

9. LIVE STOCK Thirty-three Horses, 41 head of Cattle, and 25 sheep.

10. WAGGONS, SLEIGHS, SHANTY OUTFITS, FARM IMPLEMENTS, ETC. A large quantity of Waggon, Sleighs, Boats and Bark Canoes, Chains, Ropes, Threshing and Mowing Machines, Machinest and Blacksmith's Tools, Two Patent Hay Presses, Sets of Harness, etc., etc.

A deposit of Ten per cent, on amount of Tender by accepted cheque, to order of Joint Curator, must be made with each Tender, which will be forfeited should successful Tenderer not complete his purchase. Inventories may be seen at the office of the undersigned, Standard Building, 157 St. James street, Montreal, or at the office of George Baptist, Son & Co., Three Rivers.

Plans showing location of Timber Limits may be had on application to the undersigned. The lowest or any Tender not necessarily accepted.

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Montreal, 30th March, 1888.

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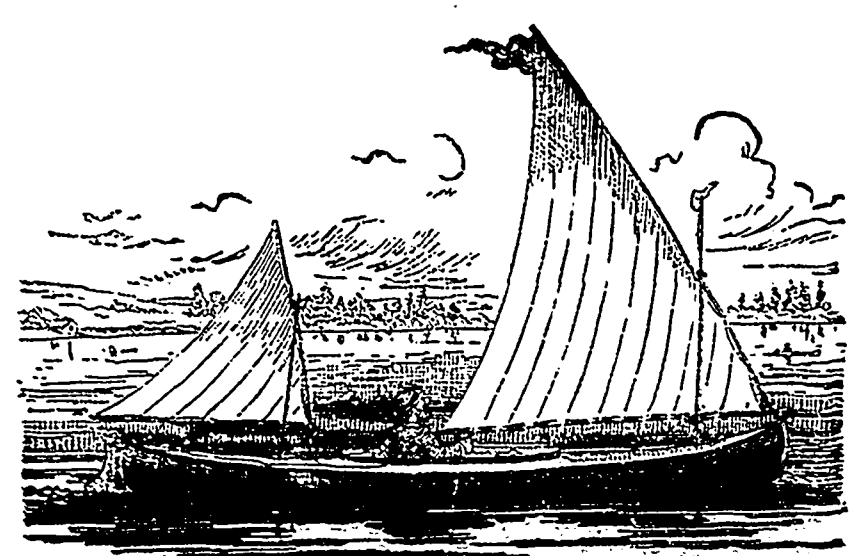
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