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# THE CANADA LUMBERMAN.

VOLUME XI. }

PETERBOROUGH, ONT., APRIL, 1890.

TERMS, \$1.00 PER YEAR.

### THE CANADA LUMBERMAN

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## NOTICE OF REMOVAL.

it devolves upon us this month to inform our readers that immediately on completion of the current issue the publication office of the "Canada Lumberwill be removed from Peterborough to Toronto. This change has been contemplated for some time, and is now being carried out in the Interest ci both the journal itself and the lumber trade in general. In order to facilitate business and accumulate from month to month a complete quota of news from all sections of the country it is necessary that the editor should be brought in contact with as many members of the trade as possible, and this is only possible in a large city where both the manufacturer and dealer are in the habit of making periodical visits. The temporary offices of "The Lumberman" are at 69 Adelaide St. West, where we shall be glad to welcome all our friends, until permanent quarters in the heart of the city are ready for occupation. Correspondents will please make a note of the new address and hereafter address their letters to Toronto.

ACCORDING to the report of the Commissioner of Crown Lands for the Province of Ontario for 1889, sent down to the Legislature on March 11th, the area of crown lands sold during the year was 53,960 acres, value, \$71,765.63. The amount collected was \$66,888.54. The total collection on account of all sources of revenue was \$1,204,639.32, while the total disbursements of the department on account of all services and expenditures, were \$236,336.69. The total collection for woods and forests during the year was \$1,078,598.12, which includes \$66,058.20 on account of bonuses, leaving the net collection on account of timber dues, ground rent, etc., to be \$1,012,539.32.

THE Governor of Tennessee, if we are to judge from his recent message to the legislature of that state, is blessed with a considerable amount of "horse sense." Coming down to the question of timber stealing he says: "The law making power has been vainly besought in the past to provide protection for timber by making its unauthorized taking a criminal offence. Why should the taking of another's timber be held to be only a trespass, when the taking of his horse is felony? I am persuaded that many persons have been deterred from investing money in our lands because of the insecurity of property in timber, and the immunity vouchsafed depredation by the absence of a penal statute. The time has come when we must look more attentively to the preservation of our timber, and restrain wanton and the immunity wanton and the immunity wanton and the immunity wanton are steamly approximate.

THE Grand Trunk Railway, says an exchange, seems totally unable to do the business required in many parts of the country. The road is lamentably deficient in rolling stock, both locomotives and cars. One single firm, that of Messrs. Mickle, Dyment & Son, of Barrie and Gravenhurst, will cut this year 25,000,000 feet less logs than they would otherwise have cut, because they cannot obtain cars to take it to market, and they seriously contemplate shutting down some of their mills the coming season for a similar reason. They wanted

last season 40 cars a day, but were only furnished with four or five. They have now cars standing in their yard loaded, and the stock covered with snow and ice, but cannot get engines to take their lumber to its destination. Short work would be made with an individual failing to perform a written or implied contract, but a railway corporation is permitted to do its duty or fulfill its obligations or not, just as it pleases. We hold it to be the duty of the government to compel this gigantic corporation to do what its charter implies, or withdraw its powers and privileges from it. If the Grand Trunk cannot put enough rolling stock on its roads to do the business of the country, it had better go into liquidation, and let other companies that can take its place.

THE House Committee on Ways and Means at Washington, has had the lumber question on hand, and so far has reached no decision as to the various plans proposed to counteract the effect of the Canadian export duty on logs. The sub-committee, however, has provided for a slight reduction in the tariff on square timber, but practically makes no reduction upon other timber, and no change in the duty on sawed timber The Senate Committee reduced the duty on pine Imber from \$2 per thousand feet to \$1.50, and left the ducy on cheaper grades, such as hemlock, spruce, etc., at \$1 per thousand feet, the same as the law now fixes it, and has been since 1872. There was some disposition manifested by the committee to reduce the duty on white pine lumber, but it was shown to the satisfaction of the committee that the price of the labor that enters into the manufacture of lumber in many of the states bordering on the Dominion exceeded the price of the same labor in Canada by \$1 per thousand. As the duty on white pine lumber is only about 16 per cent, when reduced to an aa valorem standard, and the duty on spruce and hemlock is only 11.70 per cent., the committee decided not to change the rates. The report of the sub-committee will be reported to the full committee before it goes to the House, and it may be that other changes will be made, anyhow, it will be some time yet before any definite action will be taken.

THE annual banquet of the lumber section of the Toronto Board of Trade, to those members of the board eligible for membership in the lumber section, was held at McConkey's restaurant on the evening of March 7th. The entertainment was an excellent affair. Mr. A. K. McIntosh presided and the vice-chair was occupied by Mr. G. Gall. Among the guests were Messrs. John I. Davidson, president of the Board of Trade, J. Donogh, J. J. Withrow, J. B. Miller, W. Forbes, G. Moir, J. D. Hay, Richard Dinnis, T. Willmott, J. Tennant, Capt Hall, A. Dinnis, A. G. Hagerman, Joseph Oliver, A. A. Scott, W. Leak, A. R. Riches, Hames Tennant, T. Meaney, Edgar A. Wills, secretarytreasurer. The music was supplied by Mr. J. Monk. Songs were sung by Mr. William Simpson and Mr. A. Dinnis. Mr. T. Meaney contributed a recitation. After the toasts of "The Queen" and the "Dominion Parliament" and "Local Legislature." Mr. John I. Davidson responded to the "Board of Trade of the City of Toronto." Mr. A. K. McIntosh to the toast of the "Lumber Section," Mr. J. Donogh to the "Carload Trade," Mr. J. D. Hay to the "Interior Mill," Mr. A, R. Riches to the "Hardwood Trade," Mr. J. B. Miller to the "Lake Mill," Mr. W. Leak to the "Local Mill," Mr. J. Firstbrook to the "Box Manufacturers." Mr. J. J. Withrow to the "Planing Mill," Mr. Richard Dinnis to the "Contractors," Capt. Hall to the "Builders' Interests," and Messrs. Willmott and Meaney spoke on behalf of "The Ladies."

GROSSLY exaggerated statements have from time to time been telegraphed all over the country from Minnesota regarding the alleged timber stealing along the Minnesota and Canadian border. It is asserted by Canadians who are engaged in the lumber business, and who ought to know something in regard to the matter, that there was no truth in the sensational despatches; that the logs brought into Canada to be manufactured in Canadian mills were bought from Americans who claimed to be the owners of the logs. Stealing is not a very creditable business to follow, and if it has been going on as is alleged the Americans ought to put a stop to it. When these "tall lies" were first circulated, few believed that it had been going on for years. The most recent account, however, would seem to indicate that there might possibly be a "spec" of truth in the wild tales which have been floating over the country. A recent report from White Earth, Minn., says. "United States Marshal Campbell, who went from Red Lake with a posse of Indian police to investigate a reported timber steal in the vicinity of Rainy Lake, with instructions to arrest any persons found trespassing on Indian or Government land, has returned. They report that tumber thieving has been carried on for many years until now the banks of the streams emptying into Rainy Lake have been denuded of all marketable pine and hardwood timber. Most of these lumbermen are Canadians who come to cut timber on American soil under the pretext that they have the right to do so because their wives are Indian women, belong to the Red Lake Reservation."

THE official reports on sawdust in the Ottawa river, called for by Senator Clemon, have been laid before the Senate. Mr. Henry Grey, civil engineer, who acted for the Government, reports that he commenced work in August last at Kettle Island, when he found in the channel on the north side of the island the sawdust had so silted up that only small boats could now pass with safety where twenty-five years ago there were twenty-five feet of water. He found three feet of sawdust in the eastern channel, whilst large quantities of mill refuse were stranded at the government boom and shore, forming a source of great danger owing to their liability to become ignited in summer. He found that an extensive bank of sawdust, measuring thirty feet in depth, had formed at the water's edge on the east shore of the Lievre river, and that the Lievre river itself is thickly dotted with small shoals formed by the depositing of mill refuse mixed with sand that had been carried down by freshets from far up the river, the refuse being the accumulation of deposits from an annual cut of 30,000,oo feet of lumber. Between Kettle Island and the Chaudiere Falls he found that sawdust had been largely deposited at the bay giving entrance to the Rideau locks. These deposits were the cause of great labor and delay to vessels passing inwards or outwards at low water. From Nepean Point to the Gatineau Point the bottom contains frequent depr sits, the bays are almost completely filled up, whilst the channel is being gradually interfered with by mill refuse. Mr Sanford Fleming reports to the committee of lumber manufacturers that he and his son made an examination of the rive at different points, and says the refuse consists of sawdust, edgings, buttings and slabs Large deposits of sawdust were found in side channels, sheltered bays, eddies and inlets, but the main channel of the river remains unobstructed for the purpose of navigation. Soundings were taken during the past season on lines of cross sections which were made by the government engineers the year previous, also on a continuous line along the entire length of the channel from Ottawa to Grenville, a distance of sixty miles. These soundings reveal a

depth of water for the greater part which is indeed remarkable. Mr. Fleming reports that only at five points on the whole sixty miles is the depth at low water under ten feet, but admits that navigation is affected at the entrance to the Rideau canal. Here there is a deposit for a distance of about 200 yards outwards from the entrance to the lower lock. The deposit here is probably for the most part sawdust, and it is due to the fact that the entrance to the canal is in a deep and sheltered bay where the sawdust collects and where there is no current sufficient to carry it away. Mr. Fleming concludes his report by saying that with regardto the future, there is no probability of the navigation between the city of Ottawa and Grenville being irretrievably destroyed, or seriously obstructed, from the cause assigned, for centuries to come. Here there is a conflict of opinion between the two engineers, and those who are interested have a splendid opportunity of drawing their own conclusions.

THE people of Victoria, B. C., have done a wise thing by rejecting, by a large majority, the by-law to give a bonus of \$25,000 to aid in the establishment of a saw mill. This bonus business is not only unfair, but it is dangerous and erroneous in principle. A number of large mills have been established at different points along the coast by private enterprise, and to bonus so largely such an industry is simply giving one establishment an unequal advantage over others. It is simply assisting with public money to set up competition to those who have already invested in lumbering enterprises. For the future welfare of the province it is to be hoped that a quietus has been put on the bonusing business.

THE ventilation of the Cypress Hill timber limits matter in the House of Commons, and Mr. J. C. Rykert's connection therewith, has occasioned a great deal of excitement in Ottawa, and, for that matter, throughout the country as well. Mr. Rykert's integrity being assailed there was only one of two things for him to do, either to deny the charges made altogether, or to defend himself. He chose the latter course. J. C. Rykert is an M. P., who by certain methods was intrumental in securing a cool \$200,000 out of Louis Sands, a millionaire lumberman. Rykert secured a large grant of land in the Cypress Hill district, Assiniboia. It was offered to Sands through a Winnipeg man for \$200,000, on the representation that it would cut 100,000,000 feet of pine. Sands sent a Manitoba surveyor to look over the tract and he reported that the facts were as stated by Rykert's representative. After purchasing and paying for the tract \$100,000 in cash and \$100,000 in notes that were at once negotiated, Sands found that the Canadian Pacific road claimed one-half the grant. Rykert used all his influence to have the Canadian Pacific railroad claims removed, but was unsuccessful, and Sands had to pay \$4,680 to release the railroad claim.

A MEETING of the creditors of McCraney & Wilson, lumber dealers, Toronto, was held March 10th, at the office of Townsend & Stephens, when inspectors were appointed as follows: R Y Fish, Waterloo; Mr Dymond, Barrie; Willmott, Toronto, and DeCew, Centre A statement was presented showing the direct liabilities to be \$40,989, with assets at \$39,000 total available assets are \$128,932, of which sum \$9645 consists of stock-in-trade, \$1638 bills receivable, \$14,-576 open accounts, \$243 cash, \$2540 real estate, \$1248 Manitoba farm, and balance miscellaneous Among the principal creditors are: McArthur Bros. & Co., \$1030; Collins Inlet Lumber Co, \$511; Dominion Bank, \$237; Willmott & McIntosh, \$1220; Mickle, Dyment & Son, Barrie, \$9021; R. Y. Fish, Waterloo, \$3278; J. D. Shier, Bracebridge, \$846; Lakefield Lumber Company, Lakefield, \$1930; Vanstone Bros., Southampton, \$1222; Jerry Siebert, Chippewa Hill, \$679; J. E. Cooper, Saurin, \$656, W J. Douglas & Co., Burling ton, \$1012. Paul Wiedman, Wiedman, \$477; James Sharpe, Burk's Falls, \$320; N McEachren, Burks Falls, \$459; T. H. DeCew, Essex Centre, \$1093; John H. Lesh, Goshen, Ind., \$547, W T Craig, Kinmount, \$500, Hugh Wilson, Cannington, \$940, George E. Neithergall, Clavering, \$38; Bennet & Witte, Cincin

nati, O., \$628; Chew Bros., Midland, \$739; R. B. Cotter Lumber Company, Louisville, Kentucky, \$527; W. Pearson, Singhampton, \$725; Peter Shaw, Novar, \$2201; J. O. Revell, Coboconk, \$700; A Sydney Smith, Port Sydney, \$360; W. McClymont & Co., Ottawa, \$329; Shepherd & Morse Lumber Co., Ottawa, \$275; W. Young, Wiarton, \$529; W. H. Leonard, Hope Bay, \$472; H. Cargill & Son, Cargill, \$450; Est. T. H. Carr, Owen Sound, \$601.

A DEPUTATION of the Toronto Board of Trade, composed of Messrs. McIntosh, Donogh and Tennant, addressed the grain section on March 14th regarding the scarcity of cars on the Grand Trunk Railway, and the delay in moving cars when they were loaded. lumbermen have been unsuccessfully complaining for a long time, and recently the grain men have suffered seriously for want of cars. The lumbermen thought that the combined efforts of the two sections would bring the railways to time. A number of examples were given of the delays Mr McIntosh wanted 40 cars and had none since Feb. 2. Mr. Donogh stated that 17 loaded cars stood at Bradford four days with-Much amusement was caused by Mr. Tennant's complaint that he could not get cars to bring coffin lumber to the city, there had been a very great demand during the past three months, he wanted twenty cars for one customer and could only get five. It was also explained on the authority of Mr. Wragge that the general manager had instructed him to take all the cars that came along for the ice business. Mr H. N. Baird claimed that the Canadian Pacific was as bad as the Grand Trunk. Mr John Earls looked quite innocent, and said he did not know there was such a scarcity of cars in the lumber trade. He said that there was an active demand for cars, and admitted that there was a scarcity of engine power. Mr. McIntosh mentioned a case where five cars went four miles on their journey in three weeks. Mr. M. McLaughlin mentioned incidentally that he had a car loaded at Brandon on the 6th and it arrived over the C. P. R. on the 13th, taking only seven days. No action was taken by the gentlemen.

THE discussion which followed a motion to go into committee of supply in the Ontario Legislature, brought out some valuable information regarding the timber resources of the province. From 1885 to 1889 inclusive there were derived from this source \$13,184,196, showing to what a large extent the revenues of the province are dependent upon its timber. It appears that up to Confederation there had been but eleven thousand square miles put under license, and this at the rate of 50 cents per square mile, out of which the government had realized only \$5,500. After Confederation there was a sale by the Sandfield Macdonald Government of 655 square miles in 1871, then of 459 square miles by Mr. Scott during the Blake administration, and then during the eighteen years of the present administration there nad been placed under license 3,270 square miles of territory. The proceeds to the Government from these sales amounted to \$2,499,860. Hon. A. S. Hardy, Commissioner of Crown Lands, gives the sales year by year as follows 1877, 375 square miles for \$75,739, averaging \$201 per square mile; 1881, 1,379 square miles, for \$733,675, or an average of \$532 per square mile; 1885, 1,057 square miles, for \$326,810, or an average of \$309 per square mile; and in 1887, 459 square miles, for \$1,312,312, or an average of \$2,859 per square mile. The total for the 17 years of Mr. Mowat's administration was 3,270 square miles for \$2,448,536, or an average of \$658 per square mile. The timber area in the present possession of the government is given as follows: West of the Ottawa river and northwest of the limits sold in 1872, between 80 and 85 west and extending north to 48th parallel of latitude, there are estimated to be 24,000 square miles; between the Ottawa agency and berths sold in 1881, there were 540 square miles. Averaging timber on this area at 1,000,000 feet to the mile we have 24,540,000,000 feet. Col. Dennis, late Deputy Minister of the Interior, estimated the timber in the disputed territory at \$26,000,000,000 feet. Here alone was a total of 50,540,000,000 square feet of timber untouched. There is under license in Ontario

now 19,000 square miles, and from the best estimates and information procurable on the subject there are in this area 10,000,000,000 square feet. The two totals represented, sav, in round numbers, 300,000,000 of standard logs of 200 feet each. The output for the year 1888 inclusive of square and board timber was, say, 4,000,000 standard logs of 200 feet each. The value of the 50,540,000,000 feet of timber which it was estimated, as above stated, was still in the possession of the Crown, at the regular bonus of \$1.50 per 1,000 feet was \$75,810,000; add the duty of \$1 per 1,000 feet, and there was another \$50,540,000, or a total of bonus and duty of \$126,350,000. An additional ten millions for the values of dues on timber on lands now licensed at the rate of \$1 per thousand feet would bring the total of the present value of the undeveloped timber resources of the province up to \$136,350,000.

MR. BRONSON'S bill before the Ontario Legislative Assembly, which has passed its first reading, repeals Section 40 of The Timber Slide Companies Act, and substitutes the following therefor:—

The tolls to be collected upon different kinds of timbe, shall bear to each other the following proportions, viz.

tions, viz.	•		
Red and white pine, tamarac, spruce and hemlock, square or		\$	cts.
waney board p	er piece	0	1
Oak, elm and other hardwood,	•		
square, or flatted or waney board	**	0	1 1/2
Spars	"	0	3
Masts	41	0	3
Sawlogs, 17 ft and 1 nder	44	0	ં જ
Redand white pine, tamarac, spruce			•
and hemlock, round or flatted,			
over 17 ft. and under 25 ft. long.	11	o	3
Red and white pine, tamarac, spruce			/3
and hemlock, round or flatted,			
25 feet to 35 feet long	"	0	5/12
Red and white pine, tamarac, spruce		_	J, - =
and hendock, round or flatted,			
	**	^	2.
Sawed lumber, board measure pe	r 1000 ft.	ŏ	,/3
Staves		Š	.3
Firewood, shingle bolts and other		U	1.2
	er cord	_	-
Railway ties other than cedar, in 8	i coru	J	-
or 16 ft langths	r I'h of 8 fi		
or 16 ft. lengths per Cedar, round or flatted, 8 ft. long	111 01 0 11	. 0	1.13
Cedar, round of nation, o it. long	•	_	
or under p	er piece	0	1/10
Cedar, round or flatted, over 8 ft.	14		
and under 17 ft. long		0	3/8
Cedar, round or flatted, over 17 ft			
and under 25 ft. long	••	0	1.75
Cedar, round or flatted, over 25 ft.			
and under 35 ft.	••	0	13
Cedar, round or flatted, 35 ft. and			
upwards	"		14

THE returns showing the settlement effected with the lessees of hydraulic lots at the Chaudiere, and copies of the new-leases entered into with the owners, have been laid on the table of the Senate. The names of the first lessees and also the names of the present lessees are given. On January 1st the amount due under said leases was \$64,685.60. Disputes having arisen from time to time between the government and the lessees, a provisional settlement has been arrived at whereby the present proprietors or the original lessees agreed to pay Her Majesty the whole arrears of rent due to January 1st, 1890, and transferring to Her Majesty all existing rights, executing a general release to Her Majesty of all claims in respect to the premises, and that their leases should issue to the parties entitled thereto. The new lease provides that lessees shall pay rent and taxes. The term is fixed at 21 years, the annual rent at \$100 for each hydraulic lot. The quantity of water furnished to the lessees is to be equivalent to 15c-horse power in each hydraulic lot, or sufficient to drive existing machinery. Should larger mills be erected they may take nore water power under conditions to be fixed. In case of adjoining lots the accumulated power may be used on one lot, all machinery to be of the best. Should the government boom be closed Her Majesty may lease that power. Nothing to interfere with good and sufficient supply of water to the citizens of Ottawa, all surplus water is reserved to the Queen, all dams, booms, eic, constructed by the lessees at their own expense, each lessee is to bear his portion of the expense. The chief engineer of public works is to have free access

day or night to all mills, etc. Each lessee shall maintain his own flume. The minister may make improvements at the cost of the lessees. In case of any default the title is to revert to the crown, and no lessee can have any claim for loss against the Queen.

THE Conger Lumber Company, of Parry Sound, paid their employees 5 per cent. on their season's earnings, out of the mill profits for the season of 1888, which is a snug little bonanza for the men just at this time of the year, when the camps are all closed and the mill will not run for a month yet. If other lumber concerns would adopt the same system, there would not be grounds for strikes or changing of hands-there would be more harmony between employers and employees. Long may they have a surplus to divide among the "horny-handed sons of toil."

MR. H. W. Powis, Mr. Mason, of London, Eng., and Mr. Graddon, late book keeper to Mr. Charles G Davies, the alleged defaulter, have had an interview with Mr. Davies at Suspension Bridge. The books of the defaulter have been recovered and made up. As a result of the investigation, and of the information furnished by Mr. Davies, it has been ascertained that the direct loss will be much less than previously stated That of Messrs. Bryant, Powis & Bryant is expected to be not more than \$25,000 to \$30,000. The amount of the indirect losses depend largely upon what realization can be made of the assets and debts of Davies. Quebec firm is said to owe \$90,000 to the estate agency of Mr. Davies, while another house for which Mr Davies acted has also a very heavy claim against the same firm. Mr. Davies took very little money away from Canada, his losses being chiefly through speculation. At a meeting of creditors of Chas. G. Davies Mr. John T. Welch was appointed curator and Messrs Powis and Mason inspectors.

MR. OSTROM has introduced a bill into the Untario Legislature to amend the Act respecting the driving of saw logs and other timber on lakes, rivers, creeks and streams. It provides that the arbitrators shall in all cases use the following scale as a basis for calculating and fixing the proportion in which parties to any arbitration proceedings shall bear the burden and expense of driving all material within the meaning of the act.

00.1213		
Pine saw log, 17 feet and under	1	stand
Codar over & feet and under 17 feet		66

1	Cedar, over 8 feet and under 17 feet	
21/2	Cedars, 8 feet and under	44
21/4	R. R. Ties, flatted	"
11/2	R. R. Ties, round	• 6
1	Hemlock, Ash, etc., log, 17 feet and under. 1 1/2	46
I	Piece, round, flatted or square timber,	
	over 17 feet and under 25 feet long11/2	46
1	Piece, round, flatted or square timber.	

over 25 feet and under 35 feet long .. 2 Piece, round, flatted or square timber, 35 feet long and over.....3

MR. BLAIR in introducing his stumpage resolution in the Local House, at Fredericton, N. B., referred to the efforts of the North Shore lumbermen during the past several years to secure a reduction of the stumpage. The government has been obliged to decline to comply with the request of the lumbermen for many years because the finances of the country would not admit of a reduction. Now, however, the territorial revenue was so large that a reduction of 25 cents per thousand could be made without interfering with the services of the country. A lengthy debate followed the introduction of the government resolution affirming the advisability of a reduction of the stumpage to 25c. per thousand superficial feet was finally carried by ten

We are advised from Quebec that Messrs. J. S. Murphy & Co., lumber merchants of that city, have made an assignment of their estate for the benefit of their creditors. The statement filed in court by the insolvent firm, shows their liabilities to be \$187,000, while their assets appear to be about \$151,000. The

majority.

assignment was made at the instance of Simson. Mason & Co., of London, Eng. J. S. Murphy, individually, has also failed for \$75,000, and W. H. Wilson, who was partner for J. S. Murphy & Co., has also assigned his own estate valued at some \$275,000. These failures which aggregate \$510,000, are said to be the outcome of the Davies defalcation. J. S. Murphy's large lumbering operations in the west will be continued and the manufactured timber will be brought down this spring, the contracts previously made by Mr Murphy with Mr. Wade and others being carried out. The operations at Riviere a Pierre and St. Anne mills will be continued and the logs brought down and sawn in the interest of the estate.

THE Toronto lumbermen are justly indignant at the lack of transportation facilities provided by the railways, especially the Grand Trunk. Another meeting was held in the Board of Trade rooms on Monday, March, 24th, Mr. A. K. McIntosh in the chair. There was a full attendance, and some of the members present expressed their views freely on the subject, the railroads coming in for a good deal of criticism. The main difficulty appears to exist in the lack of locomotive power rather than a scarcity of cars. Things are even worse at the present time, say the lumbermen, than when they complained last year. One member spoke of a shipment of lumber leaving Waubaushene on the 13th and only arriving in Toronto on the 24th; a second member had received only five cars when he wanted two hundred: a third instanced the fact of two trains lying on the Esplanade for two days because there was no locomotives to draw them. The lumber section will issue a circular to lumbermen in Ontario asking for full information, and base a report upon that, which report will be presented to the railroad authorities. Another cause of complaint is the absence from Toronto of a Grand Trunk superintendent of cars. Under the present system all enquiries have to be addressed to Allandale, Hamilton, or other outside points, and the annoyance and delay resulting is great. Robert Thompson, A. K. McIntosh and John Donogh were appointed a committee to enquire into matters and the council of the board will be asked to co-operate with the section in endeavoring to secure a local superintendent of cars.

THE Republican members of the House Ways and Means Committee have practically agreed upon every point of division upon the tariff schedule upon which they have been engaged for several months. It is based upon the Allison Bill, which passed the Senate a year ago. In the lumber schedule the duty on sawed boards, planks and finished lumber is reduced so per cent. from present rates. The following is the text of the provisions upon which the Ways and Means sub-Committee has agreed as to retaliation in the matter of the export duty levied by the Dominion Government upon logs. After the lumber schedule the following is proposed: Provided that, in case any foreign country shall impose an export duty upon pine, spruce, hemlock or other logs, or upon stave bolts, shingles, wood or heading blocks exported to the United States from such country in excess of the duty fixed in this act upon the sawed lumber manufactured of the logs heretofore mentioned, then the duty upon the sawed lumber herein provided for when imported from such country shall remain the same as fixed by the law prior to the passage of this act. The bill as a whole is of particular interest to Canadians. It will now be presented to the House, where no doubt it will elict considerable discussion, and it may be that some alterations will be made. The House is expected to pass the bill by the first of June, and it will be some months before it reaches the President for signature.

### SPLINTERS.

THE Ways and Means Committee at Washington has reconsidered the proposed lumber duties, and fixed the duty on sawn lumber at \$1.50 per 1000 feet. This is a cut of 50c, per thousand, the existing duty being \$2.

WE are in receipt of a circular letter from G. F. recently given his mill a complete overhauling, and has i in blasting for the foundations.

perfected his arrangements for the manufacture of dimension shingles, and can now turn out 75,000 a day of any width from four to twelve inches wide. It is now a well demonstrated fact that shingles made from British Columbia Fir have never been equalled in quality, much less excelled.

LUMBERMEN are anxious to know what is the matter with the weigh scales at Alliston. They are said to weigh about 1,000 lbs. too heavy. Perhaps the G.T. R. will rise and explain.

THERE has been an extra demand for lath this season and as a result they are difficult to obtain. Several buyers have been scouring the country of late for this commodity but have not been very successful.

• . IN our last issue we stated that Messrs. Smith, Wade & Co., of Quebec, had contracted for the coming season's cut of E. L. Sewell's four mills, which will run up to about 250,000 feet. It should have read 200,000 Quebec standards.

WE are in receipt of a very handsome hanger card, sent us by Messrs. Roblin & Sadler, the well-known leather belving manufacturers of Montreal and Toronto. In gold letters on the front of the card is the firm's name and address, while on the reverse side is given their price list.

MR. CHARLION, M. P., has moved for a list of timber limits granted by the Dominion government since March, 1885, the names of the parties to whom granted, the area of each limit granted, whether granted to the highest bidder in public competition, and the amount of bonus, if any, in each case.

A MLETING of the Southern Yellow Pine Association was held in Montgomery, Ala., last month. No business of importance was transacted. The question of an advance in the prices was brought up, but the meeting deemed it inexpedient to advance the price list at the present time. The convention will convene again in Montgomery in June next.

THE millmen on the St. Lawrence are pleased to see that the firm of Goodday, Benson & Co., who have recently established themselves in Quebec, propose developing the hardwood business, and at the same time they expect to do a large business with Ontario, especially where ash, birch and maple can be manufactured and shipped by rail to Montreal, Three Rivers and Quebec.

MR. N. E. CORMIER, lumberman, of Aylmer, Que., has made an abandonment of his estate to the court under the Quebec Insolvent Act. Some weeks ago a meeting of his creditors was held, and an extension of tine given, but the assignment has been forced by the Ontario government seizing for timber dues. The proceedings of the meeting are thus void, and the estate will go into liquidation.

It is said that Lake Superior lumber shipments this year will be greater than in the previous year. The log cut in Wisconsin has been enormous, and a large number of new vessels will soon be afloat. Lumber will be carried from Ashland to Buffalo, and Tonawanda and other important lumber centres, at a rate lower than for several years. Charters have already been secured at 22 1/2 per 1000, and shippers say that rates will be lower when navigation opens.

### CASUALTIES.

Mr. John Mattice, of Novar, while working in a lumber camp at Emsdale, had one of his legs broken.

D. Riddel, while working at a circular saw in Muirhead & Mann's mill, Victoria, B. C., had two of his tingers and part of a thumb cut off.

Two men named Turcotte and Bush, employed with others in building a dam on a small creek in the Scott timber limits, about twelve nules from Apsley, Onc., were severely injured Slater, of the Vancouver Shingle Mill, B. C. He has by the premature explosion of a blast. They were engaged

## THE NEWS.

### ONTARIO.

- -J. S. Clemens, lumber dealer, Preston, has assigned.
- -A McWilliams, saw mill owner, Dutton, has assigned.
- -Isaac Cockburn, lumber dealer, Hamilton, has assigned.
- -Lumbermen expect to do a big rafting business at Belleville this year.
- -S. B. Crossfield's mill, at Sturgeon Bay, cut 120,000 shingles in a week.
- -Walker's shingle mill at Coulson, is turning out a large amount of shingles.
- -Messrs. Burton Bros., of Barrie, will start lumbering on the Spanish River next fall.
- -The lumber camps up north are breaking up and the men are dispersing to their homes.
- -C. M. Chadburn, owner of a saw mill at Kincardine, has assigned to J. McK. Stewart.
- -The lumbermen of the Chaudiere are all growling over the scarcity of cars for shipping purposes.
- -Lumber camps in North Hastings are breaking up on account of so much water in the swamps.
- -Large shipments of pulp wood, square timber, shingles and ties, are being shipped from Emsdale.
- -The Sundriége station yard is covered with pulp wood and timber and more is arriving every day.
- -James Jarrett's large planing mill at Alliston, was burned March 9th. Loss heavy. Insurance \$1,000.
- -A very large amount of square timber is being taken out of the large swamp between Uthoff and Foxmead.
- -Wm. Spence, lumberman, Parry Sound, has failed and assigned to G. Copeland for the benent of creditors.
- -The Georgian Bay Lumber Co.'s mills, offices, etc., are to be illuminated by four hundred incandescent lights.
- -W. P. Christie & Co.'s mill at Severn Bridge has had to shut down for lack of snow to get their stock from the woods.
- —Lumbering operations at Rosse are drawing to a close, hauling being nearly finished and several camps have already broken up.
- —During the winter Mr. J. D. Shier has shipped from his mill yard, Bracebridge, a very large quantity of lumber, lath and shingles.
- —A. D. Vanbuskirk and George Vent have cut 265 cords of cedar bolts for Mr. Playfair, Sturgeon Bay, since the latter end of January.
- --Captain Carter, manager of the Rathbun mills at Deseronto, had a narrow escape from being killed at the Fenelon Mills the other day.
- -Messrs. Perley & Pattee, lumber merchants of the Chaudiere, intend using rope transmission in their saw mills during the coming summer.
- The saw and shingle nulls belonging to Olds Bros. Greenbush, were totally destroyed by fire recently. Loss \$2000; no insurance.
- —The firm of Greensides & Hurlburt, of Mitchell, have dissolved partnership. The lattergentleman will continue the lumber and saw mill business.
- -Mr. R. Simpson, of Collingwood, will take charge of the new mill which he completed lately for the Imperial Lumber Company, in Nipissing district.
- -John Irvin & Sons, of Pontypool and Brampton, are building a shingle mill at Dundalk. A saw mill is also contemplated to run in connection.
- The creditors have decided to windup the estate of Messrs. McCraney & Wilson, lumber merchants, of Toronto, having refused to compromise at 30c. on the dellar.
- -Thos. Mackey, the well-known lumberman, Pembroke, was one of the injured in the railway accident near that place. His head was forced through the roof of the car.
- -Messrs, McLachlan Bros.' mills at Arnprior, are being thoroughly overhauled and being refitted with every modern improvement, previous to starting the season's cut.
- -Returning shantymen from the Upper Ottawa lumber regions say that the drive will be a brisk one, and that there will be plenty of water in the creeks to facilitate operations.
- The forests surrounding Burk's Falls are full of fine maple, birch and beech, but there is such a demand for pulp wood that special attention is being paid to cutting the latter.
- -Mackey & Co., Ottawa, have taken out some unusually large specimens of timber in Fitzroy township this winter, which is something unusual for a locality so near the great lumbering centre.

- -Mr. James Johnston, of Clarence, has taken out a very large cut of timber during the shantying season, and will soon start his drive of lumber from the Upper Ottawa and tributaries to the Quebec market.
- —David and Reeve Milne, of Grey county, have purchased 200 acres of land in Garrick township, 100 of which is heavily timbered with pine, cedar, hemlock and hardwood. They intend building a saw mill this spring.
- —Perley & Pattee's new logging engine has not yet got down to work in their limits at Big Lake and Mackey's station. When an attempt was made to start it the driving wheels broke, and a delay is now caused by waiting for new ones.
- —T. H. DeCew, of E-sex Centre, has purchased the timber on a block of land belonging to W. J. Johnston, in Colchester North, and situated near his mills. The land is covered with a heavy growth of timber that has never been touched and which is very valuable
- —Shield's camp has finished drawing logs from the shanty to the mills at Sturgeon Bay. At the beginning of the winter they had doubts of getting the logs all drawn this season, but they have got along as well if not much better than if there had been deep snow.
- —The lumberoutput of Graham, Horne & Co., Port Arthur, during the past year approached very closely upon 5,000,000 feet. The firm has a large force of men in the woods around Vermillion Bay getting out logs for next season's operations up there, and they expect to do a still better business this year.
- -Mr. G. McWilliams has purchased the factory of Mr. Wm. Forsyth, Peterborough, and will conduct the planing mills and carry on the manufacture of pumps, fanning mills, wind engines, washing machines, etc. Mr. Forsyth's reason for retiring from the business is his intention to remove to Manitoba.
- -Mr. John Wilson, of Mr. J. R. Booth's firm, has just returned from a tour of inspection through Mr. Booth's limits. Mr. Wilson states that the work so far accomplished in the bush is equal to anticipations. The weather previous to January was somewhat unfavorable for work, but since that time everything has been going along well.
- —Messrs. Murphy, Gates & Co., of Hepworth, are calling for tenders for the erection of a saw mill on the Bay Shore at Owen Sound, which, when finished, will be one of the best in that section of the province. The capacity will be about 30,000 a day. The mills of the company at Hepworth have recently been remodeled, new engines and boilers added, and the capacity doubled.
- —A young man, aged 20 years, lest his home in Otterville last fall to work in a lumber camp near Sault Ste. Marie. A couple of weeks ago, while in the woods at night, he was shot in the back by an unknown enemy. The shooting was done at an hour when everyone in the camp was asleep. It is supposed he was shot by a Chippewa Indian. His body was taken to his sormer home for burial.
- -Mr. J. D. Shier, of Bracebridge, has his stock of logs pretty well out. The whole stock in the northern district will, he thinks, be got out. Mr. Shier is strongly averse to any concessions to Yankee lumbermen which will enable them to strip our forests for the benefit of their own mills while preserving what forest they have left till Canadians shall be out of the market from lack of material.
- —The Lake of the Woods lumber companies are getting out an enormous quantity of logs this winter, and the mills will have to be kept running night and day during the summer in order to cut them. Mr. Chalmer, manager of one of the companies, says this will be the busiest season on record at Rat Portage and Keewatin in the lumbering business. The mills will be fitted up with electric lights for night work. The reduction of timber dues is the cause of a larger amount of timber than usual being taken out.
- —The estate of Totten, Henderson & Co., lumber, etc., Little Current, is being wound up. The firm offered 75c. on the dollar. The settlement did not go through, however, and the stock, valued at \$6,333, has been sold to Bowlby & Campbell at 50c. on the dollar. The liabilities are \$22,000. The creditors are now suing John Totten to make him a partner, and as the defendant is worth about \$10,000 the creditors stand a show of getting something unless they lose the suit. In the event of failure to prove that John Totten was a partner, the creditors will receive about 10c. on the dollar.
- —Mr. J. R. Booth, of Ottawa, has just received a consignment of Canadian white oak from Bradley, Morris & Reid, (limited) of Hamilton in which there were some pieces 18x26 inches, free from wane. Canadian lumbermen doubted that such pieces could be procured in Canada at the present day, but the firm in question supplied this on short notice to Mr. Booth. It is superior to Ohio and Michigan oak, and is to be

used by Mr. Booth in the remodeling of his mill at the Chaudiere. The firm intend opening a branch office in Ottawa for the convenience of contractors who require pine or hardwood timber.

—Messrs. F. E. Dixon & Co., leather belt manufacturers, of Toronto, are doing a thriving business in their line. They have lately completed a large driving belt for the Toronto Electric Light Co., thirty-tix inches wide, double thickness, and 126 feet long. This is he third large belt of the same size which the firm have made for the same company, lesides too feet of twenty-five inch double, and innumerable smaller belts, all of which are giving first-rate satisfaction. They have recently sent away a twenty-inch double belt, 67 feet long for the new electric light works at Picton, Ont., and two large driving belts for the electric light works at Winnipeg, Man. The belts made by this company seem to give general satisfaction.

-A tale of suffering, and a very narrow escape from death, is reported from the vicinity of the Pettewawa river recently. It appears that a man named Cleophas Potvin, a woodsman, started early one day to walk a distance of eighteen miles on snowshoes, carrying an axe with him, to another shanty. Potvin was subject to falling fits, and after travelling about half the distance along the " bush" road, was seized with one of these, falling helplessly prostrate on the snow. How long he laid there he does not know, but when he revived one of his hands and both feet were terribly frozen. The frame of a deserted shanty he perceived was close at hand and into this unfortunate man crawled as best he could. With the hand that had escaped the frost he gathered a few chips lying on the floor and lit them with a match. He laid beside the scanty fire and fell into a deep slumber, and that night and next day the man laid almost next door to death. On the morning of the second day he fortunately attracted the attention of a passing teamster by his shanty and he was rescued. Potvin lives in West Hull and has been brought down for proper treatment. He is a married man with a family and the severe frost bites he suffered may incapacitate him from working in the future.

### QUEBEC.

- —A wholesale timber firm of St. Peter street, Quebec, is reported to be in lifficulties a demand of assignment having been made by Eng. h creditors.
- —Baird Bros., Douglastown, have had quite a number of men in the woods this winter cutting timber to be sawed at their new steam shingle mill built last summer.
- -R. N. Bishop, of Ottawa, and R. S. Dowd, of Quyon, have been operating in the pine woods around North Onslow during the winter. The timber taken out is clean and sound, but small average.
- —Lurabering has been brisk this winter in the Lake Megan tic district. The Nantais Mill Comany got outten million feet. Hall's company will have about ten million feet, and the Berlin Mills company about five million of pulp wood.
- —Geo. A. Freser's shanty camp on the Magnassipi river, has broken up for the season. They were jobbing for Hurdman's concern, and took out a big cut. The drive will soon start in earnest, as men are already being booked for the work.
- —Messrs. Tourville & Co., who are owners of several saw mills in the province, with main office in Montreal, report as follows: "Our sales were fairly good last year. We manufactured about forty million feet, and our exports amounted to over thirty million feet. On account of European freight rates being so high, much of the contracted lumber had to be held over this winter. Our sales this winter are good, and we have ocean steamers chartered for the early spring shipments. We are putting out this winter for our Pierreville mill two hundred thousand logs, about as much for our two Louisville mills, sixty thousand for our Nicolet mill, and fifty thousand for the Wickham mill. This is greatly in excess of the output last year, and consists of pine, spruce, hemlock, tamarack, fir, etc."

### NOVA SCOTIA.

- —In Nova Scotia the winter's cut has been very satisfactory.

  J. P. Mitchell & Co., cutting on the waters of Lake Alma and its tributaries, will put in about 7,000,000 feet; E. Davidson & Sons will cut about 4,000,000 feet for their mills on the Nictaux; J. B. Leslie, John G. Morrison and the Round Hill Wooden Ware Co., will each put in about 1,000,000 feet.
- —Our wharves, says the Bridgewater Enterprise, have a very bare appearance at present, and the piles of lumber usually seen on them at this time of year are now only conspicuous by their absence. If the present arbitrary measures for the stopping of our lumbering industry here are continued by the Dominion Government those in want of lumber will be obliged to order it from Ottawa, where they have exemption.

### NEW BRUNSWICK.

- --Four Madawaska brothers lumber on an extensive scale but never use horses. They are called champion strong men of the province and draw the sled loads themselves.
- Logging is about over on the Madawaske, all the teams are out of the woods, the snow having driven them out early. The cut will be no greater than last year, and would have been far less, but for the favorable weather in the forepart of the winter.
- —It is estimated that the lumber cut on the St. John, the Aroostook and their tributaries this year will be 150,000,000, which together with the lumber hung up last year will give 200,000,000. Of this latter quantity 125,000,000 is American cut, the remaining 75,000,000 provincial. This latter figure also includes the Quebec cut which comes down the St. John.
- —In the northern part of the province the lumbermen are leaving the woods because the snow is seven feet deep and work is unprofitable. In the south and in Nova Scotia they are forced out of the woods because there is no snow. The lumber cut all around is less than was estimated, though in the north the season was excellent while it lasted. Fredericton is in fear of a freshet if the snow up the river melts rapidly, as it seems likely todo.
- —On account of the prevalence of la grippe this winter in the camps on the Miramichi, the cut has not been as large as expected; some 70,000,000 feet will be cut instead of 80,000,000 teet, as was anticipated. Mr. T. Lynch in the South East will cut about 10,000,000; W. Richards, from 8,000,000 to 10,000,000; Mr. Walsh, 5,000,000; R. & A. Richie, 5,000,000 to 6,000,000; J. Robinson and H. Turnbull, each about 2,000,000. In the North West, Birchwell & Son will cut about 3,000,000. About 2,500,000 of last year's cut was hung up.
- —The secretary of the Fredericton Boom Company has furnished a statement showing the quantity of pine, spruce, and cedar logs from the State of Maine delivered at that boom for a series of years, commencing with 1884-5. The average value of these logs is estimated at \$10.50 per thousand feet, but estimating it to be \$10 per thousand feet, the importation of logs from Maine in quantity and value has been as follows:

	Quantity.	Value.
1884-5 1885-6 1886-7 1887-8 1888-9	. 99,000,000 '' .101,500,000 '' . 99,000 000 ''	\$ 900,000 997,000 1,015,000 490,000 750,000
2000 41111111111111111111111111111111111	467,500,000 "	\$4,578,000

The estimated amount for 1889-90 is 125,000,000 feet, valued at \$1,250,000.

-Mr. Henry Hilyard, of the firm of Hilyard Bros., St. John, recently returned from the headwaters of the St. John tiver. He says that all the choppers have abandoned the operations and gone home because of the great depth of snow in the woods. He reports the snow seven feet deep on the level. This has lessened the time of chopping by about a month, and will very materially reduce the season's cut. Mr. Hilyard thinks the reduction will be about one-sixth of the total cut. The cut was estimated at 140,000,000, but he does not think that it will exceed 120,000,000 or 125,000,000. No scarcity of logs is anticipated during the coming summer, because 40,000,000 or more of last year's logs are in the streams, and the great depth of snow justifies the belief that there will be a sufficiently heavy freshet to bring everything to the booms.

### BRITISH COLUMBIA.

- -The saw mills at New Westminster are overrun with orders at present.
- -The by-law to give \$25,000 to aid a proposed saw mill at Esquimalt, near Victoria, B. C., has been defeated.
- -The erection of the North Pacific Lumber Company's new mill beyond Port Moody is progressing favorably.
- -The Brunette Sawmills Company are building two fine tugs at their shippard at the delta of the Brunette river, Sapperton.
- —British Columbia has sprung up from 125,000 tons of shipping engaged in the coasting trade in 1876, to 2,196,000 tons in 1800.
- —Johnston, Walker & Flett, of the Queen City Planing Mills, Victoria, B. C., have ordered an engine, 100 horse power, also a new set of saw mill machinery.
- —A scow load of lumber, in tow from Port Discovery mill to Anacertes, was lost near Deception Pass in a gale. The scow contained about 60,000 feet, worth \$1000.
- -Messrs. McIntyre & Howout, two Michigan lumbermen, have purchased the Cowichan sawmill from Mr. Sutton, and will increase its capacity to 150,000 feet per day.
- -Muirhead & n., in, sash and door factory, Victoria, employ sixty-six men; monthly pay roll of \$2,800. Last year the amount of work done amounted to \$150,000.

- —Work on DeBeck Bros.' new saw mill at Sapperton is progressing rapidly. They expect to have it completed by July, and will then be able to cut 150,000 feet of lumber per day.
- Losee & Morrison have completed arrangements for the purchase of the machinery of a mill having a capacity of 40,000 feet daily which they will erect at Shawnigan Lake, Vancouver Island.
- -Losee & Morrison are erecting a saw mill at Shawnigan Lake with a enpacity to cut 40,000 feet of lumber a day. They will also manufacture all kinds of dressed lumber, and will establish yards in Victoria.
- -Lasee & Morrison are erecting a saw mill at Shawnigan Lake with a capacity to cut 40,000 feet of lumber a day. They will also manufacture all kinds of dressed lumber, and will establish yards in Victoria.
- —Thos. Gamble & Co., of Fort Simpson, have ordered from Strickland & Co., the machinery firm, a complete new saw mill. They are also putting in a new Archimedean turbine water wheel to run their present wheel.
- —The Hastings saw mill, Vancouver, has closed down to be remodeled. Nearly all the present machinery will be taken out and replaced by new machinery. The capacity will be increased to about 150,000 feet per day.
- —The North Pacific Lumber Company have forwarded an order to M. Beatty & Sons, of Welland, for one of their latest improved pile drivers, to be used in the construction of of the new mill at Burrard Inlet. It will be 35-horse power, and is expected to arrive in two or three weeks.
- -Knight & Co., of the Popcum Mills, Chilliwack, are putting in a new Wheelock automatic cut-off engine, 75-horse power, and intend going extensively into the manufacture of "Excelsior," a preparation of wood for upholstering purposes. The engine will be worked as an auxiliary to their present water power.
- —F. G. Strickland & Co, of New Westminster, have received an order from Messrs. Johnston, Walker & Flett, of the Queen City Planing Mill, at Rock Bay, Victoria, for an engine, 100-horse power, also for a new set of saw mill machinery. The engine will be from the works of Wm. Hamilton, Peterborough.
- —W. P. Sayward, Rock Bay saw mill, Victoria, employs at logging camps and mill sixty men, with a monthly pay roll of \$3,000. The output for last year amounted to about 3,500,000 feet. Mr. Sayward has decided to increase the capacity of his mill to 100,000 feet of lumber per day, and is now putting in the requisite machinery.
- -G. O. Buchanan runs the only sawmill on the inland sea known as Kootenay Lake; several other parties talk of putting in mills in the spring however. Mr. Buchanan is putting in a new carriage, a top saw and a gang edger, and he has a large stock of logs on the beach. The climate is very fine, with abundance of snow for logging and a temperature at the same time so mild that the mill can be run all winter.
- —The McLaren-Ross Company, of New Westminster, have let the contract to the Wm. Hamilton Manufacturing Company of Peterborough, Ont., for the largest hand saw ever manufactured in Canada. The machine stands over all about 82 feet high, and will weigh about 20 tons. The band wheels on which the saw will run are each ten feet in diameter, with a face of fourteen inches. When this mill is in running order the company will be able to saw a plank in the clear between saw blades 110 feet long, 12 inches thick, and 72 inches wide, or, by turning the log down they will be able to make a stick of timber 72 inches square by 110 feet long. This means that this mill will be able to cope with as large a log as can be got to the mill. This mill was designed by Mr. I. N. Kendall, the superintendent for the McLaren-Ross Mills, and the plans and specifications were made by Mr. F. W. McCrady.
- -G. F. Slater, of the Vancouver Shingle Mills, Vancouver, has recently given his mill a thorough overhailing. The mill can now turn out 75,000 dimension per day, of any width from four to twelve inches. A circular recently issued by the proprietor says: " It is now a well demonstrated fact that there is no timb... on this continent as good as British Columbia cedar for the manufacture of shingles. There are wellauthenticated cases of these shingle: lasting thirty years in the wet climate of this coast, forming a perfect protection to the roof at the end of that time. It is believed they will easily last a generation in an ordinarily dry climate. Perhaps their strongest point is that they are perfectly adapted to extreme heat and cold. They always lie flat on the roof, and will not curl or twist as other shingles. This being one of the essential Points in a shingle, it should at once commend them to all who want a perfect shing &

### AMERICAN.

- -T. W. Wheeler & Company's shippard and dry-dock at Bay City, Mich., has been sold for \$3,500,000 to an English syndicate. The present company receives \$1,750,000 for a half interest, and takes \$1,750,000 in stock. The Wheeler party puts in \$100,000 for betterment, and extension of plant.
- —Tannic acid is being made by several chemical concerns in the South direct from the wood by distillation. The wood is shipped to the chemical works in eight foot lengths, or in the shape of what is commonly known as cordwood. There are also machines for grinding the bark, and thus every portion of the tree is utilized.
- A firm of Kansas city, Omaha and Chicago, has purchased 100,000 acres of pine and cypress lands on the Sabine river. The land lies in Texas and Louisiana, and is on both sides of the river. It is nearly 100 miles in length by 5 to 10 in breadth. On the lower end of the site is the town of Logansport, La., where the firm will operate a large saw mill. A town site will be laid, and it is expected a city of several thousand inhabitants will spring up in a short time.

### MISCELLANEOUS NOTES.

John Bruce, of Stephenson, Ont., had his leg badly crushed by a saw log.

Robert Frost, of South Orillia, Ont., had his hand hadly lacerated while working at a circular saw in his mill.

- -Descronto is the only town in Canada lighted by gas made from sawdust.
- -The Lumber Cutting Company, of Trenton, have started heir mill.
- L. M. Palmer's stave mill, at Dawn, was burned March 21st. Loss, \$13,000; insure:.
- -A young man named J. McFarlane, residing in Lohaber, Que., while working in a shanty near Sturgeon Falls, had his leg broken, and lost one of his horses by an accident.
- -Mr. D. Miller's shingle mill at Washago, and a small quantity of shingles, were burned March 25th. The origin of the fire is unknown. Loss about \$1,200; insured for \$300.
- —The shipbuilding industry in Nova Scotia is very active. The aggregate number and tonnage of the vessels in process of building amounts to thirty-two vessels and nearly 25,000 tons.
- -Mr. Thos. Appleyard, owner of a saw mill at Keldon, Ont., while removing a slab from a log in his mill, by some means was thrown against the saw in such a way that both his legs were cut off. He survived his injuries a couple of hours.

Samuel Stevenson, a married man, living near Templeton, Ont., whilst cutting trees on the Ottawa river near the Hillman's Mills property, was crushed by a falling tree. He had three of his ribs broken.

- —Messrs. A. Robb & Sons, Amherst, are turning out a large amount of work. Their Monarch Economic Boiler is largely in demand, as is also their Hercules and Robb rotary. Messrs. Robb find that even with the facilities they now have they have difficulty in supplying the Monarch Economic fast enough. They are now working on Monarch Economics for Ottawa, Summerside, etc., besides all their machine and other work.
- —It is an established fact that the Brompton Mills Company has in the district of Saint Francis been cutting lumber for the second time and with as good or better results on territory from which it had taken all the available timber from twenty to thirty years ago. The thinning out of the large timber has given the small an opportunity to increase in size, and the manager of this company is confident of a liberal supply of the best lumber from this source for many years to come.
- Two wood-choppers named Hugh and Sandy Jamieson, working in the woods in Michigan, recently received word they are heirs to more than \$100,000 worth of property in Manitoba. Their fortune results from the death of an uncle. at one time a resident of Amhertsburg, Ont. When living at Amhertsburg Jamieson was a Presbyterian minister. He became interested in an English syndicate through his brother, who lives in London, and went to the North-west to secure lands along the C. P. R. The syndicate purchased immense tracts before the boom commenced, and the ex-preacher secured many thousand acres of choicest soil. He was successful, and in a few years amassed considerable money. These two nephews, both hard-working Scotchmen, were favourites of his. They look so nearly alike that it is difficult to tell them apart. The news came to them by a letter, which stated their share of the fortune was worth over \$50,000 each. They will quit hewing ues at \$4 per 100.

### SAWS ADAPTED TO THIN WORK.

It is the opinion of many, that a saw of a given number of teeth is suitable for all kinds of timber. This is no more the case than it would be to assume that different kinds of timber were alike. A saw that is adapted to soft wood will not run in hard wood successfully and a saw that runs well in hard wood is not adapted to soft wood. The opinion of many is that saws for hard and soft wood are to be hammered differently; this is not the case. All saws should be hammered in one way only (with the exception of spud,) and that is the right way. The difference does not come in this or that style of tooth, or in a certain style of filing, but the difference depends on the number of teeth in the saw, an item of importance although thought but little of by many.

It is a common idea that the more teeth the more lumber is obtained, that is the more teeth the better, and when they fail the saw maker gets the blame. The saw is considered a bad one because it will not run The sawyer got his idea of teeth from another man who was running twice as many teeth as he, and cutting as much again of lumber, so without any consideration of various circumstances he concludes that he can double his capacity by using more teeth This shows how much some millmen know about saw milling The extra teeth cut nothing but their pocket

But there are some men who do not run a sufficient number of teeth. They could cut more lumber if they had more teeth There is a limit in all things, and it seems to me that saw-makers ought to adopt a standard of teeth to the amount of feed in all kinds of hard wood and soft wood.

Instead, they allow a man to select his number of teeth. If he hits it all right, if not the saw maker suffers the blame. Why? Because the saw won't run. The sawyer can't tell what is wrong with the saw. The fact is, there is nothing wrong, the saw is in good condition, but is finally sent back to the saw maker condemned, and yet the saw maker did not see it. I know of just such a case, and the mill man thought he had such a worthless saw that he never again ordered from that firm. This man was running a saw of 36 teeth, on 21/2" feed, in white oak, beech, elm, hickory and ash, which constitutes the body of hardwood. His saw was running fairly well. He had a 20-horse power engine, and it was really about the saw he wanted, so far as teeth were concerned. But his neighbor had a 50-horse running on 4" feed with 54 teeth successfully. So the first man was led to believe his capacity could be in--creased, and he ordered a saw like his neighbor's with 54 teeth. The result was it would not cut a straight line unless in the best of oak. As all hard wood sawyers know, there is a vast difference in the toughness of oak in sawing it.

The trouble with this saw was that the teeth cut the dust so fine that the throats would not hold it, the result was it passed between the rim of the saw and log and heated the rim. If he had had the power he could have increased his feed to a chip and the saw would have run all right.

There is a limit to the amount of feed that can be maintained in hardwood as in any other, and this limit is determined by the skill of the sawyer and condition of the saw and mill But practically seventy teeth are all that any saw wants in hardwood, where timber is rafted and some of it is allowed to sen dry for twelve or eighteen months before it is floated to the mill. Some use eighty teeth in hardwood, but this is not often the case, and when eighty are employed the timber is green.

My experience has been that there is no difference between the number of teeth to the inch of feed in hardwood and in soft. I believe that there can't be as much feed maintained in hardwood as in soft. So in like manner the teeth should diminish in number. A saw will stand twice the feed in soft wood and so half the number of teeth is proper.

I have always used in all kinds of timber twelve teeth to every inch of feed. If I am cutting mixed logs, bard and soft, and can arrange it so, I saw them creased time in the soft wood by the increased feed. Any saw that will run in hardwood will run in soft. But this is not the consideration, as the same mill would cut twice the amount by having the saw that is

adapted to the work.

The great trouble is in getting too many teeth in hard wood, which is an increase of power, which of course reduces the feed and causes the trouble I have referred to. In soft wood, that is what I term as such as yellow pine, cypress, poplar, gum and cottonwood, the dust from sawing is of a spongy compact nature, and the fine dust made has not that firm rolling nature that hardwood dust has. For hardwood a tooth should be a trifle shorter and a little stiffer than in soft

### HAMMERING VS. FILING SAWS.

187 E C Grants

There are things known to a saw, expert who has to handle a variety of saws, repair a variety of mills, saw arbors, etc., that are not so easily known by a sawmaker or a sawyer strictly so called.

Here is a case to illustrate. I sold a 50-inch saw to a party who informed me that his saw would not go well at all; that it was crowning on the log side. I went at once to his mill and found his story correct, but the cause of this was not the fault of the saw. The fast collar had been cracked, and a band of wrought iron shrunk on it, in doing this the cracked collar had offset the track. When the nut was screwed up it bulged the saw. I told him this. He give me a 'clincher" then. "My old saw does not crown any, why should this?" I put the old saw on the arbor, but it was an old saw-very old-so old, that it was 5-guage thick, whereas the new one was 7 and 8-guage. The thickness of the old saw resisted the pressure, but wabbled it some; but being small it would go fairly straight but not well. I took out the check pins and attempted to true up the collar with a hand tool. Then I found another trouble. There was not one particle of babbitt lining in the cap of the box; the arbor would jumb up to the cap as soon as the tool touched it. By relining the box with babbit metal I was enabled to true the collar. My new saw then hung straight and went as well as the power would make it. Neither the proprietor or sawyer thought that there was anything particularly wrong, but thought it was wrong for me to charge forty cents per hour and expenses. Who was to blame here—the saw-maker or the sawyer?

You ought to know that a new saw, perfectly true (practically speaking) should remain so on the arbor, and that it is the fault of the arbor, not the saw this is an extreme case, a clear case. I will give you several. All but one was the fault of the mill and not of the saw. Another case was much more obscure and not so plain as to the fault.

In this case the mill was high speed and about 60 H. P. water wheel. The saw ran about 900 revolutions per minute, this required the saw to be open considerable. The saw in question had been sent three times to the saw company, who claimed they had done all they could to the saw, then sent a man to the mill, and finally compromised the matter by discounting their bill, nearly the whole of it The saw was sent to me. I opened it some, but before returning it I tried it on a fast mill near my place of business. It did good work but would not go well then on the home arbor, some better, they said, but was crowning on the log side. I have made it a rule that it was better to have every saw go well and trust to the honor of the mill men, who are as a rule as honest as anyone. So I went to the mill at once-some sixty miles away. I found the speed nearly 1,000 revolutions out the cut; but in it lagged to 400 or 500. This was bad; but the saw did not hang right. It was crowning on the log side at rest, but under speed it was up true and ran steady and pretty. "That is the way she always goes," they said, "but in the cut as soon as we crowd it a mite, it will dodge. What is the trouble?"

I did not attempt to look wise or silly, but said, "I do not know;" but went straight to work to carry out my warrant to either make it go well, or go home separately, having two saws so as to make the in- | minus my bill and time and expenses. I trued the |

collars with a short, accurate straight-edge. that is all right; the smell saw stands true." "That may be, for it is smaller, consequently it is hammered more rigid, and when at rest the collars do not control it." 1 said, "Oh!" The proprietor was looking for honest information, fer he was a merchant and was not posted. Neither was the sawyer very well posted. The collars were originally turned concave, both alike, saucer shape, but the solid collar, being the softer of the two, had dulled or worn back at the edge more than the loose collar; so it was convex for the space of a 12-inch from the outer edge. This of course bulged the saw, and when the speed went down the collars controlled the saw as to the straightness of it. This caused it to crowd the log, heat, and then everything was wrong.

I trued the collar with a hand tool, and lined the saw so as to touch the carriage head block in twenty feet. When started up it ran well; they crowded on all the feed, 31/2 inch, in as large spruce and hemlock as the saw would cut (a 52-inch saw); crowded it until the speed would lag to 200 revolutions, but the saw stood to its post like the Roman sentinel for five hours. Then, when stopped, the proprietor put his hands on the saw, "Why, it is cold as a stone ! What does this all mean?" he said to me. "It means that vou have been bamboozled because you are not posted." He paid all my bills and expenses, and looked thoughtfully wise.

### Saw Quartered Oak.

The owners of portable saw mills working at a distance from transportation, so that they can market only the upper grades of lumber, should try their hand at sawing quartered oak. The demand is always active, and the prices paid for quartered oak are fully 30 per cent, more than for plain sawed oak. Most of the owners of portable saw mills with whom we have talked are afraid to undertake to saw quartered oak. They claim that they have never cut this class of lumber and are afraid they can not do it. Quarter-sawed oak is almost as easily sawed as plain oak, and requires but little more skill. There are various designs and drawings showing just how a log should be sawed to produce the greatest amount of quartered lumber, which are safe guides to beginners. Any practical sawyer can cut quartered oak to advantage, in fact, in sawing oak in the ordinary way, the product will be at least 25 per cent, quarter sawed. All the portable mills in this section saw oak more or less, and to increase the price of their product is certainly worth an effort. Any sawyer who wants to cut quartered oak and is afraid to undertake it, should visit some mill making a specialty of this work, catch the idea, and then go home and make as good quartered-sawed lumber as anybody.

### COPPERINE.

It is simply astonishing the effect that Spooner's Copperine has. Mr. Gidley, of the Little Bob Mills, opened a box of this anti-friction metal on Tuesday, and the thermometer has been fooling around zero ever since. With stove wood at \$3 a cord, if Mr. Spooner should happen into this village just now, he would get hustled out so quick that he would require to be boxed in his own metal for a time to get cooled off. Mr. Gidley says, though, that this metal is wonderful stuff for journal bearings, no matter what the weight or speed may be there is no disturbing the equanimity. Belts may break, fly wheels burst, and lubricators burn out, but this metal remains as cool as a clam, or a professional widow on her fifth wedding. The sales of copperine are said to be increasing rapidly. There are still a number of old McGintys around some of the machine shops and factories who think they can make Babbit, but what kind of fly plaster is it? Why, if you look at it with a warm glance it blushes like a girl in her teens. It may be a few cents cheaper, but it costs as many dollars the very first time it heats... Spooner's Copperine appears to be the material. We have this week sent out a stack of subscription accounts and if they don't come back next week, Mr. Spooner will receive an order, if he will chalk it up of course, for several boxes of his finest Copperine, for this journal will be at a white heat.

### WHICH PART OF THE TREE IS STRONGEST?

" It is by no means rare," says the proprietor of a large physical laboratory for builders and for prospect ive owners of buildings, 'to have joists, plates, sills and other important pieces tested, in order that the size and kind for prospective uses may be determined." Why not? Is it not of much greater importance that the strength of materials entering into the construction of factory, store or dwelling be as accurately determined and well known as those out of which cars, bridges and cross ties are built? Proprietors of extensive car works, railroad and construction companies have the strength of materials known before a blow is struck, by which means enough and no more is used to sustain the strains to which the materials are to be subjected; but an architect and builder who makes a specialty of such knowledge is extremely difficult to find in this, and we presume, any other city, on the American continent.

This leads to the question, strength considered, of the relative ments of certain portions of a tree. It might be supposed, masmuch as every layer from the central pith to the bark is in a different stage of prefection, the innermost, or earliest formed, being the most matured, would naturally be the strongest; but practical tests. made on the most modern and accurate testing machmes, demonstrate that this is only true up to a certain period of growth. The greatest strength and toughness hes near the most recently formed heartwood, or that part the nearest to the sapwood. For this reason alone, to say nothing of many other peculiarities that will be enumerated at another time, it becomes a matter of the greatest importance in the selection of timber or lumber for special purposes requiring great strength and tough ness, to have as little sapwood as possible, and as little pitch.

With practical tests already made this leads to the conclusion, timber or lumber for these special purposes, where the above properties are required, should be cut as near the sapwood as the timber will allow, for it should be remembered that the tree does not cease growing when it comes to maturity. As long as the tree is alive it continues to increase in bulk by the addition of the annual layer, but when maturity is once passed, each succeeding year produces a certain degree of deterioration. This decay appears in various stages, and generally exhibits in the first instance, either a white or yellowish color at the butt or root end of the stem. If white, the decay is very slight, and does not appear more than a few feet up at most, but if a yellowish red in color, it is not unfrequently of a most serious character. Again, if the affected parts have assumed a decidedly red tinge, the tree is said to be foxy, and scarcely fit for any purpose, as the decay will be found to permeate a greater portion of the entire tree.

A more advanced stage of deterioration is that which may be described as a drying up or wasting away of the wood layers surrounding the pith. This forms a hollow first at the butt, and then spreads upwards, gradually increasing in size as the tree gets older, while this defect may eventually reach into the very branches.

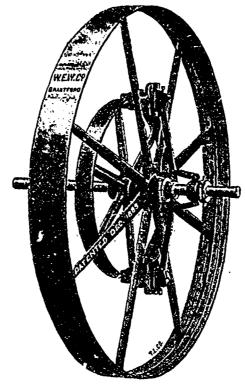
Trees are most valuable as yielding the largest amount of good timber just prior to their reaching maturity, which is indicated by the topmost branches and branchlets becoming stunted and presenting a scraggy appearance. If, therefore, we wish to select a prime healthy tree for felling, we must select one having an abundance of young shoots, and the topmost branches of which look vigorous, strong, pointed and healthy, this being the most certain evidence that the tree has not exhausted all the vegetable food within reach of its roots; in other words that the tree has not passed its maturity.

Whenever there is the unmistakeable evidences of permanent decay in a tree, the most economical thing to do is to cut it down, convert such parts as will answer the purpose into lumber, and use the balance for such purposes as do not require strength, durability, or staying properties. The size of any tree, cannot be taken as a criterion of the tree's maturity by any means, there being unlimited growth if the roots can find food to sustain and extend the formation fabric.

-Mr. A. W. Belding told the Penet Yerald that the Katrine mill will cut 10,000,000 feet this sea on.

### STEEL RIM FRICTION ORIP PULLEY

The Waterous Engine Worl- Company, of Brantford, Ont, have just patented a Steel Rim Friction claimed to be the most strong and effective made, and can be readily applied to old pulleys whose hub is large enough to bush. The cut represents 78x7 pulley built for elevator work, several having been finished for 4 the Martin Elevator Company, of Manitoba. The friction rim is made fast to shaft and always revolves with it, and is simply a strong, narrow-face pulley. When idle the driving pulley and all the grip mechanism stands. To bring it into work the sliding sleeve is



forced with lever towards pulley and readily passes beyond the diametral centre of grip arms, thus closing the friction grips on friction rim and locking them there, and at the same time relieving sleeve of all strain. The friction grips are of hard maple, set end grain to the work in iron cases, and are readily replaced when worn. The end of grip arm is of cast steel and engages a small block of cast steel let into the under side of top grip arm, which is adjustable, being from the inner end, and can be adjusted with the set screw on top to put any strain desired on friction to take up wear. To apply this friction clutch to old pulleys it is required to know size and shape of arms; number, diameter and face of pulley; size of shaft, diameter and length of hub, and what pulley drives. Parties interested in the above can obtain all necessary information by addressing the Waterous Engine Works Co., Ltd., Brantford, Canada. 

### MAKING CLOTHESPINS.

"It takes ten men to make a pin, if not more," is a quotation from an ancient reader, descriptive of pin making. It takes exactly that number to make a clothespin, which are retailed at from three to five cents per dozen. It is only with the rapidity with which they are made that a profit is secured; and something of the speed may be judged when it is stated that a maple tree can be worked into clothespins in one hour at the new factory in Carthage, N. Y.

The logs come into the saw mill and are quartered, then sawed into blocks 27 inches long by a swinging saw; another saw cuts the blocks into boards 14-inches thick; then a gang of smaller circular saws cut the boards into 11-inch squares. The entire group of sticks as they come from the saws are taken and laid smoothly lengthwise on a large revolving drum which is divided into spaces about 20 inches each, by carrying slats. This drum feeds the sticks to another gang saw which cuts them into pin lengths (each one making five) whence they drop into an elevator and are carried into a hopper which delivers them on to a table in front of the turning machines. These machines have a

head something like an iron nail cutter, with a motion very similar, and an iron tongue which darts out and catches the stick as a toad catches a fly. They stand in Grip Pulley, especially light and strong, which is I line with a wooden trough back of them through which runs an endless belt. These machines quickly do the turning and drop the pin on the endless belt, which in turn conveys them to another elevator which lands them on the slotting table. The slotting machines, two in number, have something the appearance of two old-style coffee mills set back to back. The pins being dropped into these machines are carried against a saw which makes the slot, and at the same time a knife, I located on the saw arbor, cuts out the pin sufficiently to receive the line. It then drops into another elevator and is carried into a large drying vat, which is supplied by hot air blown through a large pipe from the boiler

> After being dried the pins are again elevated to the tumbling-box, from which they come slick and smooth, and are then ready for boxing and shipping. The saws ) and turning machines are all handily grouped, and as they run rapidly it requires quick motioned folks to attend them. The machines for manufacturing clothespins are capable of turning out 250 pins per minute.

### Ottawa Valley Output.

The output of square timber of the Ottawa Valley lumber tirms for 1889-90 is estimated at eight million two hundred and eighty-five thousand cubic feet, being in excess of the cut of any previous season, due to a great extent to the brisk demand and high prices of last year. This calculated at the average current rate of 26 cents per cubic foot, represents a value of \$2,154,-1 100. Counting 50 cubic feet to a tree this amount represents in trees cut down, 165,700.

The cut per individual firm is as follows:

1. 1. 1. 1. 1. 1.	
R. H. Klock & Co. A. Fraser Hurdman & Co	1,150,000
A. Fraser	600,000
Hurdman & Co	
Hale & Booth Hawkesbury Lumber Co.	500,000
Hawkesbury Lumber Co	450,000
	400,000
Gillies Bros	400,000
Thistle, Carswell Caldwell	400,000
Caldwell	300,000
A. Lumsden	250,000
B. Booth	250,000
B. Booth McCualg & Moorehead	250,000
	250,000
Barnett & Mackie	250,000
A Barnet	215,000
McLachlin Bros	200,000
Rochester, Doherty & Co.	200,000
W Markay	175,000
Rochester, Doherty & Co. W. Markay J. & G. Bryson	250,000
	150,000
Emery Lumber Co	150,000
E. S. Kead.	130.000
E. S. Kead Rayside & MacMister	125,000
R. Gorman	120,000
Perley & Pattee	120,000
R. Gorman Perley & Pattee Booth & Murtagh	100,000
	100,000
J. R. Bouth	80,000
O'Brien & Barry	\$0,000
J. K. Ward	80,000
las, Agert	(0,000
O Brien & Barry  J. K. Ward  as: Agert  Jas Bellisle	50,000
•	75,050
Total Cubic Feet	8,255,000

Building in the South.

The building fever has struck this country with the tenacity of la grippe, and seems to be contagious. Old cities that have been dead or dreaming for the last two decades have the fever and are bailding at a marvelous rate. Old houses that have stood duty for generations as honored landmarks, and which it seemed sacrilege to remove, are levelled to the ground, and costly structures taking their place. Entire blocks of business houses are built, new streets opened, and the suburbs, by the introduction of the electric, cable, and dummy cars, are dotted with handsome residences. Capital that has long been tied up in stocks and bonds finds a safe investment in houses. New towns are springing up daily, and are born with coats off. Building operations are not confined to any section, but are general throughout the entire land. The architects are crowded, and reports from every city are to the effect that "building will be more extensive this than last year," and the buildings are more substantial and costly. The agricultural districts are in better financial condition, and will build more extensively than ever before. More hardwood finish will be used, and quartered oak, ash, gum, sycamore, and yellow pine will be largely wanted. The South will lead in building, and will build more houses than in any past two years. The Building and Loan Associations enable the working man to build houses to an extent never before known. The demand for lumber will be great, and the dealer who does not make money this year will have no one to blame. The country is prosperous, and it is hardly possible for any calamity to retard building operations this year.

HOME AND FOREIGN TRADE REVIEW.

Office of Canada Lumberman, March 31st, 1890.

Trade in Toronto may be described dull. No orders for bills of any size have made their appearance, and business is confined to sorting up orders from the yards and purchases for immediate requirements by the factories and builders. The same may be said of the trade in Western Ontario. Yet while trade is comparatively dull, it is impossible to forward with any degree of rapidity at all, the few orders that call for shipment. There is not a wholesale firm or a manufacturer that has not on his books orders a month old unfilled. The car shortage of last fall was serious enough while it lasted, because every one was busy and anxious to clean up orders before the close of navigation. But the present difficulty is intensified by the fact that business is dull, and still the stuff cannot be moved.

The ice business seems to be the primary cause of the trouble. The Grand Trunk Company are handling icefrom Barrie, Orillia, Gravenhurst, Midland, Jackson's Point and other places, and are letting the lumber, grain and stone shippers stand still and wait for a more convenient season. Thisice businessisgoing to continue all summer so that no relief may be expected from the stoppage of shipments. The root of the difficulty lies in the penurious policy of the Grand Trunk Company. They have not engine power sufficient to move more than half of the daily shipments, and consequently at every siding in Toronto and out of it may be seen: empty and loaded cars detained for days and sometimes weeks, while the ice trains go through in quick time. Some radical measure must be adopted to obtain a remedy for this evil. If lumber, grain and stone shippers could be united for action something could be done at once, but the grain men are frightened at the first move on the part of the railway company, and it is left to the lumbermen to bear the brunt of the fight for decent treatment. The lumbermen are considering the matter now and will take it up in dead carnest without delay.

The indications are that the buildings to be erected

in Toronto this year will be chiefly of the more expensive class, iron, stone and brick structures. House building has received a check, partly through the advance in rates of interest, especially on progress loans, and partly because suburban building has been overdone, and rents are declining below a remunerative figure.

In the west, where the trade is very largely dependent upon the farming community, there has been so little business done through the winter that stocks are comparatively unbroken, and the yards will be able to supply the early spring demand without difficulty.

Prices remain unchanged, and there seems to be no immediate prospect of an advance.

In the Ottawa valley the mills are busily engaged in getting ready for the season's operations, and the outlook in the timber trade may be considered fair. The prospects are considered to be far better than they were in the early part of the winter.

FOREIGN.

Since our last report the timber trade at London has been anything but brisk, the deliveries from the docks being almost confined to the requirements of London and the suburbs. As regards Canadian and New Brunswick freights, chartering continues very slack. Some spruce vessels from Miramichi have been fixed on the basis of 57s. 6d. and Richibucto at 62s. 6d. for usual range of ports on the other side.

The hardwood market continues quiet with the exception of American walnut, in which there is a brisk movement just now. High prices, says a London paper, can be obtained for prime wood for which there is a brisk demand. In cedar there is a steady movement, and prices though firmer are still weak.

Trade at Liverpool has been decidedly dull for some time past, in consequence of which competition has been very keen. Timber says the stock of satin walnut logs is exhausted, and some fresh, well figured parcels would yield excellent results, as it is still being largely used by wholesale cabinet and chair makers for the cheaper description of bedroom furniture. Some thousands of hands have quit work at the great steamship lines, and considerable cxi nent has existed at the north end docks, but so no interference with the

timber pr ters or the lumpers, at the few ships discharged has been manifested.

Messrs. Farnworth & Jardine in their recent wood circular report: Business, as is usual at this season of the year, has been quiet; the deliveries have been fair, but prices generally are lower, and the stock of most articles still too heavy.

CANADIAN WOOD, QUEBEC .- Yellow Pine Timber, both square and waney, have moved off slowly. Waney pine maintains its value, but square pine, of which the stock is excessive, is dull of sale, and prices easier. Red Pine: There has been little inquiry; the stock is ample. Oak, in the log has not been imported; there has been a fair consumption, but the present stock, which consists chiefly of United States wood, is still large; values are unchanged. Oak Planks have been imported in excess of last year, but the demand continues good, and stocks are now more moderate; prices are steady. Elm: There has been fair inquiry, but the stock is still much 'oo heavy. Ash is dull of sale; the stock is ample. Pine Deals. There has been more inquiry, and the deliveries have been satisfactory; the stock, however, is much in excess of the same month last year.

NEW BRUNSWICK AND NOVA SCOTIA SPRUCE DEALS.—The import has been less than last year, viz: 455 standards, against 1,097 standards; the deliveries have been fairly satisfactory, but it is difficult to maintain present prices; the stock is much in excess of last year, viz: 15,889 standards, against 6,025 standards, and it is very desirable that shipments for the early part of the season should be reduced to a very moderate scale. Pine Deals have not been enquired for.

for.

The arrivals at Glasgow have been unimportant. Rates of freight on parcels per steam liners from the States are still so high as to restrict imports, but easier rates are anticipated, when larger shipments may be expected. The latest scheme in the timber trade is a proposal, emanating from London, to amalgate the timber concerns of the east coast of Scotland, with a view of abolishing competition.

When writing THE LUMBERMAN hereafter be sure and address Toronto, and not Peterboro' as formerly.

# TORONTO HARDWOOD LUMBER CO.

Wholesale Dealers in and Shippers of all kinds of



83 Front Street old Mest, Cor. Lorne Street,

\* TORONTO, ONT. \*

Correspondence solicited from parties having Hardwood Lumber for sale, giving description of Stock and Prices F. O. B. Cars at Mill.

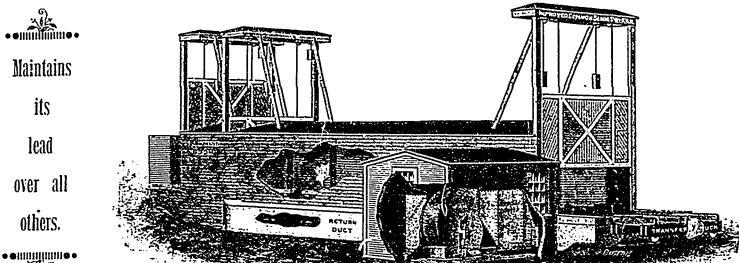
## TRADE REVIEW.

TRADE REVIEW.	Vancouver and New Westminster, B.C. New Westminster, Mar. 24th. 1890.	
Toronto, Ont.	Car load and ship rates according to assortment. Bridge and	
TORONTO, March 31st, 1890.	What Plank and Timber. 10 to 40 ft, long, per M, net 41 '0 70 ft.  Rough lumber building material  Sized  Fit. Clear  Cedar, Bench or Selects  (17 50 17 50	) ( l
CAR OR CARGO 1.0TS.  14 and thicker clear picks, American inspection \$20 00@30 00	Rough lumber building material 17 00 1 Sized 12 0 1 Fir. Clear 17 50	Ke
1% and thicker, three uppers, American inspection	Cedar, Bench or Selects 25 00 30 00	\$6
	T. & G. Edge, Grain and Dry 27 50	,
Mand thicker clear picks. American inspection   \$20 00 (\$30 00 it and thicker, three uppers. American inspection   37 00 it and thicker, pickings. American inspection   37 00 it is in a size at	No. 1, Dry	O
i inch clear and picks	2, Green	: it :% 2%
Inch siding mill fun	D. Dressed	473
r nch siding mill culls	T. & G, Edge r, Dry 25 00	i ii ik Th
22 00 25 00 2 inch strips, common	No. 1, Dry 33 00 7 1, Green 22 30 1	Th Qu
1½ Inch flooring	" 2. Green 17 50 S. S. Planks for scows 17 50	:    
Inch sliding mill run	D. D. cedar, verandah cover, any length 45 00 cut to length 60 00 Shingles	K
YARD QUOTATIONS.	T. & G. Edge, Grain and Dry 27 50 No. 1, Dry 27 50 1. Green 22 50	Çŀ
Mill cull hoards & scantling \$10 co. Dressing stocks 16 co. 20 co. Shipping cull boards, promiscuous widths	Five per cent. off above prices for cash with the order Delivery on scow to menth of river.	Ch Ba Ba
stocks 14 00 Scantling & joist, up to 16 ft 14 00 1/4 in, flooring, dres'd 28 00 30 00	20 M ft. and over	M: Bi
" 18 II 15 00 11/2 " Tough 18 00 22 00 " " 20 ft 10 00 11/2 " " dres'd F.M.25 00 28 00 " " 22 ft 17 00 " " ujidra'd B.M.18 00 10 10	Albany, N. Y.	Bi
" 24 ft 19 00 " " dres'd 18 00 20 03 " " undres'd 12 00 15 00	ALBANY, N.Y., Mar. 31st, 1890.	
Scantling & joist, up to 16 ft 14 00 134 in, flooring, dres'd 28 00 02 0	Hemlock.  Boards, 1x10 in. each. 14c. [Joist, 2½x4, each 12]  Joist, 4x6	
" 34 ft 28 50 XXX sawn shingles	Joist, 4x6	
" 38 ft 32 20 Red oak 30 00 40 00 40 to 44 ft 35 00 White " 35 00 45 00	4ths	U C S
Cutting up planks 1% and has \$100 and \$	1 to 2 in., good 49 00 50 00 and better 29 00 30 00 4ths	Si
	Pickings 3400 3500 ed 40 00 45 00 1in. good 5000 5000 5500 Common 1500 20 00	
' Montreal, Que. Montreal., Mar. 31st, 1890.	1 in. good	CI
WHOLPSALE	and up 26.00 to cotto in. plk, 12 ft. dress-	
" 2nd " 20 00 25 00 14 00 16 00	Dressing bds. narrow 20 00 22 00 ing and better, each 43@50 Sapping boards 16 00 18 00 Culls 23 25 Box boards 14 00 16 001 in boards 13 ft. dress, & better each 28 33	T'
Hemlock 9 00 10 00	1 Cuis 17 22	٠.
Ash, log run 13 00 18 00 Basswood, log run 12 00 20 00	I Shingles shaved hine — 6 Solohingles.cedat mixed 275 300 l	12
Walnut (common)	21 quality	
Butternut	Cedar, XXX 400 420	I.:
Mante 22 on 17 on	Burlington, Vt. BURLINGTON, Mar. 31, 1890.	٥.
Lath 1st quality		
Hamilton, Ont.	Canada Pine Sulings—1x8 in. and up. 12 to 16 ft. D 2 or 4 S.  Select & shelving . \$46 00 Finish . \$37 00 33 \$00 Picklings . 7 00 32 \$00 Picklings . 7 00 32 \$00 Picklings & better . 40 00 32 100 Common . 20 00 32 100 Canada Pine Stock—1x10 in. 12 to 16 ft. D 2 or 4 S.  Selects (clear) . 55 00 Picklings & better . 44 00 1st shelving . 42 00 As run, common out . 25 00 30 00 3d . 30 00 63 100 Common . 21 00 Picklings . 55 00 Picklings & 50 00 Common . 21 00 Picklings . 50 00 Common . 21 00 Picklings . 50 00 Common . 21 00 Picklings . 50 00 Picklings & 50 00 Picklings & 50 00 Picklings . 50 00 Picklings & 50 00 Common . 21 00 Picklings . 50 00 Picklings . 50 00 Dicklings & 50 00 Dicklings . 50 00 Dicklings & 50 00 Dicklings & 50 00 Dicklings & 50 00 Dicklings . 50 00 Dicklings & 5	
HAMILTON, Mar. 31, 1890. Mill cull boards and Dressing stocks\$16 op 18 oc	Selects (clear)	
Scantling and joist up  Incresing stocks\$1000 18	2d	
Shipping cull stocks. 14 00 1½ flooring, dressed . 32 00 Scantling and joist up 1 flooring, dressed . 21 50 23 00	Canada Pine Stock—1x13 in. 12 to 10 ft. D 2 or 4 S.   Selects (clear)	TPNN
do up to 26 feet 14 co-peaced sheeting 1 25 co 30 co do up to 26 feet 15 50 Picks, Am inspection 32 co 34 co do up to 26 feet 15 co-Three uppers Am. In. 4c co	1st shelving	N
do up to 22 feet 17 00 NXX sawn shingles. 2 60 2 70 do up to 24 feet 18 00 Sawn Lath 225 do up to 25 feet 19 00 Red Oak	Pickings Canada Pine Stock-14 in. 12 to 16 ft. D 2 or 4 S.	1×
do up to 35 feet	As run, common out 33 00 Common	1
1   flooring, dressed   21 50 23 00 00 to 16 feet   14 00 Beaded sheeting 1   25 00 30 00 do up to 25 feet   15 50 Picks, Am Inspection 32 00 34 00 do up to 22 feet   15 00 Three uppers Am. In. 4c 00 do up to 22 feet   17 00 NXX sawn shingles. 2 60 2 70 do up to 25 feet   19 00 Red Oak   25 00 00 Up to 25 feet   20 00 White Oak   25 00 30 00 00 Cutting up plank 1½ and thicker dry. 20 00 White Ash No. 1 & 2 2 5 00 35 00 00 Cutting up boards   25 00 White Ash No. 1 & 2 2 25 00 35 00 00 Black Ash No. 1 & 2 2 00 00 30 00		į
Ottawa, Ont.	Pickings & better 35 00@35 00 Dressing & common, d As run, common out 30 00, 2 s or d 2 s & m 20 00@21 00 Common 18 00 20 00 Canada Pine Sheathing, D. Al. & B-1 in. 4 to 7 in. 5 in. & up	12
OTTAWA Mar 21 1800	151 quality, 12 to 16 ft 46 00/151 & 2d quality, 9 to 11 ft. 33 00	12
Pine, 1st qual. № M.835 00€40 00 Oak	3d . 27 00 3d quality, 11 ft. & under 22 00 4th (selected common) 22 00 4th 18 00 18	12
" 4th qual deals 10 00 1200 Butternut	Clear, 10 to 16 ft 32 00 No 2, 10 to 16 ft 15 00 16 60 No. 1	1:
Hemlock 9 00 17 00 Laths 180 190 Ash 1300 18 00 Shingles 150 200	Above prices delivered on a rate of \$30 per car load.	14
	Buffalo and Tonawanda, N. Y.  BUFFALO, March 31, 1890.	1.
St. John, N. B. St. John, Mar. 31, 1890.	BUFFALO, March 31, 1890.   Norway   Common, 1 to 2 in, all   width	1
Deals, Boards, Scantling, etc.	width	I
Deals, Boards, Scantling, etc.  Spruce deals \$12 ∞ Spruce boards 12 ∞ Pine 15 ∞ Pine	White Fine.  Up'rs, 1 to 4 in.  Whole Fine.  No. 2 cuts, 1 to 2 in	λ
	Write Frine.  Up'rs, 1 to 4 in.  10 in\$44 00@56 00  Sicts & Picks,  1 to 4 in\$5 00  1 to 4 in\$5 00  Fine common, 1 to 2  in. and thicker\$5 00  No. 1 barn, 7 to 12 in. 18 50 20 50  in. and thicker 30 00  No. 1 barn, 7 to 12 in. 18 50 20 50  No. 1 cuts, 1 to 2 in  And thicker 27 00 40 00  Mold strips 1 to 2	I
Spruce, extra	Fine common, 1 to 2 No. 1 barn, 7 to 12 in 18 50 20 50 in. and thicker 3c 00 33 00 No. 2 barn, 7 to 12 in 16 50 17 60	6
" No. 1 extra - 2 25 Clapboards.	No. i cuts, i to 2 in Mill culls. 1 to 2 in 9 60 19 60 and thicker 27 00 40 00 Mole strips, i to	6
Pine, extra 24 00 "Clears 45 00 "Clears 23 00 " 2d clears 35 00 " No. 1 15 00 " 2d clears 35 00 " No. 2 10 00	2 in 27 00 31 00 Shingles	3
Flooring, Dressed.	XXX, 18-in, sawed	٤
Flooring, Dressed. 6inNo.1 12 004 inNo.1 - 12 00 "No.2 - 10 00," Missellaneous.	X   X   X   X   X   X   X   X   X   X	1
Staves	X 10-11	١,
" 18 in. 04% 05% Railway ties " 22 in. 04% 06	X cut	1

## New York City NEW YORK, Mar. 31, 1890. Riach Walnut. t inch plain sawed, 35 00@ 39 0c/s inches and over ... 50 00@ 51 00 13/ to 2 inch ... 39 00 40 00/lhicker ... ... 52 00 54 00 Thicker ... 40 00 41 00/ltips under 6 in ... 39 00 41 00 Quarter-sawed, white, all clear, 6 Diniension cut size 24 00 25 00 Saginaw, Mich. EAST SAGINAW, Mar. 31, 1890. CARGO LOTS. 36 00 8 90 Norway 8 50 8 10 00 16 00 21 00 Box 11 00 11 50 12 50 20 00 Uppers Common Shipping Culls Mill Culls YARD QUOTATIONS CAR LOTS DEL. Plank and timber, 12 inches wide, \$1 extra. Lath, No. 1 white pine 190 XXX No. 2 Norway 135 XX Shingles, 18 in climax 3 50 Pkts, 2 to 2 ½ in rough XXX climax 2 50 1½ in. square, rough 18 in. 4 in. c. b. 1 50 Dressed Oswego, N. Y.

	Oswego, Mar.	•
Three uppers, 14, 14, & 2 inch Pickings, 14, 14, & 2 in No. 1 cutting up, 14, 14, & 2 in. No. 2 cutting up, 14, 14, & 2 in 1 in strips, 4 to 8 wide, selected to 16 it. 1x6 selected for clapboards.	for moulding strips, 1	.843 00 845 00 35 00 36 00 .30 00 31 00 19 00 21 00
186 selected for clapboards.	· · · · · · · · · · · · · · · · · · ·	32 00 33 43 .
	uune.	
1 in siding, cutting up piks & uppers 30 00@39 1 in dressing 19 00@31 1 in No 1 culls 14 00@16 1 in No 2 culls 13 00@44	uk in selected.	25 0060 000
niks & uppers 30 004279	ools in dressing	. 17 00 10 00
1 in dressing 19 00 (21	oo's in No. 1 culls	14 00 10 00
1 in No 1 culls 14 00/g16	oolik in No. 2 culls .	13 00 14 00
1 in No. 2 cull4 13 00@14	oojiK in No. 3 culls.	. 950 1000
12 & 16 ft, mill run 12 & 16 ft, No. 1 & 2, barn board 12 & 16 ft, dressing and better. 12 & 16 ft, No 2 culls		. 20 00 23 00
12 & 16 ft, No. 1 &2, barn board	s	18 00 19 00
12 & 10 it, dressing and better.		20 00 30 30
		15 00
• • • • • • • • • • • • • • • • • • • •	10 Inch.	
12 & 13 ft, mill run, mill cults o	ut	19 00 20 00
12 & 13 ft, dressing and better.	• • • • • • • • • • • • • • • • • • •	25 00 27 00
12 & 13 It, No 1 culls	• • • • • • • • • • • • • • • • • • • •	16 00 17 00
12 & 13 ft, dressing and better. 12 & 13 ft, No 1 culls. 12 & 13 ft, No 2 culls. 14 to 16 ft, mill run mill culls ou	• • • • • • • • • • • • • • • • • • •	14 00 15 00
14 to 16 ft, dressing and better.		20 00 22 00
14 to 16 ft. No. I culls	******************	25 00 27 00
11 to 16 ft. No. 2 C. 114		14 00 15 00
14 to 16 ft, No. 2 calls		950 1000
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	xio Inches.	
Mill run, mill culls out 20 00@2	300 No. 1 Culls	. 16 00 17 00
Dressing and better 25 00 30	00'NO. 2 Cuiis	14 00 15 00
1x	g Inches.	•
Mill run, mill culls out 17 00@10	oo'No. 1 culls	13 00@14 00
Dressing and better 2300 27	oo No. 2 culls	11 00 1200
	s Inches.	
67 or 8, mill run, mill	6, 7 or 8, No. 1 culls	1600601600
culls out 19 00@21	oof zor S. No. zculle	1700 1400
6, 7 or 8, drsg & better 2400 28	ool	,
.,		
	hingles.	
XXX, 18 in pine 3 50@ Clear butts, pine, 18 in. 2 50	370 XXX, 18 in cedar	3 <b>20(</b> 03,60
Clear butts, pine, 18 in. 2 50	70 Clear Butt, 1811 Ce	dar., 240 200
XXX, 16 in plne 3 to Stocks cedars, 5 or 6 in.	20 XX, 18 in cedar	210 220
	Pickets.	
No. 1, 11/211/ 15	00 No. 2, 1x3	900 1000
No. 1, 1x3 20	001	-

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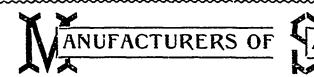
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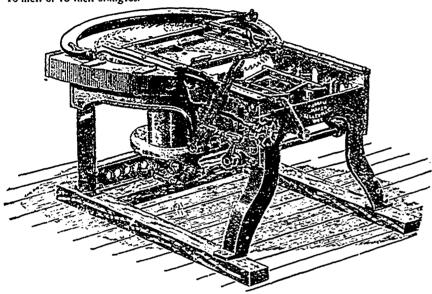
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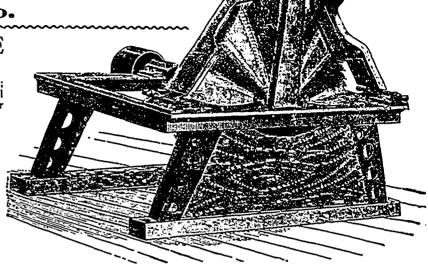
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With 40 inch saw will make more No. 1 Shingles from the same quantity of timber than Wheel Jointer in existence.

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Your respectfully,

(Signed.) SAM BRISBIN,

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Truly yours,
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The estate of the late David Moore will offer for sale at Public Auction at the Russel House, in the City of Ottawa, on

### TUESDAY, 28th OCTOBER, 1890

at three o'clock in the afternoon the following valuable timber limits:

PARCEL No. 1.—400 square miles on Kippewa river, in the province of Quebec, and being berths Nos. 57, 56, 47, 46, 55, 64, 62, 63.

PARCEL No. 2—Berths No. 3 on the north shore of Lake Huron in Ontario, license No. 103 of 1889-90. Area, 36 square miles.

PARCEL No. 3 - Berth No. 1, township of Springer in Ontario, license No. 104 for 188992. Area 34 square miles.

square miles.

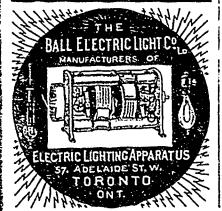
PARCEL No. 4.—Berth No. 15 on the north shore of Lake Huron, in Ontario, license 105 of 1889. Area, 35 square miles.

The purchaser will be bound to take the supplies on each limit according to schedule and valuation. For terms and conditions of sale apply to E. D. Moore. Esq., Hull, and to the undersigned.

J. R. FLEMING,

Advocate, 110 Wellington st., Ottawa

Advocate, 110 Wellington st., Ottawa, 533 Sparks st., Ottawa, 5th February 1890.



## IMPORTANT AUCTION SALE

Gilmour & Company's MIlls and Limits on Gatineau and Trent Rivers.

Messrs. Gilmour & Co. will ofier for sale by auction at the RUSSEI, HOUSE, at the CITY OF OTTAWA,

the whole of their valuable mills and limits, with plant, real estate, lumber, etc., on the

9th DAY OF APRIL, 1890

at 2 o'clock, p.m. The sale will be in parcels. For a full description of the parcels, list of chattels and details apply to either of the undersigned or at the offices of the firm at Ottawa Chelsea, Trenton and Quebec

Dated 20th November, 1889.

ALIAN GILMOUR Orrawa JOHN CH MOCK Chelses Quo DAVID GILMOUK, Irenton J. D. GILMOUK, Quebec

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SAV minitude of the bargain.

SEVERAL second-hand saw rigs, two, three and four block.

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ONE new eclipse saw mill with all late improvements.

ONE saw gummer Dissron make Philadelphia

ONE saw gunner Loss and the CANADIAN agent for the celebrated Winnie hoop machinery, catalogue free.

ONE drag saw rig. Waterous Engine Company make.

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ONE automatic handle lathe.

BROOM handle lathe with wood frame, cheap.

ONE set of spoke machinery, Fay & Co. make

GOLDIE & McCULLOCH stave cutter, set equalizing saw. &c.

ONE Blanchard spoke lathe, Fay & Co. make.

ONE new axe handle lathe

ONE to Ewart chain belt good as new with sprocket wheels.

4 POLE road cars, also a number of lumber cars.

ONE salt field lathe machine. Waterous make
NEW gang lath machine.
ONE Fairbank's timber guage.
ONE saw mill head block, Gait make.

ONE saw mill head block, Galt make.

HEADING turner, Goldie & McCulloch make.

ONE single edger with frame work.

NO 2 large size smallwood shingle machine.

DOUBLE edger Waterous Engine Co. build.

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TWO flall sell acting shingle machines. Goldie & McCulloch makers.

TWO smallwood shingle machines, Waterous make.

FOUR Laws patent upright swing shingle

FOUR Laws patent upright swing sningle machine.

ONE Doherty swing shingle machine.

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TWO new shingle packers, all iron.

SHINGLE jointers, 2.4 and 6 knives.

ONE new No. 3 Rogers saw filer and gummer.

ONE 65 inch Warren turbine water wheel,
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44 inch improved turbine water wheel.
PAIR of Sampson turbine wheels, 42 inch, run

together
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35 inch Leffel.

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30% nch Lettel.
30 inch Selater.
30 inch Burnham
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zanch Turbine by Whitlaw

21 'net Archmedian.
22 inch Leffel.
23 inch Vulcan in close case. Port Perry make.

24 inch Leffel.

15 inch Archmedian in close case. 17% inch Lettel.

to inch brass wheel in iron close cass WATER wheel governor, Galt mak

MY new list is just out of press, send for it. FULL particulars regarding any of above machines sent on application. Address, H. W. PETRIE, Brantford, Ont., Toronto banch opposite Union Station.

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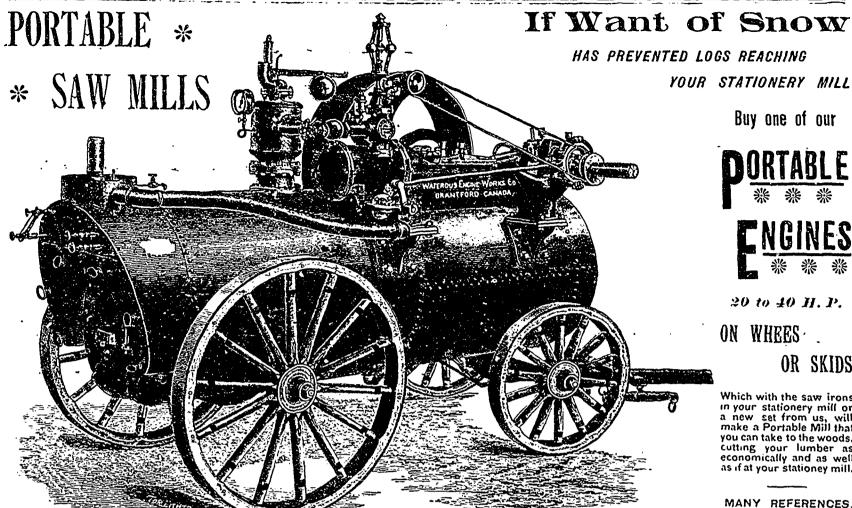
Portable from 6 to 70 horse power. Surpass portable steam power heretofore produced for attength, durability, compactness, and the ease with which they can be moved.

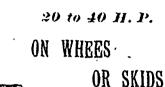
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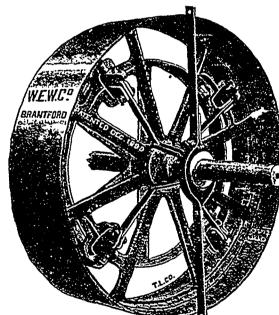




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Which with the saw irons in your stationery mill or a new set from us, will make a Portable Mill that you can take to the woods, cutting your lumber as economically and as well as if at your stationey mill.

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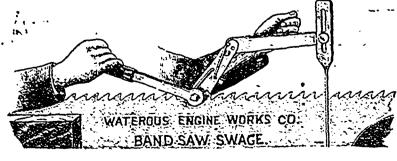
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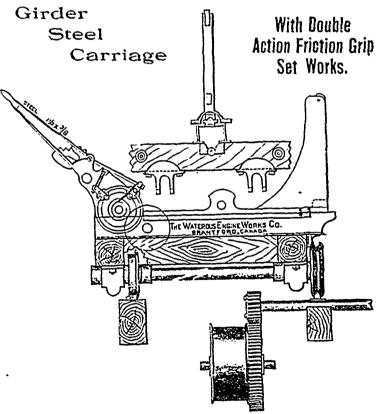
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### TRANSMISSION of Power.

Translated from "The Ingenieur-Conseil" of July 15, 1889.

Transmission by belts is a relic of foutine which should be rooted out, as has been already done with the ancient gear-wheel transmission. I venture to predict that by the time another exposition is opened belts will have entirely given away to topes. I make this prophecy with all the more boldness since belts have not the theoretical superiority over ropes which gearing had over belts. It can already be said that in theory and in practice belts are inferior to ropes, since they can only be made to adhere by a tension of both parts—that is, the part which does no work must have at least half the tension of the part which bears the working strain. Without this tension the belt would slip on the pulleys. No change of material or of make-up can correct this essential fault—the necessity of stretching to accomplish adherence.

With ropes, however, the adherence of the rope to the pulley is effected by the pressure against the sides of the wedge-shaped groove, and the useful tension, that of the working part of the rope, is sufficient to produce this pressure. The lower part of the rope has no need of tension. Thus, in theory, the rope is better than the belt, and in practice no draw-back arises to offset this advantage. On the contrary, rope cannot slip—like belts—from pulleys. The breaking of a rope occasions no stoppage, no accident. The rope falls harmless to the ground and can be replaced after working hours. It even announces when it intends to break by visibly unwinding.

For thirty years we have sustained the rope idea, and made the foregoing argument prevail. We understand the opposition of the routinists at the present time. Very few makers know how to turn out good grooved pulleys, or could supply good ropes. This was a serious difficulty. The slightest inequality in the diameter of ropes, or in size of grooves, or even in the compressibility of the ropes, causes them to bury themselves in grooves more or less, so sensibly altering the circumference run over by the different ropes on a single pulley, and

At the Exposition transmission by ropes is practiced by three Belgian firms, two Swiss firms, and two French; all others employ belts.

Why? We cannot explain, but when the next Exposition opens we will see if they continue to inflict upon their patrons a mode of transmission which, whatever be the ingenuity of the makers of belts, leather, cotton or steel, will always cost more, absorb more power, and cause more stoppages than transmission by ropes. Until that time the Belgian firms have found themselves in excellent company among the constructors of machinery who have adopted this method of transmitting power.—From the Ingenieur-Conseil of July 15.

The above extract is confirmatory of what has been advocated by THE DODGE WOOD SPLIT PULLEY CO, from the commencement, i. c., that power transmission by ropes is for superior to halfs for superior and applicable for day to me and in places where neither helts nor genting can be used at all

The above extract is confirmatory of what has been advocated by THE DODGE WOOD SPLIT PULLEY CO. from the commencement, i. i., that power transmission by ropes is far superior to belts for general purposes, and applicable for distances and in places where neither belts nor gearing can be used at all.

The French writer intimates clearly that for thirty years he has recognized this superiority of ropes, and yet the people have refused to be convinced. This argues a fault in the system which he advocates, and that fault is not far to seek. The system which he advocates is known as the "English" system. It consists of a multiplicity of separate ropes, and the "fault" resides in the impossibility of attaining an equal tension of the several ropes. That this lack of uniform tension is the condition of every "English" rope transmission is evident to the eye. No two ropes of the system hang with the same slack, and it needs no argument to show that for that reason no two are doing the same duty. The rope having the strongest tension is, therefore, overloaded, and will be first to give out; and it is small consolation that its giving out does not stop the works, since the fact that a part of the system is doing no work shows that the whole thing is an overload, and that a much smaller outfit would do the work with equal satisfaction if properly constructed.

That is precisely what has been accomplished by the American System as brought forward and perfected by the Dodge Manufacturing Company, wherein a single

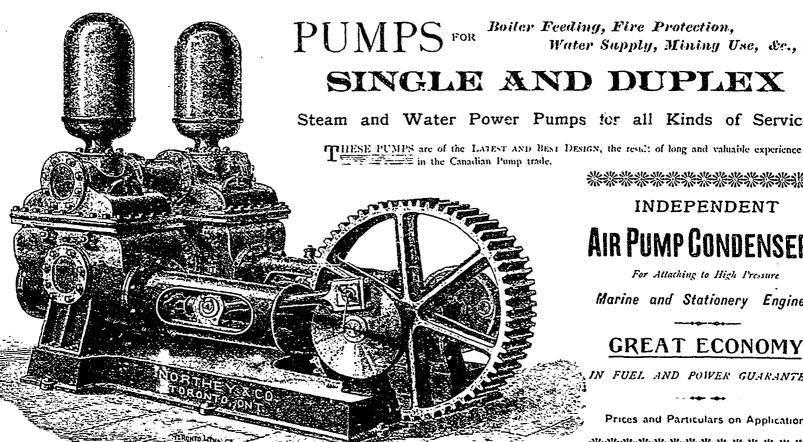
That is precisely what has been accomplished by the American System as brought forward and perfected by the Dodge Manufacturing Company, wherein a single endless rope having any required number of passes, and under uniform tension throughout, transmuts power uniformly, each strand doing its full share of the whole duty.

While thirty years have so far failed to show the practical advantages of the English multiple system, that in the year 1889 only seven users of it appear in the great Exposition at Paris, and American engineers have, almost to a man, repudiated it, the American single rope system has in three years attained a popularity almost unprecedented, and bids fair in the near future to suppliant belts for all purposes except the smallest.

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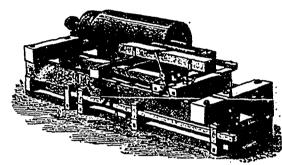
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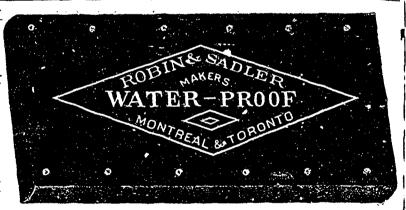


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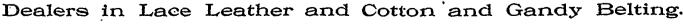
This Belt is made in both Light and Heavy Double Leather of the best material, fastened with Waterproof Cement and Brass Wire Screws, after which the entire belt is saturated with a preparation which renders it entirely waterproof.

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