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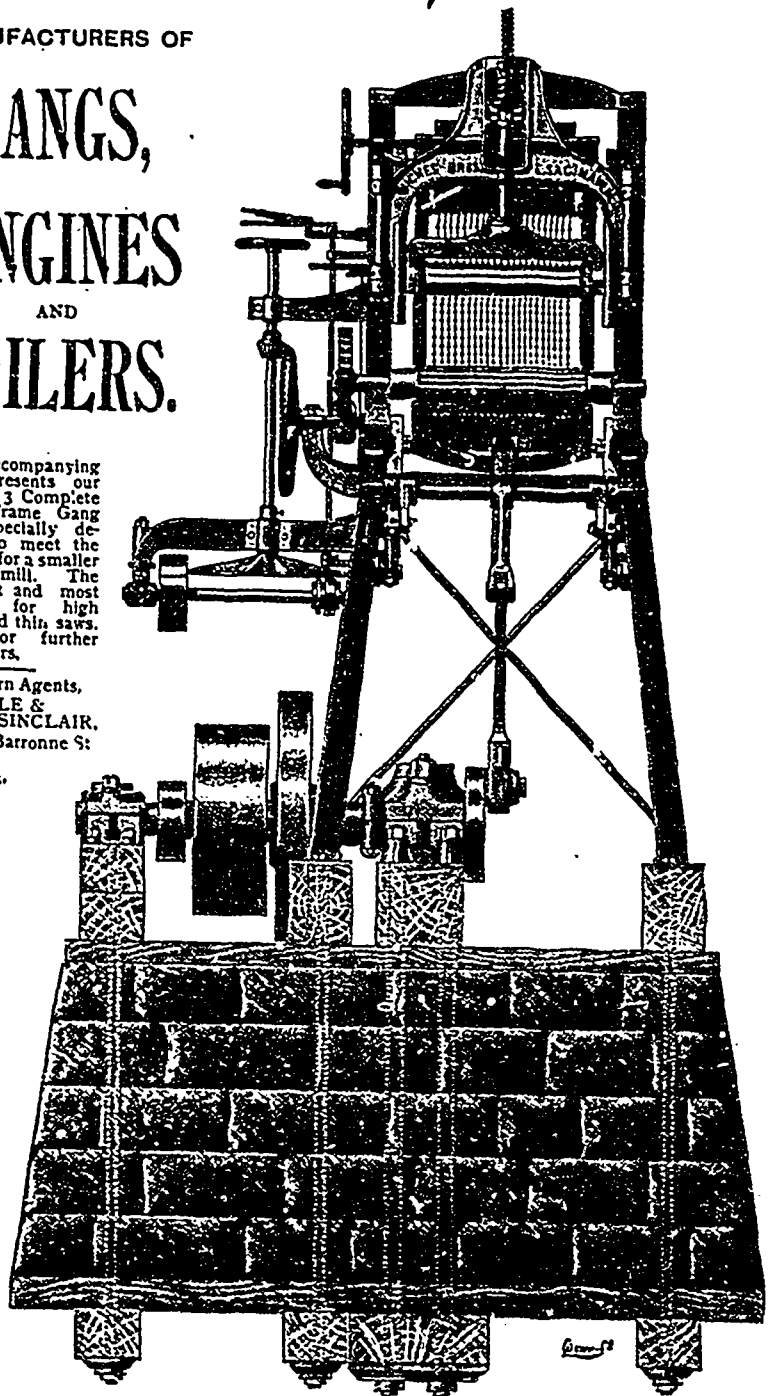
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# THE CANADA LUMBERMAN.

VOLUME XII }  
NUMBER 5. }

TORONTO, ONT., MAY, 1891.

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## THE SPANISH RIVER MILLS.

THE accompanying is a cut of the mill property of the Spanish River Lumber Company, on the Spanish River. The limits in connection with this mill aggregate almost 400 square miles fairly timbered with pine. Both mill site and 300 square miles of the timbered lands originally belonged to Mr. John Cameron. He erected the first mill in 1864. From him the property passed into the hands of Mr. M. Smith, and later to Mr. John Chaffy, whose heirs sold it to Messrs. Arnold & Fulson, of Albany, N. Y. They erected entirely new mills on the old site, introducing modern equipment and largely increasing the capacity. Both lath and lumber are manufactured, the annual product of the latter aggregating 25,000,000 ft. The new mill was erected in 1883, and has been running steadily since that time, and quite a settlement has sprung up around it. Steam power is employed entirely. Facilities for transportation are provided by three steam barges owned by the proprietors of the mills. Between 80 and 100 men are constantly employed. The senior members of the firm are both dead, but their interests are represented in the company by their sons.

tremes of the subject. They both went into a lumber region about the same time, obtained about the same timber advantages, had about the same amount of capital; as far as two men could be they were on a level and equipped to make an equal start. Having been in the business elsewhere, their experience of course taught them as to the first steps necessary to be taken. In a short while they had their plants erected, their teams in operation, and their log pile well supplied with good stocks, to make a start with. They thawed up almost simultaneously, and for quite a while were neck to neck in the race; gradually, however, it became evident that A, we'll call him, was in the lead somewhat. He added more hands and later on he put on a night force. Soon another planer had to be added, then a small dry house, which finally had to succumb to a more modern dry kiln. It was noticed that more empty freight cars were constantly standing on the side tracks that led to his mill than were seen on the siding of his rival not far distant. And so on, could we enumerate the different tangible evidences of the expansion of his business, while there were equally as many indications attesting the fact that B was still pegging away at about the same rate of speed as on the day

latter replied that weatherboarding and such like, from other mills, came dry as a bone, while his was not so well seasoned, and purchasers invariably gave preference and more money for the dryer and lighter lumber. A, clear-headed as usual, grasped the idea in an instant. By drying his lumber he could not only secure a better price, but he could save money in freight; so it didn't take him long to decide upon putting up a dry kiln. Not long after he found that the boiler and engine he had pulled his machinery sluggishly, and it occurred to him that several horse-power additional would send his machinery buzzing along at a livelier rate, and thereby enable him to saw more feet of lumber in the day than formerly. He therefore put some of his earnings into a new engine and boiler of increased capacity. The outcome of it was that he had likewise to add to his force of men to keep pace with the productive power of his plant. All this while his competitor B was contenting himself with the same outfit he started with, and was plodding along in about the same pace as when he first begun. Through the indifference of his hands, time had habitually been lost, and the output of his mill had consequently been curtailed, depriving him of so many dollars profit. He

## THE SAW MILL.

BY EDWARD A. OLDHAM.

ECONOMY is one of the cardinal virtues with the progressive lumber manufacturer of the present day. But there has been a time in the not very remote past when very little stress was laid upon this subject, and there are even instances, today, where this matter is totally disregarded, but the men who disregard it are not within the category of progressive, and as an accompanying result, they are not overly prosperous in their business. Year after year their noses become closer to the traditional grindstone, and they lay awake nights wondering where the fault lies.

Too few business men have an eye to the small leaks in their business. This has been very generally the case with new mill men, until experience has taught them many a costly lesson, by which they have benefited. The saw-mill man must of necessity be a utilitarian. He must learn how to utilize every atom of everything turned out by his mill; he must study intently the small economies of his business, and stop up the little insidious leaks that gradually eat up the profits, and in time begin their ravages upon the business itself.

I am not going to write a technical article on this subject. That is not what is needed. Saw-mill men are not always technical in their training. They have to be approached in a practical, common-sense sort of way, with appeals to their pocket as well as to their reason.

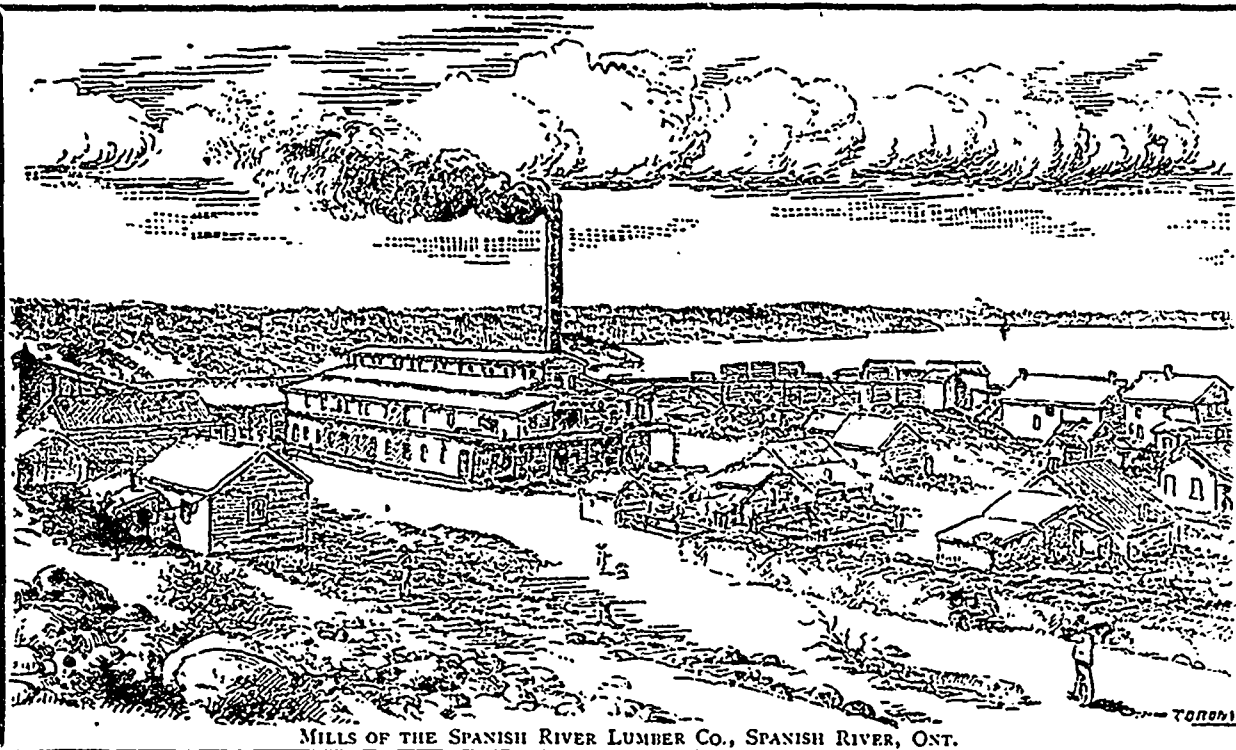
Probably no better way can be found to comprehensively illustrate the importance of carefully attending to the small economies of a saw-mill than by drawing a parallel between two men representing the two ex-

both mills started out upon the race for priority. The situation was interesting enough for a man in the business, but to a thoughtful layman it afforded an extra degree of fascination. I began to study the two men. I visited their respective mills. I talked with each about the business of saw-milling in general, and his in particular. I drew each of them out and became acquainted with their methods. The first discovery that set me to thinking was that A was a subscriber to several lumber journals. His conversation told me that he was keeping pace with the advancement of saw-milling, the advent of new improvements in processes and appliances, and with the relative profit to be gained by shipping to this or that market. On the other hand I found B took no lumber paper, and to my profound astonishment, was not aware that such papers were published. He was an intelligent man, too, with apparent zeal for the building up of his business.

A discovered one day that he was not getting the highest market price for his planed stuff. He inquired of his agent in the city what the matter was, and the

dividual worth, and each man very naturally strove to make his individual worth greater.

The next thing I learned was that A was his own sawyer most of the time, while B not only never touched this part of his business, but left it in charge of another, and for days never went near his mill, being occupied at his office a good distance off. A, by working himself, saved the amount of a sawyer's salary, had the work executed more satisfactorily, got better work and more of it out of his men. Around both mills there soon began to accumulate a vast heap of sawdust. It got to be quite an item of expense hauling it away from beneath the saw to a point fifty or sixty feet distant. A determined upon utilizing this idle factor as fuel, so he wrote to one of his lumber journals and told the editor he wanted grates that would enable him to burn this granulated fuel beneath his boilers, and through this channel he got into correspondence with manufacturers who sold him the kind of grating he desired, and in a short while he was handling his sawdust only a few feet, whereas before he was handling it sixty feet. Be-



MILLS OF THE SPANISH RIVER LUMBER CO., SPANISH RIVER, ONT.

zides this small economy he had instituted a tremendous saving in his fuel expenditures. B continued to pile up his sawdust, and in order to get rid of it he undertook to burn it, but on more than one occasion his plant narrowly escaped destruction by sparks blown from the dust pile.

Both mills were sawing pine exclusively, and as a matter of course the "slabs" accumulated rapidly, until around each mill there was a large pile of this stuff, representing so many dollars of idle capital going to ruin. A glanced at the growing heap one day and berated himself to remedy this leakage. How could he best utilize this surplus raw material? He used some of it as fuel along with the sawdust, and found that he could get a better heat, and therefore more steam by judiciously adding the two than by burning each separate, but this only called for an atom of that immense pile of outside boards. What should he do with the remainder? He did not ask himself the question long, his habitual perusal of his trade papers had whetted his ideas, and he quickly realized that the best way to put this idle material to profitable use, was to buy a lath machine and hire an extra man or two to operate it. He did so, and soon he was shipping laths away in car load lots, and making a very snug profit out of them, too. B allowed this object lesson to pass unheeded and he continued to pile his slabs higher and higher, where negroes in the neighborhood had frequent access to them after nightfall.

A had arranged a plan to utilize his sawdust, was no longer troubled by an increasing pile of slabs, but still there was a quantity of refuse material too good to dump into his furnace. He thought awhile on that line and he soon found a market for the "kindling wood," and henceforth broken laths and bits of board were dumped into the dry house and made as ignitable as tinder, after which they went to a small swing saw and were cut into eight-inch length, after which they were tied into little round bundles about a foot in diameter. These were laid out flat, standing the sticks on end, and a boy with a mop applied a thin coat of cheap rosin to the exposed ends, from a huge pot standing over a slow-burning fire near by. None of the work of preparing these kindling blocks for market was done by a man; boys were intrusted with the work and the proprietor himself superintended it. There was another thorough system and method about A's mill. He gave the signal himself, and all hands turned to or knocked off when he did.

Experience had taught him that it was the best sort of economy to be regular about all things. At B's mill the sawyer had rules, but being an employe himself did not enforce them as strictly as the proprietor would have done if he had been there in actual touch with the work, and rules not enforced were often worse than no rules at all, and in that way very much valuable time was lost that represented so many dollars and cents wasted. Is it necessary to draw the parallel any farther. I think not. Any intelligent, common-sense man acquainted with the saw-mill business in the remotest degree cannot fail to see where such a parallel ultimately leads to, indeed it may hardly be termed a parallel any longer; one of the knives is short and straight, the other early diverges and where it terminates is not in sight.

In conclusion it is safe to lay down this general proposition, that the man who extracts the most gratifying results from the saw-mill business, is he who watches steadfastly after the small economies around his mill, for if he is a business man enough to do that, he is apt to be ambitious to push his business instead of allowing it to push him.

#### MAHOGANY.

The weight of a cubic foot of mahogany varies from 35 to 53 pounds. As compared with oak, which is called 100 per cent. the strength of mahogany is 67 to 97, its stiffness is from 73 to 93, and its toughness from 61 to 99 per cent. The Government engineer of Honduras estimates the total value of the trees in that country, such as are regarded fit to be cut, at \$200,000,000, while the smaller trees, not ready to cut, are also worth a large amount

#### OUR CROWN LANDS.

THE annual report of the Commissioner of Crown Lands, which is now to hand, is a volume of more interest than the majority of Government returns, containing as it does a comprehensive statement of the management of the Province's great stores of wealth. It shows that the total collections of the Department were \$1,113,052 and the total disbursements \$290,953. The area of clergy lands sold during the year was 780 acres, aggregating in value \$1,219.76. The amount collected on account of these and former sales was \$6,037.88. The area of Crown Lands sold during the year was 50,045 acres, aggregating in value \$79,847.39. The collections on account of these and sales of former years amounted to \$74,031.78. The area of common school lands sold during the year was 220 acres, aggregating in value \$766.50. The collections amounted to \$11,758.24. The number of acres of grammar school lands sold during the year was 534, aggregating in value \$367. The collections were \$1,538.27. Under "Railways Aid Act" of 1887 certain lands were set apart to be sold for the purpose of forming a fund to recoup the province in respect of moneys expended in aiding railways—of these lands 9,406 acres were sold, aggregating in value \$18,577.20. The collections were \$11,562.56.

The total collections from woods and forests for the year amounted to \$916,155.67, which includes \$135,479.53, on account of bonuses, leaving the revenue from timber dues, ground rent, etc., to be \$780,676.14.



HON. A. S. HARDY, MINISTER OF CROWN LANDS.

The revenue from woods and forests is somewhat below the estimate, which is accounted for by the collapse in the square and waney board timber trade, there being very little demand for this class of timber during the past year. The report goes on to say this reduction of the import duty upon sawn lumber going into the United States from \$2 to \$1 per thousand feet board measure came too late in the year to have very much effect on last season's business, although there was a stiffening towards the close of the year, due, no doubt, to the reduction in question. The quantity of timber being got out this year is very small, and there is also a reduction in the output of logs. It is reasonable, therefore, to expect for the coming season a fair business at remunerative prices, and that the reduction of the American import duty will enlarge our market to some extent—more particularly for the coarser grades of lumber.

In order to enable those owning mills in the northwest part of the province to obtain supplies of timber, in harmony with the policy prevailing in other parts, it was determined to hold a sale of a limited area of timber berths as soon as the necessary surveys and explorations could be completed. The sale was held on the first of October last and there was a large attendance. Four hundred and eighty-five miles were offered, all of which, except 18½ miles, were in the territory west of Thunder Bay. Three hundred and forty-three and three-quarter miles were knocked down on the day of sale, for \$321,956.25, and thirty-three

miles were sold subsequently at the upset price, realizing \$24,300, making a total mileage sold of 376¼, realizing \$346,256.25, or an average of \$919.06 per mile bonus for the mere right to obtain license. There has been paid on account \$110,729.53, leaving outstanding \$235,526.72.

The work done during the year on colonization roads was as follows: Miles of new road constructed, 180; miles of road repaired, 400; bridges erected, 30; bridges repaired, 12. The work done was carefully inspected and reported to be of a satisfactory and substantial character. The total expenditure was \$127,577.60, of which certain items amounting to \$2,770.20 were refunded, leaving the net departmental expenditure to be \$124,807.40.

#### A SERMON IN A SENTENCE.

WE pay that man six dollars a day, said the proprietor of a small shop recently to us, for the reason that he is the best man on that kind of work, and we think ourselves very fortunate to get him. When we heard this we could not but wish that some who think the world is too full, and there is no demand for skilled labor any more, could have heard it also. There never was a time, there never will be a time, until the end of all things is at hand, when skilled labor will not be in demand. There is always an overplus of mediocrity, and half-hearted men who work for six o'clock have only themselves to blame when they are unable to keep jobs. Not many months since we were talking with a very intelligent man who was posted, so to speak, on all things outside of his business. He was a machinist, and when we broached some topics connected with his trade he shut up like a steel trap; that was the one thing he took no interest in, and it is almost needless to say he had no position in it; he was a general utility man, fit only to hew wood and draw water, and it is fair to presume, so lax was he in all matters incident to his business, that he spilled most of the water and made more chips than firewood. This man, when asked if he took a trade paper, said promptly that he did not. "Why should I? if I was the best workman in the world the boss would only get the benefit of it; I would not get any more." Argument with a man like that is impossible, and we said nothing; but it is a curious fact that the superintendent of this very works said, as we were going over it: "I want a man for foreman of one of these shops; and would you believe it, there is not one out of the whole 600 that I would trust. I never saw such a lot of men in my life; they don't care for anything. There isn't a single mechanical paper taken by one of them, and yet they are a fair average."

Now the caption of this article and the commencement explains the situation as regards advancement in life for those who wish to get on. It is for young men that we write, not for those who have run their race. If you expect more than a bare living—and an uncertain one at that—you must be able to do some one thing better than the mass can do it. No matter if it is only chopping wood—whatever it is, do that one thing better than nine out of ten can, and you will be in constant demand. All men can not be foremen, that is certain; but to be a foreman implies that you can do something else better still if you will cultivate the same qualities.

One of the most difficult things is to convince young men that they are not known for what they are; that they can be good workmen and bad workmen and the world will not take cognizance of either fact. Assuredly it will; every man is known to his immediate associates for exactly what he is. He is under their notice all the while, and they do not fail to see his daily walk and carriage; this being the fact, it is easy to get a good or bad reputation. If a young man has his way to make let him cultivate all things that are lovely and of good report. Be assiduous at his trade, do the best he can, and take counsel of his superiors. If he shows that he is in earnest, everyone will lend him a hand.

Talking about striking a tender chord, soliloquized the tramp at the wood pile; this is one of the toughest cords I ever struck.

## USEFUL INFORMATION

Know that the pulleys are well balanced before they are put in position, as a pully much out of balance is quite a sure method to throw shafting out of line.

If the speed of a conveyor connecting the flow between two performances alternates from fast to slow, and vice versa, an interruption to regular flow will result on the last operation.

When a grain cleaning machine runs above proper speed it is liable to break the wheat, and if it runs below it will not make an accurate separation; hence, if for nothing else, it will pay to provide a reliable speed governor to keep the grain cleaning machinery at proper speed.

The steam engines of the world represent, approximately, the working power of 1,000,000,000 of men, or more than double the working population of the world, the total population of which is usually estimated at 1,455,023,000 inhabitants. Steam has accordingly enabled man to treble his working power, making it possible for him to economize his physical strength while attending to his intellectual development.

Here is a method of making an emery-wheel dresser: "Take a piece of  $\frac{3}{4}$ -inch round iron about 14 inches long; heat it and split up about four inches; bend the two sides made by splitting into the form of a letter U, leaving a handle 10 inches long. Now drill  $\frac{3}{8}$ -inch holes in each end of the U, put  $\frac{3}{8}$ -inch bolt through and fill with  $\frac{3}{8}$ -inch washers. This will make a perfect emery dresser."

Smoke pipes may be preserved from rust by painting the pipe thoroughly, either with coal or wood tar, then filling it with shavings and setting them on fire. The heat roasts the tar, and, at the same time, opens the pores of the iron, which become filled with carbon, and thus preserved from rusting for an indefinite period. A smoke flue is mentioned which was thus treated twenty-six years ago, and is still in good condition.

Air is an absolute necessity in good combustion. That is understood pretty generally, yet there are engineers who forget it when they put in grates with insufficient openings for air or think that cleaning a fire often does little good. Select a grate that has over 50 per cent of air space, and a rocking grate makes cleaning the fire an easy operation and without cooling down the boiler.

Possibly it is not in order to criticise old sawyers, but there are men who claim the title of sawyers who do not know the first principle of milling. They file saws to the disadvantage and ruination of their employers. A saw should be swaged with a lever or tongue swage or set with a Disston saw set. In order to cut smooth lumber, a side file should be used. A good sawyer will not depend upon the guide pins. File the saw correctly, and the result will be satisfactory to yourself and employer. Too many sawyers do not file the saw correctly, and depend upon the guide pins for good work, and when the saw does not do good work it is blamed for what is really the sawyer's carelessness.

The practice of removing the manhole plate in the front head of a hot boiler, says Mr. W. H. Wakeman, in the *Manufacturers' Gazette*, and then inserting the hose, and allowing the cold water to run along the bottom to the blow-off pipe, is a bad one, for if the bottom of shell is suddenly cooled off, while the top is still in contact with the heated masonry and other covering, unequal contraction and a severe strain on some of the parts is the inevitable result. This may be practiced for years without ruining the boiler to outward appearance, but the worst defects we have to contend with are those which would escape the notice of the casual observer, and when boilers that are thus misused finally "let go," it is voted a mysterious dispensation of Providence.

Edwin A. Kimball, instructor of the shops at the University of Illinois, writing on the subject of preventing slipping of belts, says: "I do not know that washing soda may not be as good as castor oil, for I never used the former; but I do know that castor oil is effective and safe in the hands of a competent person. There is no occasion to soak a belt in any sort of oil. A little applied to the surface is sufficient. There is nothing that I have ever tried that is so effective as castor oil, especially for wood-working machinery belts. The way to apply it is to let it run from a bottle in a small stream on the belt while this is in motion, commencing at one edge of the belt, moving the stream over a little at every full travel of the belt, until the whole width of the belt has received its portion. I know of belts that have been treated in this way for years, and they are whole yet, and doing their work without a murmur."

### LUMBERMEN IN THE LEGISLATURE.

THE lumbering interests of the Province of Ontario are represented in the Local Legislature by fifteen members engaged in lumbering pursuits either as owners and operators of saw mills or as holders of timber limits, and in some instances as both. Of these the Hon. E. H. Bronson, whose picture we here publish is a Minister of the Crown.

Mr. Bronson is a member of the well-known firm of Bronson & Weston, who operate extensive mills and control large interests on the Ottawa. He is the eldest son of Mr. H. F. Bronson, a native of Warren County, N. Y.; he was born at Bolton, Warren Co., in 1844. He received his education at Ottawa and Sandy Hill, N. Y. He has been a member of the Ottawa city council for seven years and of the school board for a much longer period. In 1874 he married the only daughter of Prof. N. B. Webster, of Norfolk, Virginia. He was first elected to the Legislature as a member for Ottawa in 1886. Last June he was re-elected by the enormous majority of 1,460.

It is in keeping with the fitness of things that a business holding such an important relationship to the prosperity of the entire Province should be thus fully and ably represented in its councils.

Crossing over from the Government benches to the opposite side of the House, we find in Mr. A. Miscampbell the new member for East Simcoe, a man prominent in lumbering sections and who is destined to come quickly to the front in Legislative circles. His speech on the Budget



HON. E. H. BRONSON, MINISTER WITHOUT PORTFOLIO.

in the recent session of the Legislature was perhaps the ablest delivered by any of Mr. Meredith's supporters. In another column along with a portrait of the author, we publish an extract from this speech, touching specially on lumbering interests and which will furnish a good illustration of this gentleman's style in debate and trend of thought on public questions. Mr. Miscampbell spoke with force on the Mining measures of the Government and also on the shantymen's Lien bill.

Another member who delivered one of the chief speeches in the mining debate was Mr. Jas. Conmee, member for West Algoma. He was born in Sydenham in 1849, and is now a resident of Port Arthur. He is extensively engaged in lumbering and railway construction.

Mr. W. C. Caldwell, B. A., of North Lanark, is another lumberman, and son of the former member Mr. Alexander Caldwell. E. C. Carpenter representing North Norfolk, whilst now engaged in agricultural pursuits was for some years in the employ of the Rifle River Booming and Rafting Co. in Michigan. South Norfolk is happy in its choice of a lumberman, in the person of W. A. Charlton, a resident of Lynedoch, and where he is engaged in mercantile and lumbering business and with his brother John Charlton, M. P., for North Norfolk, has interests in the Georgian Bay region and Tonawanda, N. Y. One of the most active members of the Assembly is Mr. James Clancey, of West Kent, a lumberman of Wallaceburg. Mr. John Fell, of North Victoria, for some time ran a shingle mill at Fenelon

Falls. Robert Ferguson the member for East Kent lives at Thamesville where he carries on a lumber business. One of the new members of the Legislature brought in by the June election is Wm. McCleary representing Welland. He is a member of the firm of McCleary & McLean, lumber dealers and sash and door manufacturers. Centre Simcoe claims a new member in Mr. Robert Paton, of New Lowell, who is extensively engaged in stock raising and lumbering. David Porter, of North Bruce, has been engaged in saw milling since 1877. Jas. Reid, of Addington, worked for many years in his father's saw mill and was engaged in lumbering. The member for North Waterloo, Mr. Elias W. B. Snider, is a manufacturer and owner of several mills including a saw mill. One of Mr. Meredith's most active supporters is Mr. A. F. Wood, of North Hastings, a gentleman largely interested in manufacturing and railroad interests, holding for some time the position of president of the North Hastings' Lumber Company.

### THE BIG TREES OF BRITISH COLUMBIA.

It may well be imagined that it is no boy's play to cut down a tree from five to ten feet in diameter. The axemen work in pairs, and after selecting the place where they desire the tree to fall, they begin operations. Trees generally have a swell at the base that is cross-grained and gnarled, hard to cut, and not good timber, and as it is not desirable to have this in the log it becomes necessary to cut the tree above this defect. Some trees, especially the fir, have a great deal of pitch at the base, and this, also, renders it desirable to begin cutting some distance from the ground. Another advantage of getting above the ground is being out of the way of crush and fallen timber.

In order to do this the axeman chops a notch in the tree nearly as high as his head, the notch being about six inches deep and about the same in length, and inserts in it the end of a board, upon which he stands to wield his axe. The board is a piece of oak or fir from four to six feet long and about ten inches wide, the inserting end being narrower and bound with steel, upon which is a calk like that on a horseshoe, which holds the board firmly when the man's weight is on it. If the first notch is not high enough he cuts another higher up, and still another, if necessary, using the boards as steps, until he is often ten or twelve feet above the ground before he finds a suitable place for chopping. The two axemen, having thus gained a position on opposite sides of the tree, begin the work of chopping with their double-bladed axes, working carefully so as to direct the fall of the tree in the line selected. Of late years the improved style of two-hand saws has been made to do the chief work. After cutting with the axe a deep line in the tree on the side to which it is to be made to fall, the men begin sawing on the opposite side, wedging the cut made by the saw as they progress, thus keeping the saw clear and gradually inclining the tree in the right direction. In this way a tree may be made to fall in the direction exactly opposite to its natural inclination. When the tree shows symptoms of falling the men give a few well-directed strokes with the axe to guide it in its course, and then spring lightly to the ground, standing near the base of the tree, which experience has proved to be the safest position. Gradually the forest giant bows its head, its fibres cracking like pistol shots, until, at last, it comes down with a rush, its limbs dragging down others with it, and the under ones being splintered into pieces.

### HOW WOOD PULP IS MADE.

IN wood pulp making by the sulphite process, the wood is peeled, discolored or decayed parts are removed, the wood is cut across the grain into thin chips, which are dropped into large drums about 14 feet in diameter, 24 long, and strong enough to sustain a pressure of from 75 to 200 pounds to the square inch; when packed full of chips the drum is filled with sulphuric acid and other chemicals, and the cotton-like product is pressed dry and mashed, mixed with water, rolled flat and cut into shape for bundling, being 60 per cent. moisture and 40 per cent. fiber. Thus it goes to the paper mill. One cord of spruce makes 1,200 pounds of dry fiber worth from \$100 to \$150 a hundred pounds.



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#### TO VISITING LUMBERMEN.

LUMBERMEN visiting Toronto are invited to use the office of the LUMBERMAN as their own. We shall take pleasure in supplying them with every convenience for receiving and answering their correspondence, and hold ourselves at their service in any other way that they may desire.

#### PROTECTION TO SHANTYMEN

THE Lumbermen's Lien act carried through the recent session of the Ontario Legislature by the Commissioner of Crown Lands is designed to give to shantymen the same privileges as are extended to other workmen under the Mechanics' Lien act. It provides that wages shall be deemed a first charge on all logs and shall have precedence of all other claims or liens thereon.

In principle the measure is sound. Experience has proved that special legislation for the protection of those, who of themselves, are powerless against unscrupulous employers, has become a necessity. This particular bill, however, contains several clauses that, whilst aimed to protect one class of the community in particular, bears unfairly on another class, who unfortunately at the present time feel that their lot is not an easy one.

The bill is made to be operative only in the Algoma, Thunder Bay and the Rainy River districts—the border districts. Here, it is alleged, is the greater temptation for sharp practices on the part of jobbers, who will see an opportunity to hurry their logs out of the country, too often without paying the men who have done the burden of the work, the wages earned. While cases of this kind have occurred and have been more common to the districts named in the bill than elsewhere, it does not follow that like fraudulent acts may not be committed in other lumbering sections. In the discussion in the House preceding the passing of the measure it was pointed out by Mr. Wood that there were complaints of dishonest jobbers in the Trent and Moira districts. Mr. Dunlop said there was a desire for a bill of this nature in the Ottawa district, and Mr. White cited reasons for its extension to Essex. But aside entirely from local reasons, if the principle of the bill is sound, it should be general in its application. It should not be a case of waiting until irregularities show themselves in a community before a law already in existence is made to apply to that particular locality. This looks too much like locking the stable door after the horse is stolen.

The clause which will operate most severely on the lumbering interests is that which says that "such lien shall remain and be in force against such logs or timber in whosoever possession the same shall be found." It is not denied that there are men engaged as jobbers in lumbering, who, like those in many other lines of commerce, are working on a limited capital. They are just as honest as the men who have ten times the capital, and because of their known honesty credit is given them on the logs or timber they buy, pending the closing of sales on their part. Now, if the lumberer who gives this credit has got to take the additional risk of having a possible wage bill tacked on to his account and the very logs for which he has not yet got his pay, seized and perhaps sold at a sacrifice, through

no dishonest intent, but the unforeseen misfortune of the jobber, he is very apt to draw a strict line in future on the matter of credits, and the consequence will be the crowding out of business of many deserving men and honest jobbers. Even though the jobber should never have done otherwise than pay every cent of wages he has ever contracted he will be treated in the same way as the rascal who goes into the business with full purpose of "doing up" workmen and everybody else. When business men establish rules, forced on them by exceptional circumstances, the rules have to be general to all.

This phase of the matter is further aggravated by another clause which provides that if "such labor or services be performed or done on or after 1st day of April and before 1st day of October in any year," then action in law can be commenced within twenty days after the last day such labor or services were performed. Here we are at the close of the season and it would not be difficult for those troublesomely disposed to cause action to be entered against a jobber for the one purpose of having the logs held long enough to make it impossible, owing to the setting in of severe weather, to have them carried through to their destination that winter. Even if such action were entered with a proper purpose, serious loss on all hands would follow in the same way.

The lumbermen are not forgetful of various wise measures of the Provincial government helpful to their interests, noting specially their recent action making it a condition of timber sales that all logs cut in the territory disposed of shall be manufactured in Canada.

It is a disappointment in this latest measure that the objectionable features referred to were not at least modified and still the general principle of the bill which all lumbermen we believe approve of, preserved.

#### FOREST PRESERVATION.

THE tendency of human nature is to "put off," so long as the worse results that we know will eventually follow some given course of action, have not actually developed. We see this illustrated in the case of tree planting having in view the preservation and renewal of our forests.

The possibility of a scarcity of timber in this country of so much wood is passed over as the dream of an idealist or the vaporings of a mere theorist. Yet, with the inroads that are being made in our forests to-day, the time may not be so remote as we anticipate, and we will wake up too late to reap the gain that would have come from a little prudent forethought, and less of the indifference of the present day.

Much careful reflection has been given to this subject by Mr. Phipps, of the Forestry Department of the Ontario Government. In his latest report he suggests as a practical method to encourage tree planting, the opening of a large public nursery, where trees might be obtained free of cost, and that under a system of free saplings, twenty times as much planting would be done as at present. This proposition involves an expenditure of public money, which Mr. Phipps justifies in this way: "The work is national; it is the nation that desires the farmer to plant trees; it was the fault of the nation that he was ever allowed to obtain public land at first without an agreement to retain a certain portion in trees." The great error of the original settlers, he says, was taking hill and hollow, mountain and vale, indiscriminately, with the result that many mountain tops were cleared, farmed and ruined by the washing away of the soil. "That the mountain should be wooded and the sloping valley cropped, is the very A B C of forestry."

Captain Eads, an American writer on the subject refers to the indiscriminate destruction of forests in his country in the following vigorous and picturesque manner: "The United States is tearing out the heart of the country with her gang ploughs and throwing it into the Mississippi river."

The testimony of 200 farmers has been given to prove that years ago, when there was still much timber standing, most crops gave a far better return than since more has been cleared.

This is a very practical side of the question—one

that involves dollars and cents, and should weigh against the measure of sentiment that some of our too utilitarian people think surrounds this question. Otherwise future generations may rise up not to bless us, but mad enough to consign us to some unmentionable region where fire wood is supposed to be more everlasting than Canadian woods may have proved to be.

#### THE QUESTION OF DUTY.

OPINIONS differ among lumbermen as to the wisdom of removing the duty on logs going into the United States. Two separate interests come into conflict with each other. The mill men see only a curtailment of the work of their mills and a transference of this labor to Michigan mills. The owners of timber limits on the other hand are already feeling the impetus that the abolition of the duty is giving to the sale of their logs and lumber; and that these sales are running into large figures there can be no question. THE LUMBERMAN has taken some trouble to enquire on this point, and finds that here both mill owners and owners of limits are at one. We give a few figures that will be suggestive of what is being done in exporting. N. Holland, of the Saginaw Lumber and Salt Company will export 30,000,000 feet from Canada; J. W. Howry & Son, of Saginaw, 20,000,000; and Sibly & Bearinger as many more; about 35,000,000 will be taken from Lake Superior, and Alger, Smith & Co., will raft about 80,000,000 feet from Algoma.

The workmen recognizing what this means are agitating for a reimposition of the duty, and it is possible that at the present session of the Dominion House the matter may be taken up. But this is only one view. It does not follow, nor is it likely, that the large quantities of logs that will be rafted across the border would, if the export duty were reimposed, be cut in Canada. Some will be, but the larger quantity would remain in *statu quo*.

There is the other important phase of the question that cannot be left out in a fair consideration of the entire problem, viz: That whatever drawback does exist as a result of the abolition of the export duty, is it not more than offset by the gain in the lessening of the import duty on Canadian lumber going into the States? Let our government reimpose the duty on logs, and the United States government, it is believed, would at once retaliate by again clapping on the import duty on lumber.

It would seem to be the consensus of opinion that it was unnecessary—and it was not asked for—for our government when removing the duty on pine logs, to have also included spruce. One large Canadian concern, the E. B. Eddy Manufacturing Co., of Hull, has already interviewed the government and asked for a reimposition of the duty on this product. They use spruce in their sulphite fibre works, where by a simple process of treatment with sulphuric acid, the wood of the spruce is converted into sulphite fibre, from which the finest qualities of paper are made. The products from the works, which average 300 tons monthly, finds a ready market in Canada and the United States. The company, however, is already being handicapped because of the Americans coming over here and buying up all the available spruce. It is a serious injustice to the lumber interests of New Brunswick where the larger portion of spruce is found, while no advantage to offset this loss is presented. In the new department of the LUMBERMAN, "Eli," it will be interesting, and not without its funny side, to read the various views of the trade on this and kindred questions. There one can "speak right out in meetin'."

Among the questions that the census enumerators are instructed to ask are the following regarding the products of the forest; Number of square cubic feet of white or red pine, oak, birch and maple, elm, black or other walnut, and hickory produced for the census year; cubic feet of square or sided tamarac and all other timber; number of standard pine or spruce logs, spars and masts, thousands of staves, cords of lathwood, tan bark, firewood, pulpwood, and number of fence posts, railway ties, telegraph poles, and thousands of shingles taken out.

## EDITORIAL NOTES

PRESIDENT HARRISON issued his proclamation last week reserving from settlement 1,750,000 acres of timber land in the northwestern portion of Wyoming adjoining the Yellowstone National Park.

THE rag picker no longer holds the key to the situation in the manufacture of paper. Wood pulp has worked a solution in paper making. Rags are still used for the finer grades of paper, but for print papers and the cheaper grades of writing wood pulp has the field.

BEHOLD what a great fire a little matter kindleth—and one would expect many such taking the average daily out-put of matches in the Eddy Company factories at Hull, Que., as a criterion. No less than 22,000,000 matches, or four for every man, woman and child in the Dominion, are turned out daily in this establishment.

THEY are using more walnut in Europe at this time than is usual, and considerable quantities are now going forward from eastern points to meet the foreign trade. Operators are disposed to think that the trade is about at its highest pitch however, but Europeans are disposed to take all they can get of a quality that suits them, at prices prevalent in the seaport markets.

BLACK birch is rapidly coming into favor in building circles. When properly stained it is almost impossible to tell the difference between it and cherry or walnut. In the forests throughout Ontario birch grows in abundance, especially if the land is not too boggy. There is a great difference in the wood of different sections. Where the land is high and dry the wood is firm and clear, but if the land is low and wet, the wood has a tendency to be soft and of a bluish color.

THE forestry exhibit at the Columbian Exposition at Chicago will embrace wood in its natural state from every section of this and other countries, thus affording a most excellent opportunity for comparing the same varieties growing in different latitudes and the climatic effect on forest growth. Worked timber in all of its many commercial forms will be shown by beautiful specimens selected from the wood-working establishments of the world, including the various ornamental woods used in furniture, veneers, and interior decorations.

THE owner of a planing-mill in Chicago has been sued for \$10,000 damages because a six-year-old boy, who was bringing beer to the mill for some of the workmen, accidentally got caught in the machinery and was injured.—*Ex.*

Beer is bad stuff to get inside a planing mill or inside workingmen. The amount claimed for the boy's injuries is a good round sum. But if it results in prohibition being made the law not only of the mill, but individually of the men employed both in and out of the mill there will in the end be full return received for the \$10,000.

THE Winnipeg assessment rolls for 1891, which have just been completed, show the total assessment to be \$19,995,370, an increase of about a million and a third over last year's return. This increase is accounted for, partly by the large number of buildings erected during the past year, as well as improvements and repairs made to premises generally throughout the city and partly to the advance that has taken place in the value of outside property, a large proportion of which has changed hands at prices far in excess of former assessments, and something approaching a valuation has at last been imparted to all that kind of property. The exemptions remain at \$4,000,000 and the personal property assessment of \$2,375,000 show a slight decrease from that of last year. The population is 27,000.

AGENTS of the General Land Office, appointed in June last by Secretary Noble to investigate alleged large timber depredations in the Rainy Lake and Rainy River country, in Northern Minnesota, by both American and Canadian parties, have made their official reports. It is stated in the reports that such definite information of large depredations has been obtained as will enable the government to sustain actions at law against the trespassers. The yearly average of logs passing through the Rainy River is said to be between forty-five and fifty million feet.

WE have all heard of the well known Forth bridge of England, which it is claimed has more steel in it than any bridge that is or ever was. Canada is a "wooden country," so our old country friends say, and can claim the greatest wooden bridge extant. We refer to the Canadian Pacific Railway Company's new bridge at Milford, Manitoba. It is 3,300 feet long and 75 feet high. There were used in the work 1,300,000 board measure, 1,300 piles for supporting the trestle, and 150 piles for the abutments of the Howe truss of the great span. And it was all completed in five weeks.

THERE are from 30,000 to 100,000 olive trees along the confines of the Province of Gilan in Persia, which yield on an average 6 pounds to 90 pounds of olives per tree per annum or roughly a gross annual produce of 750,000 pounds. The value of the oil after a good harvest is from 1s. 2d. per bottle of two pounds at Resht or Teheran, whereas the maximum price paid after a bad harvest is about 3s. Rudbar, the centre of the production, is situated on the Safeed Rud, which from that point is navigable down to the exit into the Caspian Sea, during the greater part of the year, for strongly built barges or rafts and for flat-bottom boats. Every olive tree is subjected to a Government tax of about 1½d.

IN Buffalo, N.Y., complaint is made that mill men are cutting prices, and that every effort to remedy the evil has so far failed. Here as in almost every department of trade comes that bane of all trade—"cutting." Probably nothing that we can say will be half as effective as the efforts of their own people. We do say, however, in most emphatic terms that history has yet to record an instance where "cutting" in any branch of business ended in other than disaster. The rope may be longer in some hands than others, but there is an end to even the longest rope. The funny part is that men who are shrewd in every other way, and who put on the brakes to stop the leakages everywhere else do nothing to dam the greatest of all leaks—too often constantly widen the channel to give greater flow to the losses.

A CONTEMPORARY writes of the "coming timber," as we might expect a dry goods man to talk of the coming fashion in bonnets. It is the case however, that fashion changes in woods as it does, in a greater or less degree, in almost all other mundane things. Just now with our American friends the warmest appreciation is going out to the yellow pines of the southern States. The output is already nearly three-fourths that of white pine, and there are sanguine ones who predict that it will yet double that of its northern rival. Yellow pine is claimed to be susceptible of as high and beautiful finish as the white pines of the higher latitudes. Hitherto it has been regarded as too full of resinous gum and too coarse grained for fine wood working finish. The same idea is also prevalent in England. But this prejudice is quickly disappearing. It is said to be harder than white pine and more enduring.

IN another column we publish, along with a portrait of Hon. A. S. Hardy, a very complete summary of the report of the Commissioner of Crown Lands for 1890. It deals at considerable length with the marked development that has taken place in the mineral wealth of the province. To applicants in the districts of Algoma, Nipissing, Rainy River and Thunder Bay, who have filed plans, an area of mineral lands of up-

wards of 14,000 acres have been sold, for which upwards of \$28,000 has been received. The total collections for the year from woods and forests amounted to \$916,155.67, which includes \$135,479.53 on account of bonuses leaving the revenue from timber dues, ground rents, etc., to be \$780,676.14. The report will bear a careful reading by all engaged in lumber industries.

VANKLEEK HILL, a thriving village in the county of Prescott, is in high glee over the news that the Central counties railway company expect to have the line from Glen Robertson to the village completed by November next. The population is now about 2,000, and which it is anticipated will increase rapidly. Lumbering is carried on extensively in this region, and it is expected that the new railway line which is to connect at Coteau with the American system will enable the large dealers and holders of lumber to ship at any season of the year to Boston, New York and other cities in the United States. The railway company have a bonus of \$15,000 from the municipality of West Hawkesbury, and a number of small bonuses from farmers along the line. THE LUMBERMAN trusts that all the good things that our friends along the Ottawa anticipate from the increased railway facilities will be realized. Just see to it that you have got the railway solid—if such a thing is possible—on all its promises, so that some day when you most need its service, it will not kick back on you. Railway corporations, and heavily bonused ones too, have done that kind of thing before.

"SPEARING" for timber is a new industry, says a London paper, which has been developing for the past few years in Ireland, and is a form of timber prospecting never dreamed of some years ago, not even by "American pine hunters." Geologists know that immense tracts of what are now bog lands in Ireland were formerly covered with forests of oak and pine, and that in cutting peak immense trees of both these varieties are found embedded in the earth, at depths of 10, 20 and 30 feet. In some cases, whole groves are found standing just as they grew hundreds of years ago. A visitor to the wild region of Donegal thus describes the way in which the seekers after buried forests operate. Two men armed with long steel rods 30 or 40 feet long, traverse the bog, and by running the rods into the ground are able to find where the trees are to be found. They fix on a patch of land 20 or 30 feet square and cross it with their searchers north, south, east and west. Having searched across each way stabbing every foot of the inclosed space, they quickly learn whether it contains what they are looking for. The timber when obtained is, we learn, generally found to be perfectly sound, and the oak, which is as black as ebony, is used extensively for ornaments of jewelry and fancy cabinet work, and sells at high prices.

ONE of the best known lumbermen in the Dominion is Mr. J. W. Phillips, a resident of this city. He is the owner of extensive timber limits in Newfoundland, situated on the Gander river, near the island of Fago, on the north-east coast. He is owner also of a large mill at Point Limington, and is now engaged erecting a second mill, docks, etc., at a cost of about \$125,000. Though a resident of Toronto for upwards of thirty-two years, as a native of Newfoundland he takes a warm interest in all its affairs, practically shown in his large material interests in this colony. He has recently returned from a visit of some weeks to his native place, and to an ubiquitous interviewer has unbosomed himself on the possibilities of this colony that to-day is attracting world-wide attention because of her fishery affairs. He considers her agricultural capabilities second to those of no province in Canada. She is rich in minerals and timber resources. Combatting an idea, quite general, that the "extreme weather" is a drawback to the cultivation of the soil, he gives the official figures to show that when the mean temperature in Toronto marked 44.3, at St. George's Bay, Newfoundland it was 43.8, while at Winnipeg, Man., on same day it stood 30.8. It was at Bonavista, now a large harbor, distant from St. John, Newfoundland, about 100 miles, that Christopher Columbus, it is said, first set foot on land.





ELLI'S greetings to readers of the CANADA LUMBERMAN who are to be found in the wide Dominion, in nearly every state in the American Union, and reaching England, Germany and even far away India, a subscription coming to us this month from Burmah, India. I shall chat freely in this column about various matters pertaining to lumbering and kindred interests. Readers will have every opportunity given them to express themselves. Bright, shrewd sayings of the brightest and shrewdest of our business men—for where do you get them. If not in the lumber trades?—will be caught on the 'fly' by Eli as he wanders to and fro among the trade and will be recorded here. In a word it will be a page for the interchange of opinions with readers and writer, where without restraint each may feel free to say his own say in his own particular way. Your introduction to Eli.

"Take my word for it," said a lumberer to the writer a little ago, "there is not the slightest danger of the Americans tacking on an increased duty on lumber, should we reimpose the duty on logs. They want our lumber too bad."

"There can be no doubt," remarked Mr. A. H. Campbell, of the Muskoka Milling and Lumber Company, "that the yellow pine of the Southern States is going to seriously break in on the sale of Michigan pine. It will not fill the bill in every case where white pine is used, but it is a useful wood. The one great drawback will be transportation, but when there is the stuff to ship satisfactory arrangements can usually be made for shipping."

In the lumbering sections in the Ottawa region and especially out on the Pacific coast among the Indian villages and logging camps, I am told the census enumerators are having a jolly time. Two men will take an open boat with a supply of provisions and go to the Howe Sound to enumerate the population, and from there they will go northward along the coast as far as the upper end of Knight's Inlet, a distance of upwards of 300 miles. How would some of our city enumerators like the job?

"Just how far astray the daily papers will get," said lumberman John Donogh, "in their anxiety for news is shown in the boom that the city dailies are endeavoring to work up in building lines. Their prediction is that 1891 will prove a busy season and they cite the number of permits issued as proof. We are directly interested in seeing a lively trade done, and I wish the prognostications of the newspaper press were correct. The building permits are certainly a long way ahead of those of a year ago, but be it remembered that the fire limits have been widely extended within the year. Last season's building was not nearly represented by the permits registered at the city hall. There was building outside of the fire limits that these little documents told nothing about. This year the building is in the main covered by the permits."

I see that Mr. H. E. Clarke, one of the members for Toronto, drew the attention of the Legislature at its recent session to the extent of the timber cut in the Province. He quoted from statistics furnished by the Legislatures of Michigan, Wisconsin and Dakota, which show that these states, so it is stated, are so deficient in their timber that they cannot supply the home consumption for the next ten years, and also that New Hampshire and Vermont have virtually exhausted all their forests. "No one," said Mr. Clarke, "can find fault with the government if they cause to be cut down every stick of timber in the country, if it is done to make room for settlers, but such is not the case. It is being done to supply our neighbors to the south with an article that is growing scarcer every year, and must increase in value as time goes on."

I find in discussing trade questions with men engaged in any line of business that it makes a good deal of difference whose ox is gored. The color of our spectacles vary a good deal—sometimes. I had been spending a pleasant half hour in the office of a leading jobber in this city, a few days since, who in discussing the question of duty on logs, had no hesitancy in saying that it would be a serious blunder to reimpose the old duty. It would certainly materially affect his trade. I had not left this gentleman any length of time be-

fore I ran across a mill owner from the Midland district. "Well," said I, "how are things your way? Getting ready for a big season's trade?" No trade at all was the reply. The abolition of this export duty has completely killed mill operations. I have sold my mill to an American firm, and they have closed it down—so you can draw your own conclusion as to how the duty business works."

"Do you know," remarked one whose opinions on lumbering are worth something, "that the abolition of the duty on logs is going to raise a bigger noise than those Ottawa fellows ever dreamed of. It was a simple matter with one scratch of the pen to give away our forests to the Americans, but it will not be so easy to recover the ground that is now fast slipping from under us."

I had to confess that there was some cause for my friend's indignation, at the same time I asked him to read over the "Eli" page when the LUMBERMAN would get into his hands this month and see how a "house was divided against itself," some lumbermen holding to one view and others to the opposite.

"All this will not alter the cold facts that the mills in the regions directly affected by the measure are closing down one after another, hundreds of men are being thrown out of employment, and Michigan saw mills are both getting our logs and doing the cutting. Let me go back a little in history," said he. "You know that some six or eight years ago the Americans did this same kind of thing—they bought our logs, rafted them over to the Michigan shore and kept their big mills in a continued buzz. To give to our own people who surely have a right to the bounties of their own forests some show an export duty of \$2 per thousand ft. was placed upon Canadian pine logs by the Dominion Government. What was the result? Immediately our saw mills all through the Midland, Little Current, Spanish River, and other lumbering regions took on a big boom, and such men as Mr. Miscampbell, Cook Bros. and others were able to give employment to hundreds of working men. Our woods swarmed with them, villages thrived, store-keepers did a rattling trade, boats were kept running, and progress marched apace on all hands. I know what I am talking about when I say that this last movement of our government has changed all this, and the leading mills throughout the Midland, Little Current, Algoma and places along the north shore are as a consequence closed down, and will remain closed unless the duty is reimposed."

Hold on, I said, you are showing us one side of the shield only with a vengeance. Do you suppose that Sir John Macdonald, the father of the National Policy, a measure designed specially for Canadian industries and workmen, abolished this duty solely for the fun of the thing? Did he not get in return the reduction of from \$2 to \$1 import duty on Canadian lumber going into the States, thus giving encouragement to every manufacturer of lumber in the country—and especially in the region named by yourself—and as a consequence is not manufactured lumber being shipped to the States in increased quantities by our Canadian shippers? Reimpose the duty, have the import duty raised, and the trade with the United States in Canadian lumber will be seriously curtailed.

"The experience is all against you," persisted my irrepressible friend. "I will grant that shippers are doing an increased trade because of the reduction of the import duty, but mill owners are not getting any marked benefit. There is a surplus of sawed lumber in a large number of yards consequent on the depression of a year ago, and this is being shipped across the border to-day. This stock exhausted and shippers will feel the pinch just as the mill men do to-day."

Do you mean to say that our people will cease manufacturing? You know the old adage that it is easier for the mill to come to the logs, than for the logs to go to the mill. We have got the logs and the mills are planted beside them.

"This is very plausible and might count for something if certain special factors did not exist. (1) The Americans have their own saw mills on their own side of the lines—some very large ones—and they have got to keep them running. If it were not for this it would probably pay them to 'cut' in Canada, notwithstanding the dollar duty on manufactured stuff. (2) If the duty on logs remain off for any length of time, they will have sufficient lumber in their Michigan yards manufactured from Canadian logs, cut by their own workmen, in their own mills, these without costing them a cent of duty, to be perfectly independent of manufactured stuff from Canada. In a word what need will there be for them paying even one dollar duty on lumber, when they get the stocks in free of duty in the shape of logs and manufacture, if I may so put it, on their own premises?"

There seemed to be no "downing" our saw mill friend. He recognised the fact that the owners of timber limits had a large amount of capital invested in the woods of Canada, and that the abolition of the duty on logs meant that these gentle-

men were now getting a nice turn over on their investments and from their standpoint it was perhaps proper for the government to concede to them certain privileges. But was it right for them to do this at the cost of the complete ruination of other important interests, which if not representing so large an amount of capital—though no inconsiderable sum—was a business upon which depended the livelihood of hundreds of men and their families and the sustaining of thriving and progressive villages at many points in the Province.

"I am too loyal a Canadian" said he "to take any other view of the matter" and then he left me.

### THE EXPORT DUTY ON LOGS

INTERVIEW WITH A LEADING LUMBERMAN.

THE CANADA LUMBERMAN both in its editorial columns and also through its wandering scribe, "Eli," has a good deal to say in this number on the abolition of the duty on logs. It is the burning question in lumbering sections at the present time, and no apology is necessary for the prominence that we are giving it. Desiring to obtain the views of a well-known Canadian, one who is interested extensively both as the owner of limits and mills, your interviewer called upon Mr. John Bertram, president of the Collins Inlet Lumber Company, and one of the largest operators in the Georgian Bay region.

He was found in his office on Wellington street, and though up to the eyes in business, very cheerfully gave an audience and freely discussed the question.

"Let me say at the outset," remarked Mr. Bertram, "that there is no such quantity of logs being shipped from Canada to the States as is stated by the newspapers. The figure is placed at 160,000,000 feet. There will not be at the outside more than 80,000,000 or 100,000,000 feet shipped from Canada. I have heard names mentioned and figures given that are wide of the mark."

Do you not think, remarked the interviewer, that even though the figures may be exaggerated that sufficient will be shipped to have a hurtful effect on the lumbering industry?

"I do not," was Mr. Bertram's prompt reply. "So far as the Georgian Bay mills are concerned, I know that it is not so. When the proposition was made by the United States government to reduce the duty on manufactured lumber from \$2 to \$1, I think it was but a fair condition that we should abolish the duty on logs. Of course I should like to have seen entire free trade in lumber, and I can hardly fancy that there are two opinions among lumbermen on this point. I was in Saginaw, Mich., last week and was told of a large lumberman who purposes building a mill in Canada in order to cut his logs here. It costs \$1 a thousand to tow logs from Canada to the States, while the difference in the freight rates by vessel from the North Shore to Tonawanda, N.Y., is only 25 cents."

But is it not the case, was the enquiry, that the Emery Lumber Co., for example, have closed their mill at Midland?

"Yes," said Mr. Bertram, "but I would like to hear of any others. The Emery Lumber Co. were, with Mr. Miscampbell, owners of this mill. They are Americans, and own large mills in Michigan, and in order to keep these running they bought out Mr. Miscampbell's interest, closed down the mill in the meantime so that they could be assured of logs to keep their large mill on their own side busy."

Can you tell of any appreciable effect that the abolition of the duty is having on the Canadian lumber trade?

"What has been the cause of the depression in the lumber trade in Canada for the past few years?" said Mr. Bertram. "Why we have had no outlet for our coarser stuffs and you know we have immense quantities here. It has been a drug on the market. We could not export with \$2 export duty on this poorer stuff. We could not manufacture it into lumber for the \$2 import duty barred it there. It simply remained here doing no good to any one. I know now of even culls that are being shipped to the other side."

Do you anticipate, was asked, that in the event of the duty on logs being reimposed that the Americans, would retaliate by putting up their tariff and if so what would be the result?

"I can't speak for the American government," said

Mr. Bertram, "but it seems to me not unlikely. And if they did how would our mills fare then? We have got the logs, but the export duty would prevent shipping them as now; on the other hand no one could manufacture this coarse stuff here and ship it to the States with a practically prohibitory tariff against it. I trust that the Dominion Government are not so vacillating in their views as to make any change of policy in this respect."

"One word" at parting said Mr. Bertram, "some folks talk about the amount of money that is being taken out of the country the product of timber limits owned by Americans. In the first place these people bought their limits, have had to pay for them and surely should be allowed to realize on them in their own way. The country got the purchase money. But we are Canadians too, who are large owners of limits. Our money is locked up in these limits. As a Canadian I sell say \$200,000 of stuff which before was unsaleable, is this money going to remain idle in my hands? I have that much more money to place in circulation in our own country. There is a lot of nonsense talked on this question."

**ANDREW MISCAMPBELL M.L.A.**

ANDREW MISCAMPBELL M.L.A., for East Simcoe is a representative lumberman. His parents hail from the Green Isle, but in 1834 they came to Canada, and on 28th of June, 1848, in Simcoe County this promising legislator was born. He has quite a military record. He was engaged in the Fenian repulse as sergeant-major of the provisional battalion of companies from the north put together in Toronto. From 1864 to 1866 he was drill instructor of the volunteers of Simcoe. Eighteen years ago he went to Midland where he now lives, to take charge of the lumber business of Mr. H. H. Cook. Later he ran a saw mill on his own account, which since the new year he has sold to the Emery Lumber Co., of Michigan. At the last general election he contested East Simcoe with Hon. Charles Drury, then Minister of Agriculture, and counted the victorious candidate. He has a thorough knowledge of lumbering and as is shown by his part in the debates in the House, he has a good grasp of all public matters.

The following is an extract from his speech delivered at the last session of the Legislature during the Budget debate:

"In the estimates of the expenditures on public lands he expected to have seen a larger amount, because the timber lands were one of the greatest sources of revenue that the Province had. A short time ago, in one of the sessions of the House, the honorable leader of the opposition asked for an exploration party to see what amount of timber we had. That was a very fair request. No business man was afraid to take stock of his affairs, and they thought on the Opposition side of the House that the government should have acquiesced in this proposition. One gentleman had told them that they had timber enough to last for a century, and another member had said that the timber land and mineral resources would amount to \$200,000,000. And they said there was no danger of these becoming exhausted; just let the present system of their disposal go on. It had been stated that the prices for timber lands were lower this year on account of the depreciation in the value of lumber. True, the lumber interests were somewhat depressed. At the last sale of timber lands they had received only \$930 per square mile. At the preceding sale they had received \$2,800 a square mile. They received per mile last year about one-third what they received the year previous. Admitting that there had been a depression in the price of lumber last year, was it fair to assume that there was such a difference that timber would fall two-thirds in value per sq. mile? Was it not fair to assume that there were other reasons for this depreciation? Was not the lumber now being sold more inaccessible than that which had been sold before? Was the timber being disposed of at the present time of as good a quality as that sold in former years? When these two things were taken into consideration the cause of the depreciation would be better understood, and they

must remember that when they had received so much for the timber in the past they had sold the best land. The members of the House, who were responsible for the welfare of the Province, press upon the honorable gentlemen opposite for a judgment, as far as timber lands were concerned, similar to what they had given in regard to the mineral lands. They should withhold for the time being the timber lands. Let such a proposition be laid before the House. He would give the honorable gentlemen opposite every support for the best interests of the country. He would lift his country above his party. If he had to sink his individuality, his character, and principles for politics, he would let politics go. He hoped the Government would issue that commission and that there would be an exploration of the timber lands. By the legislation of the Federal Government a short time ago the export duty had been taken off logs, and the consequence was that large quantities of timber were being taken across the line to the other side and sent to the mills. If the lumber was of value to the people of the United States,



ANDREW MISCAMPBELL M.L.A.

it was of greater importance to Ontario to know just how much of it she had. They were told by some gentlemen that they had obtained an estimate of the value of the timber. He would like to see the estimate that the honorable gentlemen opposite were talking about. True, Col. Dennis had gone through the country and made some kind of a report, but he had never made a careful estimate. They had been told time and time again, they had heard it on different platforms, that the Opposition had never objected to a dollar being expended in the way he had been speaking of. He did not know whether exception had been taken to such an expenditure or not. One reason why they had not done so was that the matter had not become public, because it had been discussed at a committee and not on the floor of the House."

**HOW TO PILE HARD WOOD.**

TO know exactly how to pile hard woods to secure quick results and prevent checks, strains and mold is more of a science, says the *Timberman*, than most people imagine. For instance, oak, ash, hickory and other tough woods must dry very slowly, and therefore when piled must be crossed with very thin sticks, placed closely together, in order to get it dry as slowly as possible. The soft woods, like basswood, pine and poplar dry more quickly, and there is not so much danger of checking. No hardwood pile should be more than six or eight feet wide. The front part of the foundation should be at least two feet from the ground, the back about eighteen inches. A space of at least two feet should be left between the piles. Begin the pile by leaving a space between each board, and continue to do so until the top is reached. Place the cross sticks about four feet apart and directly over each other. Put the sap boards with sap down and on the outside of the pile. Cross-sticks should never be more than three inches wide and thoroughly dry, and the front sticks should be placed so as to project about an inch beyond the ends of the lumber. This allows just enough moisture to collect to prevent the stick drying too rapidly on the ends, or faster than other portions of the pile. When a pile is completed, the top should be covered in a substantial manner to protect the lumber from rain and sun. This covering should project from each end of the pile, and also over each side.

**BRITISH COLUMBIA LETTER.**

**A REPLY TO THE HASTINGS MILL—A BUDGET OF NEWS NOTES—THE EXPECTATIONS OF TRADE.**

My first care in this letter is to make a short reply to "A.P." of Vancouver. The Hastings mill, last year cut as near 30 millions as can be counted. Since being repaired it can cut 150 M per day, easily, and pushed, 200 M. This is in 10 hours, and it will give 45 millions per annum if you multiply it by 300 days. By running nights as well, double this amount can be produced. "A.P." ought to have seen that an error, or misprint had crept in somewhere the value of product at \$1,750,000 and not wasted half a column of your valuable space in discussing it. The 35 millions I put down as being cut by 3 mills of the R. C. P. Mills Co. is correct. The Hastings is the fourth mill belonging to this company, and "A.P." does not seem to be aware of this.

**NEWS NOTES.**

Wm. Mackay, of Ottawa, paid a visit to this coast this month.

The Shuswap Milling Co.'s mill at Kamloops was started up this month.

The Revelstoke Lumber Co. has added new and improved machinery to their mill.

The lumber export market is still quiet on account of the scarcity of tonnage. Freights are very high for the few vessels that offer. A good local trade is being done by all the mills.

The cut for 1890 of Knight Bros.' mill at Popcum, on Fraser River, was 812 M feet of lumber, 500,000 shingles and 8,000 fruit boxes. These latter were used at Chilliwack for the packing and shipping of fruit.

Elmar Ward's shingle mill has started up again this month, and shipping to Winnipeg and the North-west has begun. He has received very flattering letters re the quality of his shingles and expects a good summer's trade.

Hughitt & McIntyre's new mill at Genoa, on Cowichan Bay has just been started. The capacity is 125 M per day. Six million feet are in the booms, and contracts are let for 16,000,000 feet to be delivered them this season.

Andrew McLaughlin, manager of the Pacific Lumber Co., has returned from a trip to Eastern Canada where he succeeded in getting the necessary stock for his company subscribed. Machinery, etc., will be forwarded shortly and construction will begin as soon as it arrives.

There will be a busy season in building operations in Vancouver. Among the larger works are the Bank of British Columbia building, new post office, the hotel Metropole and Y.M.C.A., and among the buildings announced for the summer are the C.P.R. general offices and the Hudson Bay Co.'s block. Nearly the whole of Water street will be built up including a block by C. G. Major, and a number of new blocks are in contemplation on Cordova street.

Several new saw mills are talked of in the Province, at Liverpool, opposite McLaren-Ross mill; at Hall's Prairie; one by Clarence Debeck, a late partner in the Brunette Saw Mill Co., on the north-west coast of the mainland, with a capacity of 100,000 feet per day; one by N. Slught & Co., late of Michigan, at Steveston, near mouth of Fraser River; one by C. L. Street & Co., at Chilliwack, now almost ready and making a specialty of box lumber. The Victoria Lumber and Manufacturing Co.'s new mill at Chemainus, began cutting early in April with a capacity of 200,000 per day. The Brunette saw mill has started again after completing some improvements and alterations. The McLaren-Ross mill is in full operation.

The cut of the Vancouver Saw Mill Co. for 1890 was 4½ million feet. The mill only ran five months or so. Extensive alterations have been made to greatly increase this output. H. G. R.

New Westminster, B.C., April 25th, 1891.

Oak timber loses about one-fifth of its weight in ordinary seasoning, and about one-third of its weight in becoming perfectly dry.

TRADE REVIEW.

Office of CANADA LUMBERMAN, April 30th, 1891.

TRADE is marked this month with a certain measure of activity consequent upon the opening of navigation. There has been more than the usual volume of shipping to Oswego, especially of common lumber. Prices are if anything on the low side, an advance of ten cents on shingles being the only deviation from those that prevailed a month since.

Local trade is somewhat slow. Whilst there are a considerable number of large contracts out for the erection of public buildings, which will make work fairly brisk, yet these are scattered over a period in some cases of several years, and the benefit is only reaped gradually.

The construction of J. R. Booth's new mill on the Chaudiere will be an event in lumbering of more than local moment. This mill, when finished, will be one of the largest and finest in Canada, and among the first in price.

The lumber shipped to the States from Ottawa and Carleton Place during the three months ending March 31st as shown by the official returns, amounted to \$593,000, as compared with \$203,000 for the similar three months last year.

Word comes from New Brunswick, through Robert Connors, the St. Frances lumberman, that the cut of the present winter on the St. John river and its tributaries will not exceed 150,000,000 feet, and unless the freshet is very heavy it is doubtful if all this comes out.

UNITED STATES.

Our lumbermen across the border are not hopeful at the opening of the season of a very brisk trade. Building has not started up with any show of activity—especially in the Eastern States. One cause of this no doubt is the anticipated strikes nearly all along the line.

FOREIGN.

The Timber Trades Journal says that much interest centred around the quantity of Canadian goods offered on the market on 15th ult. "Of these a largish line of Montmorency 3rd spruce, a good representative parcel, were keenly competed for, although the competition did not take a wide range, being confined to a few of the regular dealers on the front seats.

market price; the longer lengths, viz., 14 ft. to 16 ft., went at from 5s. to 7s. 6d. a standard more, these latter being scarce in the better class of goods. We were rather surprised to see the 3rd Saguenay, a coarse lot, making as much as £6 5s., but we suppose it was from the fact of their being 12 ft long."

Toronto, Ont.

TORONTO, April 30, 1891.

CAR OR CARGO LOTS.

Table listing lumber prices for Toronto, Ont. including items like 1 & 1 1/2 in. Cut up and better, 1 x 10 & 12 dressing and better, etc.

YARD QUOTATIONS.

Table listing yard quotations for Toronto, Ont. including items like Mill cull boards & scantling, Shipping cull boards, Scantling & joist, etc.

Ottawa, Ont.

OTTAWA, April 30, 1891.

Table listing lumber prices for Ottawa, Ont. including items like Pine, 1st qual., 2nd, shipping culls, etc.

Montreal, Que.

MONTREAL, April 30, 1891.

Table listing lumber prices for Montreal, Que. including items like Pine, 1st qual., 2nd, Hemlock, etc.

Oswego, N. Y.

OSWEGO, April 30, 1891.

Table listing lumber prices for Oswego, N. Y. including items like 3/4 inch uppers, Pickings, No. 1 cutting up, etc.

Siding.

Table listing siding prices for Oswego, N. Y. including items like 1 in siding, cutting up, 1 in dressing, etc.

1 x 12 Inch.

Table listing 1 x 12 inch lumber prices for Oswego, N. Y. including items like 12 & 16 ft. mill run, 12 & 16 ft. No. 1 & 2 barn boards, etc.

1 x 10 Inch.

Table listing 1 x 10 inch lumber prices for Oswego, N. Y. including items like 12 & 13 ft. mill run, 12 & 13 ft. No 1 culls, etc.

1 x 8 Inch.

Table listing 1 x 8 inch lumber prices for Oswego, N. Y. including items like Mill run, mill culls out, Dressing and better, etc.

1 x 6 Inch.

Table listing 1 x 6 inch lumber prices for Oswego, N. Y. including items like 6 7 or 8 mill run, mill culls out, 6 7 or 8 drsg & better, etc.

Shingles.

Table listing shingle prices for Oswego, N. Y. including items like XXX, 15 in pine, Clear butts, etc.

Pickets.

Table listing picket prices for Oswego, N. Y. including items like No. 1, 1 x 1 1/2, No. 2, etc.

Lath.

Table listing lath prices for Oswego, N. Y. including items like No. 1, No. 2, etc.

St. John, N. B.

ST. JOHN, April, 30 1891.

Deals, Boards, Scantling, etc.

Table listing lumber prices for St. John, N. B. including items like Spruce deals, Pine, Deal ends, Scantling, etc.

Shingles.

Table listing shingle prices for St. John, N. B. including items like Spruce, extra, clear, No. 1 extra, etc.

Clapboards.

Table listing clapboard prices for St. John, N. B. including items like Pine, extra, clear, ad clears, etc.

Flooring, Dressed.

Table listing flooring prices for St. John, N. B. including items like 6 in. No. 1, No. 2, etc.

Miscellaneous.

Table listing miscellaneous lumber prices for St. John, N. B. including items like Staves, Heading, etc.

Albany, N. Y.

ALBANY, N. Y., April, 30 1891.

Hemlock.

Table listing hemlock prices for Albany, N. Y. including items like Boards, 1 x 10 in. each, Joist 4 x 6, etc.

Pine.

Table listing pine prices for Albany, N. Y. including items like 2 1/2 in. and up, good, 4ths, Selects, etc.

Shingles and Lath.

Table listing shingle and lath prices for Albany, N. Y. including items like Shingles, shaved pine, Sawn, extra, etc.

Buffalo and Tonawanda, N. Y.

BUFFALO, April, 30, 1891.

Norway.

Table listing Norway lumber prices for Buffalo and Tonawanda, N. Y. including items like Clear, 1 in. & clear, Dressing, etc.

White Pine.

Table listing white pine prices for Buffalo and Tonawanda, N. Y. including items like Upr. 1 1/2 in., 2 to 2 in., etc.

Shingles.

Table listing shingle prices for Buffalo and Tonawanda, N. Y. including items like XXX, 1 1/2 in., etc.

Table listing various lumber prices for Buffalo and Tonawanda, N. Y. including items like XXX, sawed, C.B., No. 2, etc.

Boston, Mass.

BOSTON, April, 30, 1891.

Western Pine—by car load.

Table listing western pine prices for Boston, Mass. including items like Uppers, 1 in., 1 1/2 & 2 in., etc.

Eastern Pine—Cargo or Car Load.

Table listing eastern pine prices for Boston, Mass. including items like Nos. 1, 2 & 3, clear, etc.

Spruce—by Cargo.

Table listing spruce prices for Boston, Mass. including items like Scantling and plank, random cargoes, etc.

Lath.

Table listing lath prices for Boston, Mass. including items like Spruce by cargo, etc.

Shingles.

Table listing shingle prices for Boston, Mass. including items like Spruce, 1 1/2 in. extra, etc.

## ONTARIO.

—Rafting has commenced at Morrisburg.  
 —Only one mill running at Midland as yet.  
 —Building prospects at Midland are promising.  
 —The two mills at Hespeler are running over time.  
 —Successful logging at Coldwater for Trask & Lakin.  
 —The mills at Burk's Falls are making ready for work.  
 —There is a large stock of logs in Mr. Markle's millyard, Dalrymple.  
 —Waubashene mills are in a good state of repairs and ready for business.  
 —The saw mill of Mr. Richard Olmstead, at Waters' Falls, is kept busy.  
 —Messrs. Ford & Co. are erecting a large planing mill at Sudbury, Ont.  
 —The water in the river at Young's Point has not been so high for years.  
 —Mr. Cullis, has floated over 300 logs down the Maitland river at Auburn.  
 —The circular saw mill at Hurdman's, on the Ottawa, has commenced work.  
 —Mr. McQuaig, Clinton, shipped 16 cars of timber the second week in April.  
 —Drivers are being hired on the Ottawa this spring at from \$20 to \$26 per month.  
 —W. J. Lackey's saw mill is in full blast and doing a good business at Cheesville.  
 —Mr. James A. Sharp is removing his lumber mill from Inglewood, to Sudbury.  
 —Mr. Playfair's mill, Sturgeon Bay, has started for the season with a large stock.  
 —The Parry Sound Lumber Co. are preparing their water mill for early spring trade.  
 —Better wages it is claimed are being paid Michigan lumberers than those in Canada.  
 —Railway ties for use in Ottawa and vicinity are being floated down the Castor river.  
 —Mr. Aaron Stewart, of Orillia, had his hand badly cut by a saw in his mill a week since.  
 —Things are being made ready for the starting of James Playfair's saw mill, Sturgeon Bay.  
 —Mr. W. H. Leonard has sold his mill property at Hope Bay, to H. C. Rich, late of Goderich.  
 —J. E. Rolston's saw mills at Metcalfe are running full time again and turning out good work.  
 —A considerable quantity of timber has been rafted down the Scotch river at Riceville this spring.  
 —An enormous quantity of logs have been taken out and laid upon Commanada creek this season.  
 —A new planing mill is being erected in Meaford on the site of the one recently destroyed by fire.  
 —Shipping by barges has commenced at Ottawa, giving employment to a goodly number of men.  
 —Mickle & Dymen's big mill at Barrie has commenced the season's sawing. A large trade is done.  
 —The new saw mill at Powasson is buzzing, and a number of new houses are being built in the village.  
 —The Rathbun Company recently purchased 250,000 feet of lumber in the neighborhood of Calabogie.  
 —Mr. W. J. Fenton, Leitrim, Ottawa section is doing an extensive business in sawing logs for custom.  
 —Mr. Wm. Higginson, of Inkerman, has begun sawing this season's logs brought down the creek lately.  
 —F. J. Fox, of Wheatly, has thoroughly overhauled and repaired his saw mill and is now running steadily.  
 —Messrs. Cluff & Bennett of Seaforth are erecting a large new addition to their planing mill and paper factory.  
 —Messrs. Conroy Bros.' mills at the Deschenes, Ottawa district, are being put in order for the season's work.  
 —The paper and pulp manufacturers are asking the Minister of Customs to place an export duty on pulp wood.  
 —The McQuatt mill on the Nation managed by Mr. Toye is now in full blast, and will have a large turn out this year.  
 —The Rathbun Company are busily engaged peeling the poles for the new telephone line from Hastings to Peterboro'.  
 —The Thomson Bros., of Fort William have set up in the township the new machinery for the saw mill for Grayson Bros.  
 —Vansickle Bros., of Barrie, are building a new mill. Mills in this vicinity are commencing to get into active operation.

—R. Adams, of Vine, has the contract to supply 40,000 feet of lumber for summer residences along the shores of Lake Simcoe.  
 —The schooner *Woodduck* has undergone repairs and will be engaged during the season in the lumber trade on the Bay of Quinte.  
 —The saw mill at Cranbrook, Grey Co., is running full time. There is a big stock of logs in the yard. The owner, is a pusher.  
 —Mr. Walter James, of Cottam, is about purchasing 2,400 acres of timberland in Missouri. He is already a large holder there.  
 —About 300,000 feet of lumber at Midland, the property of the Ontario Lumber Company was destroyed by fire on the 8th ult. Insured.  
 —McLaughlin Bros., of Arnprior, have a gang of fifty-five men at work on the drive commencing at Alymer Lake on the Madawaska.  
 —The gangs in the lumbering shanties on the Upper Ottawa have nearly all returned home, having completed their winter's work.  
 —Large quantities of elm timber have recently been shipped from Craigvale to Thorold where it will be manufactured into fruit baskets.  
 —It is said the mills at Midland will be run only half time this summer and that the large one at Victoria Harbor will stand still for the season.  
 —Mr. David Gillies, lumberman, Carleton Place, states that his men had cut about 40,000 feet of logs on the Temiscamingue and the Coulonge.  
 —On 13th inst., Charles Edwin Grove, clerk in the Rathbun Company store, Deseronto, died of pneumonia at the age of 51 years, after an illness of eight days.  
 —Orr Bros., at Maidstone Cross, have their mill going in full blast now; but owing to the scarcity of snow last winter they have not a very heavy stock on hand.  
 —Pierce & Co. are advertising their large mills and water-power at the Chaudiere, with a large area of valuable limits, which will be put up at auction there on May 27th.  
 —Messrs. Gow & Hopewell are fitting up the old saw mills at Johnstone's mills, Ottawa district and will shortly begin operations as a saw mill and sash and door factory.  
 —The Fairview mills near Barrie have been re-built and plans are laid for a heavy summer's work. An immense stock of logs, chiefly oak, has been put into the yards.  
 —Some changes in the present arrangement of buildings owned by the E. B. Eddy Co'y are on the tapis. The sash factory is to be converted into a wood and paper box factory.  
 —The timber of Mr. Geo. Simser, of Russell, going over the dam is creating a bigger excitement in the village than a circus. A local paper says that the fair sex are much interested.  
 —Mr. George Rowland, who was head sawyer at the Warren mill for the last eighteen months has taken charge of a saw mill for the Georgian Bay Lumber Co., at Severn Bridge.  
 —The first two tows of the season arrived at Ottawa on 22nd when the tug E. B. Eddy steamed to the Chaudiere docks with three light American bottoms to load lumber for Whitehall, N. Y.  
 —Mr. James Holmes, of the 16th concession of Elma, the other day brought in a pine saw log to the Monkton mill, which was 12 feet long and contained 840 feet of timber. Beat it, somebody.  
 —The steamers *Active* and *Hope* of Landers Landing with scows are loading hay for the northern logging camps. Hay is getting scarce and is now selling at \$12.50 per ton, oats at \$35, wheat at \$32.50, and potatoes \$20.  
 —An average of 25 cars of elm logs arrive at Walkerville, daily, over the Lake Erie & Detroit River Railroad. The logs are dumped into the Detroit river and towed to various hoop and stave mills along the American shore.  
 —The Huntsville *Forester* says that Heath, Tait & Turnbull want to cut thirty million shingles this summer, and in order to accomplish this big work have arranged to put on two gangs and run night and day all summer.  
 —Mr. Amos Wood, who had a contract of making shingles for the Imperial Lumber Co., of Warren, has taken Joseph Vincent in as partner in the business and have increased their force to nearly double the number.  
 —Half a million feet of lumber belonging to three Midland firms was burned on 9th inst.

—A detachment of sixty men have left Ottawa from Bronson's limits on the Madawaska, to bring down "the drive." They are being paid a dollar a day, which is the highest wages paid at present for good hands to bring down timber.  
 —Mr. Hamilton, of Fergus, has nearly 30 men engaged taking the wood out of the river. He floated down about 1,850 cords from Luther, Proton, &c., and this has to be taken out and piled up before the saw logs and ties come down.  
 —Never before in the history of Wingham were there so many saw logs in the mill yards of the town. All three of the mills are now being run at their fullest capacity. Messrs. Button & Fessant are sawing maple blocks for the old country market.  
 —Mr. James Sterling, of Ottawa ward, has returned home from the Michigan lumber woods, where many Canadian shantymen spent a prosperous winter. He states that good wages are being offered for the "drive," which has now commenced in that section.  
 —Mr. R. Smith, who used to lumber on the Petawawa, has been jobbing for the Ontario Lumber Co., at Commanda Lake during the past season, and up to the 1st of April got out 38,049 pieces, measuring 5,641,413 feet, the finest description and about the best in the market.  
 —Within the past eight months R. Miller, Wroxeter, has at various points on the line of the Canadian Pacific Railway loaded upwards of 140,000 railway ties, representing a total of about 700 cars, besides a quantity of other timber. Mr. Miller is now at work on the Ontario & Quebec division.  
 —Messrs. I. N. Kendall & Son have opened offices in Ottawa, opposite the C.P.N. wharf, as millwrights, draughtsmen and designers. Mr. I. N. Kendall, senior partner of the firm, has been in this class of business for over thirty-two years, and has built and designed most of the large saw mills in the district of Ottawa.  
 —The Bigelow saw mill, on Pigeon Lake, will soon have disappeared. Held by the Ontario Bank for debt, it has been disposed of bit by bit. The limits have been broken up and sold to various parties, and the engine, boiler and machinery has been purchased by Mr. Hazlitt, of Peterborough, and removed to his mills at Harwood.  
 —The William Hamilton Manufacturing Company, Peterborough are interesting themselves in having an American manufacturing concern establish works in Peterborough for the manufacture of shingle mill machinery. The machinery is at present manufactured by a company in the United States, where some 300 men are employed in the works. The company wish to establish a Canadian branch and will bring with them valuable patterns for which they hold the patents.  
 —The Manitoulin don't indulge in big egg stories. Lumber is their eggs. The boys of the T. Pickard's camps (Sudbury.) contractor for the Emery Lumber Co., have been telling of a big haul—a load of logs containing 8,253 feet (18 logs) as the largest load of logs that has ever been hauled in Canada, over an ordinary log road. The Manitoulin *Expediter* goes one better by saying there was hauled at Howry's camps a load that beats this by a dozen tons or so. The lunks on the sleigh were fourteen feet wide, and were loaded eleven tiers high. There were 110 logs, two-thirds of them 16 feet long, and averaging 12 inches in diameter. The team belongs to Howry & Sons and was driven by Bill Haner, of Manitowaning. Snow had to be shoveled into the road in places to make a track. Those who doubt this, can go into Henry Peter's studio and see a photograph of the load and count the butts. Now just hold on, you fellows from Manitowaning until we hear from the Ottawa, or say British Columbia. You never heard an egg story yet that somebody couldn't get ahead of.  
 —One hundred and thirty men are at present engaged in the construction of Mr. J. R. Booth's new mill at the Chaudiere. This mill when finished in July will be without exception, the largest and finest in the world. It will have the largest capacity, and the machinery will be the most modern and best adapted for turning out lumber in big quantities. The leading improvements in the mill will be the 13 new band saws introduced. The largest number of band saws used in any mill in the world at present is 10 and they are in a mill in Minnesota. These band saws set in position cost over \$5,000 each, making an expenditure for Mr. Booth on these saws alone of about \$65,000. Besides these 13 band saws there will be two twin circulars and two wicks gates used. In the past only one wicks gate has been used. The band saws are being introduced for the great saving they afford in the cutting of the lumber. Where eight boards are sawed now, nine will be sawed by the band saws. An interesting feature of new mill will be the provision made, if necessary, to save the saw dust and prevent its falling into the river. About 1,500 men will be employed by the firm this summer.

## QUEBEC.

—Messrs Willis & Co. of Lonsborough, have shipped to Pointe Levi, Que., three carloads of square timber.

—Quite a large quantity of spool wood was manufactured at Murray Bay and Bay St. Paul during the winter.

—A Montreal builder, named Wm. Byrd, has been granted a settlement by creditors at 30 cents on the dollar, payments spread over twelve months and bearing interest. Liabilities are about \$15,000.

—In some parts of the Eastern Townships of Quebec cutting soft timber from which to make pulp-wood to be used as paper stock is quite an industry. At Scotstown the average shipment by rail, according to the Sherbrooke *Gazette*, is about 33 carloads per week, besides what comes into the mills at that place. The Salmon River Pulp Co. are filling up their yards with a large quantity.

## NEW BRUNSWICK.

—The Gibson mill (formerly McLaggan's) at mouth of Bartholemew River, Blackville, has commenced cutting.

—The New Brunswick mills are getting down to the season's work. The Snowball, Muirhead, Ritchie and Nelson mills have all commenced work.

—The Fredericton boom is now ready to take all lumber as fast as it comes. Compared with last year it is said the boom business will be much smaller.

—Mr. Geo. McKean purchased from W. C. Purvis, of the Purvis mill, Carleton, the entire cut of that mill for the season, in all amounting to about three million feet. The lumber is intended for shipment to European markets.

The Maritime Chemical Pulp Company's mill, of Chatham, has had its capacity doubled. Two new digesters, in which the pulp boiled in a chemical solution, are going in, and the old ones are relined with cement, lead lining having been discarded after a fair trial.

—The contract for log driving on the St. Johns, N. B. has been awarded to Mr. Fred Moore. The rates are as follows: from the head of Grand Falls, 20 cents; from the Mouth of Salmon River, 18 cents; from the boundary line on Aroostook River, 20 cents; from the mouth of Tobique River, 16 cents; from the mouth of Big Presque Isle River, 13 cents; from the mouth of Becaguimac River, 13 cents; from the Mouth of Meaduxnikeag River and all points below, 11 cents.

## BRITISH COLUMBIA.

—Mission, B. C., will have a sash and door factory running in about a week.

—The Morton mill, south of Cloverdale, anticipates a large trade in lumber and shingles this season.

—The Brunette saw mills, New Westminster, B. C. have made their largest shipment of the season, consisting of fourteen carloads.

—A boom of logs said to contain 600,000 feet of lumber was recently brought into New Westminster. The enormous boom came from the north and is one of the largest ever taken in at that port.

—Mr. E. Ward who owns the shingle mill on the North Arm New Westminster is building a tug for river work. She is 66 feet long, 16 feet beam, 6 feet depth of hold and will be fitted as a sidewheeler.

—The Dominion government is placing a considerable quantity of timber lands on the market in British Columbia. Tenders are now invited for a license to cut timber on a well wooded limit in the New Westminster district.

—The formal transfer of Hastings Saw Mills and Royal City Planing Mills in this city, to the British Columbia Mills, Timber & Trading Co., has been made. Mr. John Hendry will retain the general management of the company.

—The MacLaren-Ross Lumber Co. are starting four new logging camps on Campbell River, where they have a magnificent timber limit. The logs will be got out for the North Pacific Mill on Burrard Inlet, and the MacLaren-Ross Mill, New Westminster.

—The ship Titan, of Boston, recently cleared from Vancouver, B. C., loaded with 752,000 feet of rough lumber from the Hastings saw mill at that place bound for Wilmington, Del. The lumber is for the U. S. Navy. This shows the superior value of British Columbia lumber for use in ship building.

—The Brunette Saw Mill Co. of New Westminster, B. C. have made application to the Chief Commissioner of Lands and Works for a license to cut and carry away timber from the following described land in New Westminster District, viz Commencing at a post on the south side of the river emptying into the head of Pitt Lake and about a 100 yards up from its mouth; thence north 40 chains, west 40 chains, north 80

chains, west 80 chains, south 80 chains, East 40 chains, South 40 chains, to shore of lake, thence following shore to point of commencement.

—A fine new tug the *Comet* for the Royal City Planing Mills, Westminster, which has been building for some time, was launched from the company's yard a few days since. She was designed by Mr. A. McNair. The dimensions are as follows; Length over all, 85 feet; breadth of beam, 16 feet; depth of hold, 7 feet. The engines are compound, 10x20, with 14 in. stroke, and were manufactured by the John Doty Company, Toronto. The addition of this fine steamer to the company's fleet gives the Royal City Mills Co. the largest number of steamers owned by any one milling establishment on the Pacific Coast. These mills are running over time to keep up with the heavy demand for their out put.

—Timber, says the B. C. *Commercial* instead of being imported in the rough log and cut up there, is now sent to England in a more and more finished state, to the saving of freight and carriage, and with greater convenience in handling and stowing. According to a circular of one of the largest houses, last year showed a great and increasing import to Great Britain of all kinds of timber ready cut, to special shapes, with a corresponding diminution in the old business in solid logs. Sawn timber in brief is rapidly gaining the ascendancy. As compared with 1889, the total imports showed a decrease of 17 per cent.; and the consumption at the same time fell off by 7 per cent.

## MANITOBA AND THE NORTHWEST.

—The indications point to an early opening of navigation in Manitoba.

—A lumber yard and planing will be started at Carberry immediately.

—J. T. Simpson, lumber, Moose Jaw, N. W. T. has assigned in trust to Herbert Crowe.

—Campbell & Stevens, lumber, Glenboro, Man., have opened a branch lumber yard at Stockton.

—Fred Robinson has sold out his interest in the Robinson Co. lumber firm of Selkirk, Manitoba. The remaining partners are offering to sell out.

—A lively logging business will be done on the Bird Tail creek in Manitoba this season. A number of men have already been engaged for log driving.

—Moore & Macdowall of Prince Albert, Sask., have commenced the shipment of lumber. The new railway gives an outlet for the great forest north of Prince Albert.

## FIRES AND CASUALTIES.

A sawyer in the Star mill, 16 con. of Grey has had his foot badly smashed.

An Indian lad named Porte employed in Dr. Sibbalds trust, near Newmarket, was crushed to death by a tree falling upon him.

Joseph Walden, a sawyer in Seiberts sawmill, Logan, near Mitchel was killed on 14th Apl. by falling against a circular saw.

Wm. Kirby, a driver for the Rathbun Company, Kingston, was thrown from his cart which passed over him, breaking his leg.

Half a million feet of lumber belonging to three Midland firms was burned on 9th ult. The Ontario Lumber Co. is the heaviest loser.

T. Sheles of the Mechanics mill, New Westminster, B. C. has had his hip seriously injured by coming in contact with a circular saw.

Patrick Malia, who is well-known in the Ottawa district as an expert hunter and bushman, has been committed by the Magistrate at Arnprior as a dangerous lunatic.

Two of Graham, Horn & Co's. workmen have been obliged to take to the Pt. Arthur hospital, one suffering from a severe cut in the head caused by a falling tree striking him, and the other from a cut in the foot from an axe.

While Mr. Copley, of Kirkton, was driving through the woods on 9th ult on a load of logs with his 8 year old son the latter fell off, and a log following struck him on the head, fracturing his skull he only lived a short time.

At Langille's sawmill, Mahone Bay, N. S. on 10th ult Mrs. Joseph Ernest found her husband's body in a standing position in the dam when she went to give him his dinner. His head was only a few inches under the water. The supposition is he was on a small raft getting a log to haul up and the raft parted and he went down feet first.



Chas. Henderson, government bush ranger, has been spending a little time in the Muskoka region.

Mr. J. Cromwell Cox, of the lumber firm of R. M. Cox & Son, Liverpool, England, is in Canada on lumbering business.

Walter James, of Cottam, has left for Tennessee to look after his track of timber, some 1,600 acres.

Mr. James Angus, formerly of Warren, Ont., has left to take charge of a large American saw mill.

Mr. Snowball, New Brunswick's well-known lumberman is expected home from England early this month.

Mr. C. A. C. Bruce, of the Maritime Chemical Pulp Company left Chatham N. B. for Europe 24th ult.

Mr. E. H. Cooke for eight years in the cedar mill department of the Rathbun company at Deseronto has removed to Toronto.

—Lieut. Col. Forsyth well-known among the lumbering men of Ottawa and Hull, has been sworn in Collector of Customs at Quebec.

Mr. Edward Ryan, sawfiler at Bronson & Weston's mill, and for many years well-known at the Chaudiere, died during the month after a lingering illness.

Mr. Wm. McKay, the well-known Ottawa lumberman, accompanied by Mrs. McKay, son and daughter, recently visited Manitoba, the Pacific coast and Minnesota.

Mr. E. Walter Rathbun, of Deseronto, Ont., is home from his California trip. He was deeply impressed by the illimitable resources of that part of the continent.

Mr. Leo Gregory, head sawyer at the Royal City Mills, New Westminster, B. C., is visiting friends in the old country. He will call at London, Eng., Madrid, Paris, Rome, and Jerusalem, not forgetting to visit his aged parents at Bilboa, in northern Spain, before returning home. He will be away about four months.

On Sunday April 12th inst., Mr. Henry Witbeck, a well-known Chicago lumberman, counted a victim to la grippe. He was a public spirited citizen, serving at one time in the city council.

Mr. C. D. Pickles, of Messrs. Pickles & Mills, dealers in lumber, Annapolis, N. S., has recently visited the West India Islands and the Guianas, making a careful survey of the lumber markets.

THE LUMBERMAN was favored with a call during the month from Mr. W. C. Penoyer, of the well-known lumber manufacturing firm of Penoyer Bros., Au Sable, Mich. He reports the lumber business prosperous in that state.

We were pleased to have a call during the month from lumberer Geo. Fulton, of Clifford. He reports trade quiet, but has on hand a good stock of logs. He added, "I am very much pleased with THE LUMBERMAN and get considerable information as well as news from it." And backed up his appreciation by promptly renewing his subscription.

Mr. Robert H. Klock, one of Canada's well known lumbermen, died at his residence in Aylmer, during the past month. For some time he had been suffering from erysipelas. Deceased was a native of Aylmer, born 9th Jan., 1823. He owned large limits on the Ottawa river, and carried on extensive operations on the Black river, and in connection with his limits there, erected mills at Mattawa. He was a Conservative and a Presbyterian.

Professor Brown, late of Guelph, now Professor of Agriculture in Western Australia, has been making a tour of inspection of the timber wealth of the lately delimitated province, and as a result he reports to the Government that the timber ready for cutting is worth not less than \$500,000,000. Much of this timber is of the most valuable kind in size, strength, and indistructability by rot or borers.

Mr. E. B. Ackerman of Darry, B. C. is dead. The deceased gentleman, father of Messrs. O. B. and T. Ackerman the well known contractors and mill owners, was a native of Erie, Pa., having been born there in 1821. He went to British Columbia about eight years ago and settled on a farm at Upper Sumas, remaining there until last September, when failing health decided him to make Westminster his home. The deceased leaves a wife and six children, four of whom reside in British Columbia and were present at his bedside when death closed his eyes.

WANTED AND FOR SALE.

Advertisements will be inserted in this department at the rate of 15 cents per line each insertion. When four or more consecutive insertions are ordered a discount of 25 per cent. will be allowed. This notice shows the width of the line, and is set in Nonpareil type. Advertisements must be received not later than the 27th of each month to insure insertion in the following issue.

WANTED-TO BUY.

GOOD Canadian Timber Limits and Georgian Bay saw logs. Address, BEN BIRDSALL, Whitnoy Building, Detroit, Mich.

WANTED.

EMPLOYMENT or partnership in lumber business, by man of large experience in manufacturing and shipping. Ready by 15th May. High references. Address, R. B. CANADA LUMBERMAN, Toronto.

HARDWOOD lumber, bought, sold or received on consignment, TUCKER DAVID, Lumber commission merchant, 202 Eleventh Ave., N.Y.

WANTED IN 1891.

ANY QUANTITY OF CEDAR TELEGRAPH POLES at shipping points. Terms cash. Apply to J. HARRISON HARVEY, Cobocok, Ont., purchaser for H. D. McCAFFREY, Engineer and Contractor of Telegraph lines, Oswego, N.Y.

RAILS AND CARS FOR SALE.

Light Steel Rails for Tramways - good order Cars for lumber, cheap. JOHN I. GARTSHORE, 49 Front St. West, Toronto.

WANTED.

QUEBEC BIRCH-Those who can furnish choice lumber are invited to correspond with JOHN S. MASON & CO., 240 Eleventh Avenue, New York City.

FOR SALE-Planing mill in Toronto, forty five feet frontage, one hundred and ten ft. deep. One third three stories, balance two stories. Fifty horse power Wheelock engine, sixty five horse power Steel Boiler, also the latest improved machinery. Address, JNO WOOD & SONS, Cor Front and Erin Sts., Toronto.

EMPLOYMENT WANTED by an experienced Lumber Inspector and shipper, acquainted with American and English markets. Can bring small but increasing business. References produced on application. Address, H. M. W., LUMBERMAN office.

HIGH PAY TO BARK PEELERS

WANTED, May 15, 1891, 750 competent Bark Peelers for this season's work, at \$1.75 a day and board. Address or call on J. L. SNYDER, Lectonia, Tioza Co., Pa., U. S.

MORTGAGE SALE -OF VALUABLE-

Timber Limits

-AND-

SAW MILL PROPERTY

IN THE TOWNSHIP OF BEXLEY, CO. OF VICTORIA

Under and by virtue of the power of sale contained in a certain mortgage from George A. Wagar to the vendors, bearing date the 14th July, 1890, default having been made in payment thereof, will be sold by public auction, at

Chirpaw's Hotel, at Victoria Road,

WEDNESDAY, MAY 13, 1891,

At 1 o'clock, p.m., 1371 acres of land, being composed of the northerly 37 acres and the easterly 91 acres of the southerly 163 acres of lot 4, in concession 2; lots 4, 5 and 7, in concession 2; northerly half of lot 6 and the northerly 40 acres of lot 7, in concession 3; lot 6, easterly half of lot 7 and lot 12, in concession 4; and the west half of lot 12, in concession 8, all in the township of Bexley. The timber is pine, hemlock, cedar and hardwood.

The Mill is situate on lot 6, in concession 4, about one mile from Corson's Siding, on the Cobocok Branch of the Midland Railway. The mill is 100x51 feet and 30x50 feet, with two good boilers and engine (75 horse power), and all machinery required in a first-class mill for cutting lumber, shingles and lath. The mill and machinery are in good order and nearly new. There is a frame boarding house and stable on the property in close proximity to the mill.

The above property will be first offered en bloc; if not sold en bloc, the lots will be put up and offered separately. This is a first-class opportunity for contractors and builders or for any parties engaged in the lumbering trade.

TERMS-One-tenth of the purchase money on the day of sale, and the balance in thirty days thereafter; or other approved security will be taken for the purchase money, bearing interest at six per cent per annum.

For further particulars and conditions of sale apply at the Law Office of MR. W. H. DECATER, Vendors' Solicitors, Corson's Siding, London, Ont.

J. J. TURNER, Sail, Tent and Awning Maker, 251 GEORGE AND 184 KING STREETS, PETERBOROUGH.

Canoe, Yacht and Boat Sails made to order. Perfect Fits guaranteed. Every description of Lumbermen's Supplies and Waterproof Clothing.

Timber Limits

BRITISH COLUMBIA.

FOR SALE!

\$5,000 to \$50,000 of shares in a Stock Company owning and operating Saw and Planing Mills Sash and Door Factory, etc. Valuable Timber Limits in connection. This is an exceptionally good chance to make money.

Address- LIMITS, Care of CANADIAN LUMBERMAN.



SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for supplying Coal for the Public Buildings, Ottawa," will be received at this office until TUESDAY, 5TH MAY, at noon.

Specifications can be seen and forms of Tender obtained on and after Tuesday, 28th instant, at this office, where all necessary information can be had on application; also at the office of James Nelson, Architect, Montreal, and D. B. Dick, Architect Toronto. Each tender must be accompanied by an accepted bank cheque for the sum of \$500, made payable to the order of the Honourable the Minister of Public Works, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted, the cheque will be returned.

The Department will not be bound to accept the lowest or any tender. By Order, E. F. E. Roy, Secretary, Department of Public Works, Ottawa, 20th April, 1891.



TENDERS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Indian Supplies," will be received at this office up to noon on SATURDAY, 9th May, 1891, for the delivery of Indian Supplies during the fiscal year ending 30th June, 1892, consisting of Flour, Beef, Bacon, Groceries, Ammunition, Twine, Agricultural Implements, Tools, &c., duty paid, at various points in Manitoba and the North-West Territories.

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

Parties may tender for each description of goods (or for any portion of each description of goods) separately, or for all the goods called for in the Schedules, and the Department reserves to itself the right to reject the whole or any part of a tender. Each tender must be accompanied by an accepted Cheque in favor of the Superintendent General of Indian Affairs, on a Canadian Bank, for at least five per cent. of the amount of the tender, which will be forfeited if the party tendering declines to enter into a contract based on such tender when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted, the cheque will be returned, and if a contract be entered into for a part only of the supplies tendered for an accepted cheque for five per cent of the amount of the contract may be substituted for that which accompanied the tender; the contract security cheque will be retained by the Department until the end of the fiscal year.

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

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

L. VANKOUGHNET, Deputy of the Superintendent-General of Indian Affairs, Department of Indian Affairs, Ottawa, March, 1891.

Advertisement for BALL ELECTRIC LIGHT CO. MANUFACTURERS OF ELECTRIC LIGHTING APPARATUS. 57, ADELAIDE ST. W. TORONTO, ONT.

CHICAGO, MILWAUKEE AND ST. PAUL RAILWAY.

Electric Lighted and Steam Heated Vestibuled Trains, with Westinghouse Air Signals, between Chicago, St. Paul and Minneapolis, daily. Electric Lighted and Steam Heated Vestibuled Trains between Chicago, Council Bluffs and Omaha, daily. Through Vestibuled Sleeping cars daily, between Chicago, Butte, Tacoma, Seattle, and Portland, Oregon. Solid Trains between Chicago and principal points in Northern Wisconsin and the Peninsula of Michigan. Daily Trains between St. Paul, Minneapolis and Kansas City via the Hedrick Route. Through Sleeping Cars, daily, between St. Louis, St. Paul and Minneapolis. The finest Dining Cars in the World. The best Sleeping cars. Electric Reading Lamps in Berths. 6,100 miles of road in Illinois, Wisconsin, Northern Michigan, Iowa, Minnesota, Missouri, South Dakota and North Dakota. Everything First-Class. First-Class People patronize First-Class Lines. Ticket Agents everywhere sell Tickets over the Chicago, Milwaukee and St. Paul Railway.

WILLIAM FOSTER Lumber & Commission Merchant Receiver and forwarder of LUMBER, LATH & SHINGLES Correspondence Solicited. OWEN SOUND, ONT.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Engine House, etc.," will be received at this office until Friday the 15th day of May next, inclusively, for the erection of an Engine House and Chimney for the Dry Dock now in course of construction at Kingston, Ontario, according to the plans and a specification to be seen at the Engineer's Office, 30 Union Street, Kingston, and at the Department of Public Works, Ottawa. Tenders will not be considered unless made on form supplied, and signed with the actual signatures of tenderers. An accepted bank cheque payable to the order of the Minister of Public Works, equal to five per cent. of the amount of tender, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for and will be returned in case of non-acceptance of tender. The Department does not bind itself to accept the lowest or any tender. By Order, E. F. E. ROY, Secretary, Department of Public Works, Ottawa, 16th April, 1891.

E. F. Ames & Co. Lumber Commission. Correspondence solicited from Canadian manufacturers. Room 3, Lumber Exchange, Chicago, Ill. T. SHORTISS, DEALER IN PINE & MINERAL LANDS 9 Toronto Street, TORONTO, ONT. CORRESPONDENCE SOLICITED.

Investment Bonds.

THE DOMINION SAFE DEPOSIT WAREHOUSING & LOAN CO., LTD. Head Office-The Canadian Bank of Commerce Building, King St. W., Toronto. CAPITAL, ONE MILLION DOLLARS.

DIRECTORS: W. D. Matthews, Esq., President. Henry W. Darling, Esq., Vice-Pres. John I. Davidson, Esq. S. F. McKinnon, Esq. G. B. Smith, Esq. M.P.P. H. W. Nelson, Esq. J. P. Clark, Esq. J. H. Starr, Esq. M. C. Cameron, Esq. Robert Kilgour, Esq. Alexander Nairn, Esq. Thomas McCracken, Esq. Robert Davies, Esq. Eugene O'Keefe, Esq. Aaron Ross, Esq. This Company is now issuing \$100, \$200, \$500, \$1000 and \$5000 Investments in bonds, payable in five, ten and fifteen years from date of issue, with participation in profits, affording all the advantages of compound interest accumulations on small sums of money. These bonds are the obligations of this Company and are specially protected by a sinking fund, invested in first-class real estate mortgages. They are plain definite contracts, subject to no contingencies whatever, are non-forfeitable after one annual payment, with values definitely stated thereon. For a small outlay they secure a fixed and generous return. To bondholders who complete their contracts the Company guarantees compound interest at the rate of Four Per Cent. Per Annum. The Company is prepared to receive applications from reliable agents at all points where it is not already represented.

The Safe Deposit Vaults of the company cannot be surpassed for absolute security. Call and examine or write for circular. WM. KERR, Manager

Advertisement for WATEROUS ENGINE WORKS CO. featuring GRIP Pulleys & Cut off Couplings. 10x3 TO 10x30 SPLIT OR SOLID GUARANTEED. AFTER USING YOU WONDER HOW YOU MANAGED WITHOUT IT. WKS. Co. Brantford, Can.

Advertisement for Toronto Lithographing Co. LITHOGRAPHERS & ENGRAVERS. TORONTO.

**A. M. DODGE & CO.**  
 MANUFACTURERS of and Wholesale dealers in all kinds of Lumber, Lath and Shingles. Tonawanda, N. Y.

**COWPER & GREGORY.**  
 RECEIVERS and Forwarders of Lumber, Lath, Shingles, &c. Unexcelled facilities for shipping by canal or rail. Tonawanda, N. Y.

**CHEESMAN DODGE**  
 TIMBER and Lumber Merchants. Ship and Boat stock, Railroad Ties, &c. Office, 16 West Seneca Street, Buffalo.

**EMMET FLEMING**  
 INSPECTOR and Commission dealer in Lumber. Office, 251 Louisiana Street, Buffalo, N. Y.

**LAYCOCK LUMBER CO.**  
 MANUFACTURERS of Pine, Hemlock and Oak Timber up to 5 1/2 feet in length. Saw Mills: Ackley, Pa., Black Rock, N. Y., Gravenhurst, Ont. Office, corner Main and Seneca Sts., Buffalo, N. Y.

**J. & T. CHARLTON**  
 WHOLESALE dealers in Mast and Spars, Canada Round Pine, &c. Tonawanda, N. Y.

**WILLARD W. BROWN.**  
 202 Main Street, Buffalo, handles all kinds of Hard Woods.

**A. P. & W. E. KELLEY CO.**  
 WHOLESALE Lumber dealers. Yards at Tonawanda and Chicago. Correspondence invited.

**C. P. HAZARD.**  
 WHOLESALE dealer in Lumber, Shingles, Lath and Fence Posts. Correspondence invited from the Canadian trade. No 92 River Street, Buffalo, N. Y.

**L. A. KELSEY LUMBER CO., (Ltd.)**  
 MANUFACTURERS and dealers in Hardwood Lumber of all kinds. Describe stock and write for prices. Office Tonawanda, N. Y.

**BOVEE & HOWDEN**  
 MANUFACTURERS and Wholesale dealers in Hard and Soft Wood Lumber. Holders of Canadian stocks are invited to write for quotations. Offices at Tonawanda and Le Roy, N. Y.

**THE TONAWANDA LUMBER CO.**  
 MILLS at East Tawas, Mich.; office 106 Main Street, opposite N. Y. C. and H. R. R. R. Station, North Tonawanda, N. Y.

**Cash for Lumber**

**W. N. McEachren & Co.**

Wholesale dealers in all kinds of

**HARDWOOD LUMBER**

**NO. 3 DOCK  
 TORONTO**

WRITE US FOR PRICES AND SIZES TO CUT.

WE PAY CASH WHEN LOADED ON CARS.

HERBERT G. ROSS.

Box 273.

REGINALD C. BLAKER

**H. G. ROSS & CO.**

Real Estate, Fire and Life Insurance, Shipping and General Commission Agents.

Timber Limits and Farming Lands a Specialty.

A.B.C. Code, Cable address, "Ross."

**NEW WESTMINSTER.**

**B. C.**

CORRESPONDENCE SOLICITED.

**LUMBER**

**TRUCK \* WHEELS.**

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**The Montreal \***

**\* Car Wheel Co.**

MANUFACTURERS OF

CHARCOAL IRON CHILLED

**RAILROAD WHEELS**

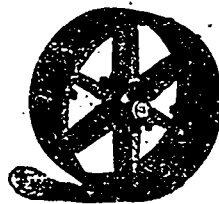
Offices: New York Life Insurance Building, Montreal.

Works: Lachine, Quebec.

\*\*\*\*\*

WE make a Specialty of Wheels suitable for the requirements of Lumbermen and Street Car Service, and can supply them Bored, Finished and Balanced.

CORRESPONDENCE SOLICITED



Mens. ha Hickry Pileys  
 We make the only hardwood bent rim spoke arm split pulley, only small split pulley, only wooden hangers in the market. Send for discounts & circulars.  
 Menasha Wood Split Pulley Co. MENASHA, WISCONSIN.

**THE MONARCH BOILER AND HERCULES ENGINE.**



Guaranteed to Saw Lumber Perfectly Smooth and Even in thickness.

Portable from 5 to 70 horse power. Surpass portable steam power heretofore produced for strength, durability, compactness, and the ease with which they can be moved.  
 The 70 horse power can be taken over the roughest roads, or into the forest, and set up as easily and quickly as an ordinary 20 horse power portable engine, and as firm as a brick-set stationary engine. Engines and boilers of every size and description. Rotary Saw Mills, Shingle and Lath machines, Saw Grinders, Planers, etc. Mill machinery and supplies of every description. Every boiler insured against explosion by the Boiler Insurance & Inspection Co. of Canada. Write for circulars.

A. ROBB & SONS, Amherst Foundry and Amherst, N.S. Machine works. ESTABLISHED OVER 40 YEARS.

DALTON McCARTHY, President. A. ECKARDT, Secretary. JOHN MCGREGOR, Manager.

**Toronto and Midland Mfg Co.**

(INCORPORATED.)

**Wholesale \* Lumber \* Dealers**

AND MANUFACTURERS OF

**DRESSED LUMBER, FLOORING**

Ceiling, Sheeting, Siding, Shelving, Mouldings of all Descriptions.

Office and Yard:

**FOOT OF SPADINA AVE., - TORONTO.**

Planing Mills: MIDLAND, ONT.

**PORTER, ROBERTSON & CO.**

STOCKS  
 STRIPS  
 SIDINGS  
 BILLSTUFF

WHOLESALE

**LUMBER**

DEALERS

HARDWOODS  
 HEMLOCK  
 SHINGLES  
 LATH, ETC.

Millichamp's Buildings,

**35 \* Adelaide \* Street \* East,  
 TORONTO.**

YARD: NORTHERN DOCK, FOOT OF BATHURST STREET.

**NAPANEE CEMENT COMPANY**

— MANUFACTURERS OF —

**Hydraulic Cement**

PARTICULARLY adapted for Dams, Smoke Stacks, Foundations, Culverts, Cisterns, Cellars, etc.

ENDORSED BY LEADING RAILWAYS AND CONTRACTORS.

**ROACH \* LIME**

For Building, Plastering, Gas Purifying, Paper Making, &c.

**THE RATHBUN COMPANY**

DESERONTO, ONT.,

MANUFACTURERS OF

**\* TERRA \* COTTA \* FIRE \* PROOFING \***

For Use in Old and New Buildings.

Endorsed by Leading Architects. Absolutely Fire-proof. About as Cheap as Wood or Brick. Weight One-Third that of Brick. Does not Crack on application of Heat or Water.

Deadens Noise. Gives Warmth in Winter; Coolness in Summer.

**Galt \* Machine \* Knife \* Works.**



**MACHINE KNIVES**

OF EVERY DESCRIPTION FOR

Planing, Moulding & Stave Cutting.

SEND FOR PRICE LIST

**PETER HAY - - - GALT, ONT.**

# The Only Successful Kiln for Drying Oak and other Hardwoods

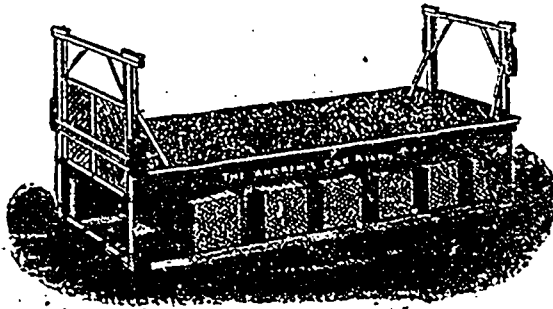
**"THE ANDREWS"**

NEW LUMBER

## DRY-KILN

Its remarkable efficiency depends upon its peculiar mode of applying heat to, and eliminating moisture from, the air used in drying. We use no costly fan, engine or other device that requires constant attention, nor do we waste heat by a special chimney. The air circulates through the lumber, and the moisture absorbed from it is extracted from the air by natural means. You can not afford to be without it.

Our Process Duplicates Nature.



Outside View of the Andrews Kiln.

The following well-known furniture manufacturers have recently purchased the "ANDREWS KILN."

- Estey Manufacturing Co., . . . . . Owasa, Mich.
- East Shore Furniture Co., . . . . . Manistee, Mich.
- Universal Tripod Co., . . . . . Grand Rapids, Mich.
- Grand Rapids School Furniture Co., Grand Rapids, M.
- New England Furniture Co., . . . . . Grand Rapids, Mich.
- Milwaukee Chair Co., . . . . . Milwaukee, Wis.
- Oshkosh Furniture Co., . . . . . Oshkosh, Wis.
- Skandia Furniture Co., . . . . . Rockfork, Ill.
- Story & Clark Organ Co., . . . . . Chicago, Ill.
- Rock Falls Manufacturing Co., . . . . . Sterling, Ill.
- Courey & Birely Table Co., . . . . . Shelbyville, Ind.
- Southern Spring Bed Co., . . . . . Atlanta, Ga.
- Sidney School Furniture Co., . . . . . Sidney, Ohio.
- New Richmond Church Furniture Co., N. Richmond, O.

## A. N. Andrews & Co., Proprietors and Manufacturers

215, 217, 219, 221 Wabash Ave., CHICAGO, ILL.

## The Casselman Lumber Co.

CASSELMAN, ONT. Successors to FLATT & BRADLEY.

ESPECIAL GOOD FACILITIES FOR SHIPPING.  
HEMLOCK BILL STUFF OF EXCELLENT QUALITY.

ALSO MANUFACTURERS OF  
PINE, SPRUCE, ASH, MAPLE AND OTHER HARDWOODS.  
CORRESPONDENCE SOLICITED.

J. W. MAITLAND  
H. RIXON

J. G. AINSLIE  
W. STODART

## Maitland, Rixon & Co.,

Owen Sound, Ont.

## Saw Millers and Lumber Dealers

All kinds of Building Material kept in stock.

WE MAKE A SPECIALTY OF  
LONG BILL STUFF IN ROCK ELM, PINE, CEDAR AND HEMLOCK  
QUOTATIONS FURNISHED ON APPLICATION.

GEO. HASTINGS. JOHN GRAY. H. HANCOCK.

## GEO. HASTINGS & CO.

Lumber Merchants

TRUST BUILDING CHAMBERS,  
Cor. Yonge and Colborne Streets. TORONTO.

All Kinds of Pine and Hardwood Lumber.

BILL STUFF CUT TO ORDER A SPECIALTY.

## DONOGH & OLIVER,

Wholesale Dealers in

# LUMBER

OFFICE:

Nos. 213, 214 and 215, Board of Trade Building,

COR. YONGE AND FRONT STS.

TORONTO, ONT.

## THE "LEADER"

The Finest Tempered, Fastest Cutting and Best Saw made on the Continent.



Manufactured of Triple Refined Silver Steel, Rolled specially for us from Superior Ingots.

THE KING OF CROSS-CUT SAWS

R. H. SMITH COMPANY, LTD., ST. CATHARINES, ONT.

Sole Manufacturers.



The Gold Medal,  
Toronto, 1883

# WOOD WORKING MACHINERY

The Gold Medal,  
London, 1883

## For Door, Sash, Blind and Furniture Factories

PLANERS.

MOULDERS.

TENONERS.

SHAPERS.

RIP SAWS.

SAND PAPERERS.

BAND SAWS.

BAND RE-SAWS.

PANEL RAISERS.

DOVETAILERS.

JOINTERS.

DOUBLE SPINDLE BORER.

BUZZ PLANERS.

MORTICERS.

BLIND MACHINERY.

BAND SAW FILER.

BAND SAW SETTER.

ETC., ETC.

## The Galt Bros. Co., Limited,

GALT, ONTARIO.

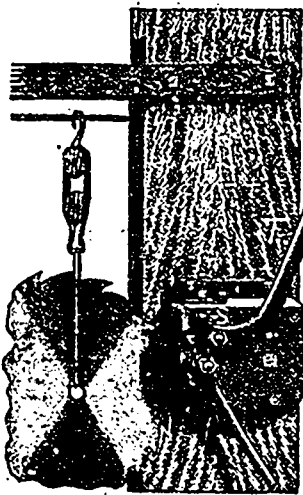
Write for Circulars  
and Prices.

Correspondence  
Solicited.

# Rhodes' Improved Swage for Circular and Gang Saws.

PATENTED JULY 2, 1889

THE MOST PERFECT MACHINE FOR THE PURPOSE EVER INTRODUCED.



SWAGE IN OPERATION.

It will swage the hardest as well as the softest saws. Never pulls the points of the teeth off, as the swaging is done by direct and steady pressure, and not by rolling pressure.

Swaging done with this machine will stand longer than when swaged with any other machine or by hand.

It makes the swage the heaviest on the under side of the tooth, and leaves the face of the tooth perfectly straight.

It does not shorten the tooth as done by upsetting. It has a positive clamp so a saw cannot slip while being swaged, therefore every tooth is an exact duplicate of the other.

Corners never drop off if swaged with this machine, as it does not injure the steel, therefore the teeth can all be kept of a length.

It is very simply constructed: nothing to break or wear out. Easily adjusted. Any ordinary man can swage a circular saw in from 10 to 12 minutes. Is thoroughly constructed of the best material, all the parts requiring it are made of steel of the best quality. Every swage is thoroughly tested before leaving the shop.

We positively guarantee the swage to do all we claim for it in this circular.

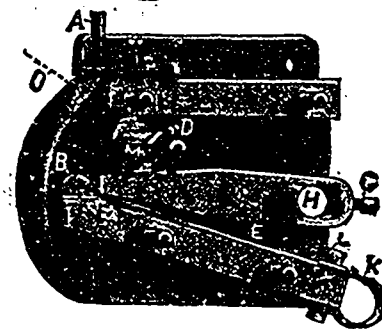
Full and complete instructions for adjusting and operating accompany the swage.

SEND FOR PRICE LIST OF

RHODES' IMPROVED

Automatic Band Saw Swages, Circular Saw Swages, Gang Saw Swages, Shingle Saw Swages.

—MANUFACTURED EXCLUSIVELY BY—



SECTIONAL VIEW.

P. O. BOX 430.

## Palmiter, Empey & Co., Galt, Ont.

Established 1849.

Incorporated 1884.



We use nothing but W. J. & Sons' English Steel in our saws and the name speaks for itself.

# Detroit Saw Works

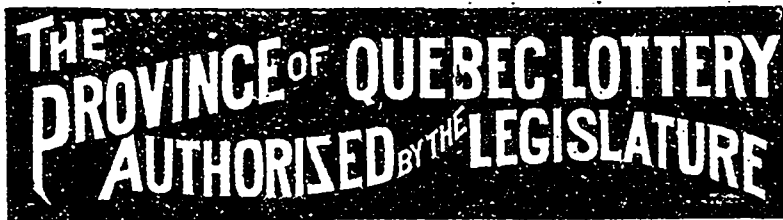
MANUFACTURERS OF

## Circular, Gang, Mulay, Drag and Cross-Cut Saws.

MOLDING AND PLANING KNIVES,

French Band Saws, Emery Wheels and General Mill Supplies.

66, 68, 70 and 72 Fort St. East, DETROIT, MICH.



MONTHLY DRAWINGS ON

2nd Wednesday of Every Month

S. E. LEFEBVRE, Manager.

Head Office—81 ST. JAMES STREET, - MONTREAL.

PATENTED 5TH MARCH, 1877.

## PARKER & EVANS,

Sole Proprietors of the

FAMOUS INTERNATIONAL

### BOILER - FLUID - COMPOUND.

This compound will save its cost many times in one year by saving fuel.

It eradicates scale, and when the Boiler is once Clean a very small quantity keeps it clean and free from all incrustation. One fourth the dose will prevent a new Boiler from scaling so long as it is used regularly.

Contains no Caustic Soda, and is the only matter yet known that will not injure metals in any way, and emits a clear pure steam.

30 WILLIAM STREET, - MONTREAL.

# Friction Pulley Board.

The Best Materials ever used  
for Frictions of all  
\* kinds \*

MANUFACTURED BY

Asbestos  
Mill  
Board.

The

## DOMINION LEATHER BOARD COMPANY,

Steam  
Packing.

Montreal, Quebec.

SAMPLES FURNISHED.

PLEASE MENTION THIS PAPER.

CORRESPONDENCE SOLICITED.

# THE DODGE PATENT WOOD SPLIT PULLEY CO.

MAUFACTURERS OF

Pulleys of every description and style in stock and made to order.

Prices lower than any other first-class Pulley.

**Patent  
Split  
Belt  
Pulleys**

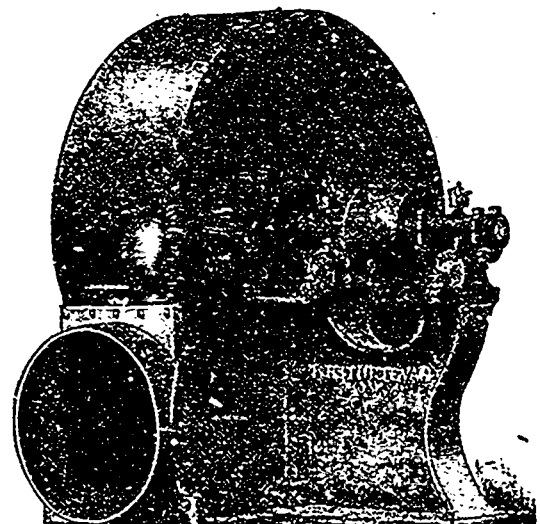
Every pully guaranteed strong enough for heaviest Mill Work, and to give more power with same belt than any other pulley made.

Send for Catalogue and discounts.

## Dodge Wood Split Pulley Co.,

City Office, 83 King St., W.

## TORONTO.



# THE STURTEVANT

STEEL PLATE PLANING MILL

# EXHAUSTERS.

PROGRESSIVE LUMBER DRY KILNS, HEATING AND VENTILATING APPARATUS  
FOR ALL CLASSES OF BUILDINGS.

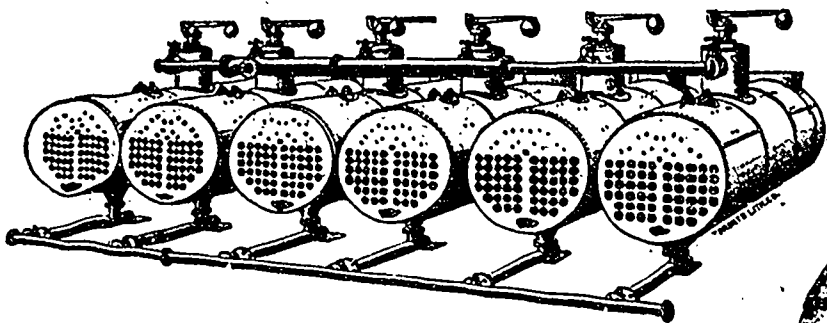
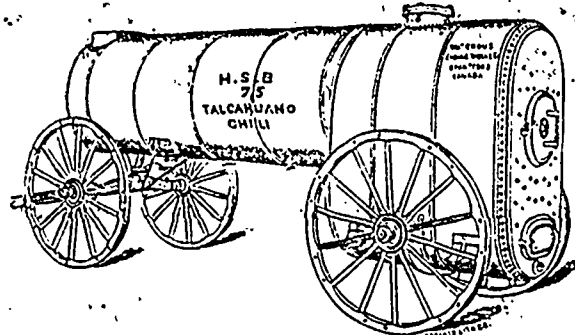
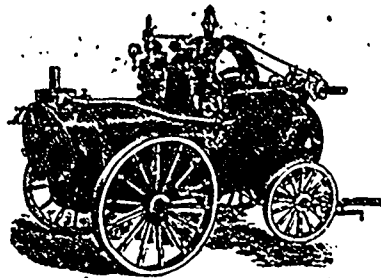
## B. F. STURTEVANT CO., BOSTON, MASS., U. S. A.

BRANCHES: 91 LIBERTY ST., NEW YORK  
16 S. CANAL ST., CHICAGO  
135 N. THIRD ST., PHILADELPHIA

## A. R. WILLIAMS, Soho Machine Works, Toronto, Ont., GENERAL AGENT FOR THE DOMINION.

# BOILERS, BURNERS, TANKS,

IN ALL VARIETIES.



## BOILERS

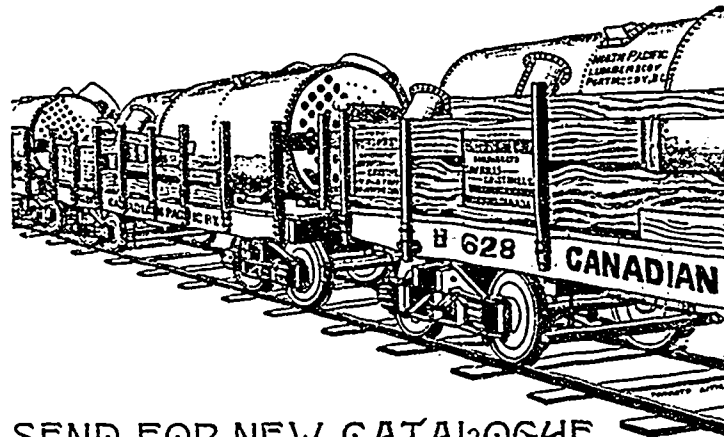
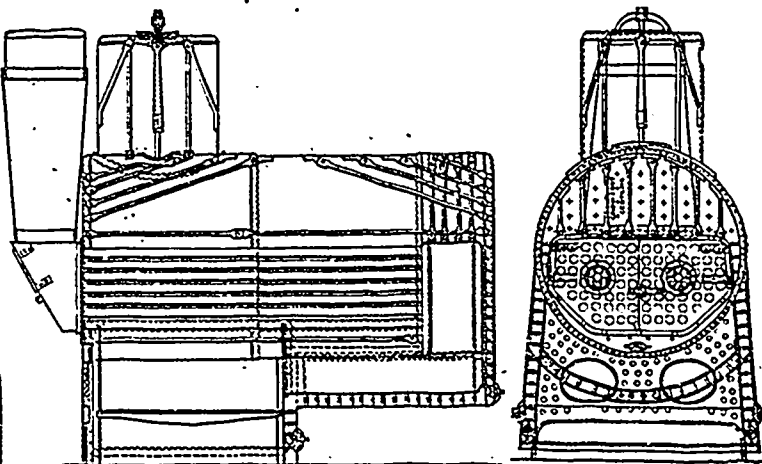
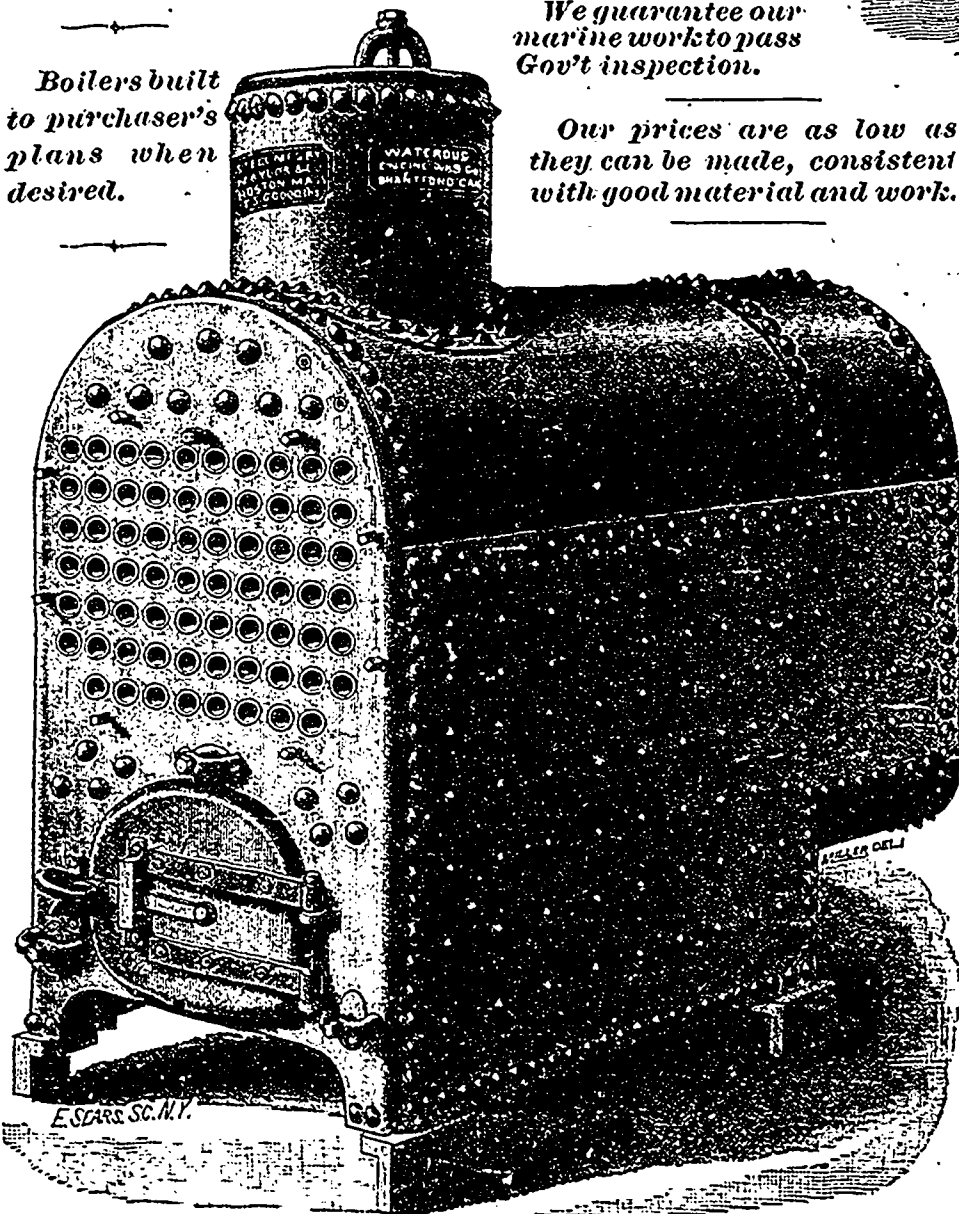
UP TO SIXTEEN FEET LONG

*Can be made with but one sheet on the bottom, thus avoiding seams over the fire.*

*Boilers built to purchaser's plans when desired.*

*We guarantee our marine work to pass Gov't inspection.*

*Our prices are as low as they can be made, consistent with good material and work.*



SEND FOR NEW CATALOGUE

And ask for estimates on any boiler work required.

**Waterous** ENGINE WORKS CO. LTD., **Brantford,** CANADA.

# "DO YOU LACK STEAM? WE CAN HELP YOU!"

## THE GORDON PATENT HOLLOW BLAST GRATE.



A HOLLOW BLAST GRATE.

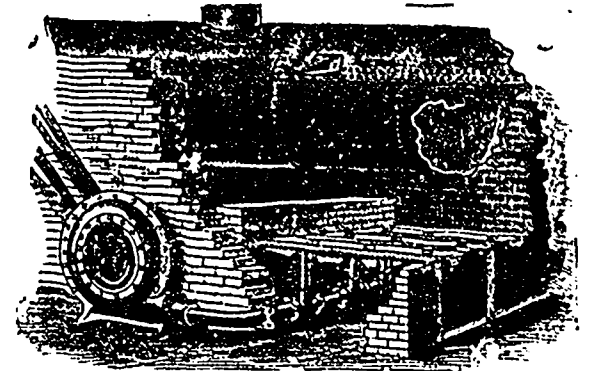
A new and novel application of a principle centuries old. Step into the nearest blacksmith shop and see

*N. B.---Regardless of the character of your fuel, we can greatly increase the volume of steam generated by your boilers. It Costs you nothing to try them. We guarantee satisfaction or no sale.*

it in operation, on a small scale.

The Hollow Blast Grate supplies the furnace fire with a blast of Hot Air sufficient at all times to insure the rapid and perfect combustion of fuel of every sort.

It is the only successful appliance for generating steam from such fuel as the SAWDUST and refuse from hemlock, cypress and hard wood timber or from spent tan bark.



FURNACE FITTED WITH HOLLOW BLAST GRATES AND APPARATUS

### RECENT TESTIMONIALS

JOHN ORM, Pres. S. H. LANGSTAFF, Vice-Pres. GEO. LANGSTAFF, Sec'y. H. W. RANKIN, Treas.  
LANGSTAFF-ORM MAN'G CO.

Manufacturers of Lumber, Sash, Doors, Blinds, Etc. Long Steamboat Lumber a Specialty. PADUCAH, Ky., March 7th, 1891.

The Gordon Hollow Blast Grate Co., Greenville, Mich.

DEAR SIRS,—Enclosed find our cheque to cover amount due you for the Hollow Blast Grate Bars purchased from you some time ago. We have given the Bars a thorough test and are very much pleased with them; we find them to be all you claim.

Yours truly,  
LANGSTAFF-ORM M'G CO

JNO. N. PHARR.

F. B. WILLIAMS.

PHARR & WILLIAMS.

Band Sawed Cypress Lumber. Daily capacity, 100,000 feet. Extra Wide Lumber and Tank Stock a Specialty. 50 Million of Logs on hand. 6 Million Feet of Lumber in stock. 43 W. U. Telegraph in office.

C. S. BURT, Esq., PATTERSON, LA., March 9th, 1891.  
Baton Rouge, La.

Dear Sir—Our Grate Bars (Hollow Blast Grates) are now making us all the steam we wish. We had some doubt as to our boilers having sufficient capacity to furnish steam for our engine as they have only 100 horse power while our engine has 250, but we are now making more steam than we can use with cypress saw dust and refuse from our mill. Any one can figure the capacity of the boilers for themselves. There are four of them 32 feet long by 42 inches diameter, each with two flues 15 inches diameter. Our engine is 24x30. Anyone who is short of steam can not do better than to put in the Blast Grate bars. Yours very truly,  
PHARR & WILLIAMS

J. T. LIDDLE LUMBER CO.

Lumber. Merchandise. One Mile from Mississippi City, L. & N. Railroad.

HANDSBOBO, MISS., March 9th, 1891.

TO THE GORDON HOLLOW BLAST GRATE CO., Greenville, Mich.

GENTS.—We are now running our mill with the Hollow Blast Grates and instead of requiring two mule carts to haul away the saw dust, we now consume nearly all, giving us much better steam than we were forced to make it with wood and the small quantity of saw dust we could burn. We are satisfied that every mill man burning wood alone, or wishing to utilize the dust, bark, etc., for fuel will find by test, that the Blast Grates will reduce the labor and expense of steaming by one half.

Respectfully yours,  
J. T. LIDDLE LUMBER CO.

BRINKLEY CAR WORKS AND MANUFACTURING CO.

Yellow Pine and Oak Lumber.

BRINKEY, ARK., Feb. 7th, 1891.

TO THE GORDON HOLLOW BLAST GRATE CO., Greenville, Mich.

GENTLEMEN;—We have your favor of the 5th, and beg to say in replying thereto, that the Hollow Blast Grates you put in for us are a splendid success, and we are more than pleased with them; by using them we are able to make enough steam to run our plant without having to put in another large boiler. We recommend them very highly. Enclosed find acceptance in settlement of account.

BRINKLEY CAR WORKS & M'G CO.  
H. H. METERS, Sec. and Treas.

THE WOLVERINE LUMBER CO.,

CAIRO, ILL., Feb. 8th, 1891.

TO THE GORDON HOLLOW BLAST GRATE CO., Greenville, Mich.

GENTLEMEN;—Yours of the 14th ult. at hand. In reply will say that we had grates placed and ready for use about the middle of December last, and by January 1st were

fully convinced that they were exactly what we needed. We could not think of trying to run without them for ten times their cost. We are running two band mills in green oak right out of the water, and are burning all our saw dust, leaving none to be carted away. The burning of the saw dust, with your grates, makes a very hot fire and keeps up steam splendidly without the use of any other fuel, excepting a very few slabs. We consider your grates to be what any saw mill requires. As for us, we would not think of trying to run without them. Yours truly,  
THE WOLVERINE LUMBER CO.

A. E. STEVENSON, Supt.

SILAS KILBOURN & CO.,

Fish and Syrup Packages, Cider Kegs and Jelly Pails.

GRAND HAVEN, MICH., Feb. 20th, 1891.

TO THE GORDON HOLLOW BLAST GRATE CO., Greenville, Mich.

GENTLEMEN;—Enclosed find check in payment for bill of Grates, etc. Please acknowledge receipt of same and oblige. The Grates are doing all you claimed, and more. Will save amount of your bill in better power and fuel in a short time. Before we put them in we had to buy a great many cords of dry slabs each year; we now burn nothing but saw dust and waste from factory, and have much better steam than before. We drive blower with a small "Dako" engine, which we think an improvement over connection with factory power.

Yours truly,  
SILAS KILBOURN & CO.

DECATUR LUMBER CO.

All Kinds of Rough and Dressed Lumber.

DECATUR, ALA., Feb. 12th, 1891.

TO THE GORDON HOLLOW BLAST GRATE CO., Greenville, Mich.

GENTLEMEN.—Your Blast Grates are all that you claimed for them, and are very satisfactory.

DECATUR LUMBER CO.

A. W. LEE & CO.,

Oak, Pine and Hemlock Lumber.

BELENA MILLS, PA., Feb. 12th, 1891.

THE GORDON HOLLOW BLAST GRATE CO., Greenville, Mich.

GENTLEMEN,—Enclosed find our check in settlement of account. The apparatus is in and does its work well. It is a decided improvement over the old. We recommend its use.

Yours truly,  
A. W. LEE & CO.

C. C. MENGEL, JR., Pres.  
Louisville, Ky.

A. W. WILSON, Vice-Pres.  
Alma, Mich.

C. H. MENGEL, Sec. Treas.  
Louisville, Ky.

C. C. MENGEL JR. & BRO. CO.

Louisville, Ky.

Manufacturers of Poplar and Hardwood Lumber.

Mills: Trimble, Tenn.  
Oakton, Ky.

The Trimble & Kenton Railway.  
is owned and operated

Office of  
Tipton, Tenn. JAS. R. DELVECCIO, Supt  
Boston, Ky. Trimble Mill.

TRIMBLE TENN., March 3rd, 1891.

GORDON HOLLOW BLAST GRATE CO., Greenville, Mich.

DEAR SIR;—Please find enclosed check in payment of our account. Your grate bars have given us perfect satisfaction, and a reference to our records shows that in one month previous to the time we put them in, we had 21 stops for steam, aggregating 6 hours and 9 minutes, or an average of 17 minutes to the stop. Since putting in your bars, on the same fuel in one month, we have had only 6 stops for steam, aggregating 1 hour and 22 minutes, or an average of 13 minutes to the stop. Before introducing your system steam was very seldom up to the limit and the machinery would be continually dragging; since your bars have been put in, if steam gets low the cause is in the fireman alone.

Yours truly,  
C. C. MENGEL JR. & BRO. CO.  
JAMES R. DELVECCIO, Supt.

## The Gordon Hollow Blast Grate Co., Greenville, Mich.

Sole Proprietors of the Gordon Patents for the United States and Canada.



# PETRIE'S MACHINERY DEPOT.

*Special Bargains  
This Month.*

One New Eclipse Planer and Matcher, Galt make.  
 Champlon Planer, Matcher and Moulder, nearly new.  
 Little Giant Planer, Matcher and Moulder, price \$200.  
 24-inch Planer and Matcher, Dundas make.  
 New Pony Planers and Matchers, only \$1.75.  
 24-inch Pony Planer, Frank & Co. make.  
 27-inch Double Surfacer, revolving bed—Cowan & Co. make.  
 No. 3 Revolving Bed planer, Cowan & Co. make.  
 24-inch Pony planer, Ross make, Buffalo.  
 No. 4 Pony planer, McKechnie & Bertram, builders.  
 Economist planer, matcher and moulder, Frank & Co. make.  
 24-inch wood frame planer, Kennedy & Sons make.  
 1 planing machine knife grinder.  
 24-inch wood frame surface planer, cheap.  
 24-inch surface planer, Rogers make, Norwich, Conn.  
 23-inch surface planer, American build.  
 24-inch wood frame planer, Kennedy & Sons build.  
 22-inch surface planer, McKechnie & Bertram build.  
 22-inch wood frame planer, in good order.  
 20-inch wood frame planer in good order.  
 12-inch diagonal buzz planer, new, Galt make.  
 Daniels planer, R. Ball & Co. make.  
 Matcher, Kennedy & Sons' make, Owen Sound.  
 Beading and moulding attachment for planer; Ross make, Buffalo.  
 No. 2 Three-steed moulding machine, Galt make.  
 3 Sided Moulder, made by Rogers, Connecticut.  
 New power morticers—Galt make.  
 One chair or upright boring machine.  
 Iron top shaper—Goldie & McCulloch make Galt.  
 Centennial top jig saw—Goldie & McCulloch builders.  
 Double cope tenoning machine—Dundas make.  
 New 36-inch resaw—Galt make—also band resaw machines.  
 Tenoning machine—without copes—price only \$60.  
 Wood turning lathes—several sizes.  
 New combination saw table—all iron and steel.  
 Improved power rod feed machine—MacGregor, Gourlay & Co., Galt, builders.  
 No. 1 shaper—all iron—Goldie & McCulloch build.  
 Improved saw arbors—all sizes—Galt make; large stock.  
 One improved iron frame swing saw—new, Buffalo make.  
 Sand paperers—new and second hand.  
 New dovetailing machine—Tyrell's patent.  
 New 30 and 36-inch band saws—Galt make.  
 New 25-inch band saw, Cant Bros. & Co. make, Galt.  
 Four pair scroll saws and three foot power; good order.  
 Three blind slot turners, all Galt make.  
 Dodge wood split pulleys at maker's prices; quick delivery.  
 Foot and hand mitring machines, latest design.  
 Foot and hand wiring machine, Galt make.

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