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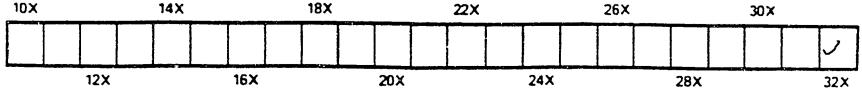
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# E CANADA LUMBERMA UMBER 6 (TERMS, \$1.00 PER YEAR SINGLE COPIES, 10 CENTS

#### CHARACTER SKETCH.

#### HON. PETER WHITE

LUMBERMAN AND STATESMAN.

"The truest wisdom is a resolute determination."-A Napoleon Maxim. T is a wide gulf between the view held in the present day of men of commerce and that proclaimed by Cicero in the early centuries, that all artisans are engaged in a degrading profession, or still stronger expressed by Plato and Aristotle before Cicero's time, when they were wont to declaim in a pitiful way against the noble rights of labor. People delight in the present day to do honor to the men who labor in the ranks of commerce and manufacture, though the time is not long gone by when some one spoke in gibing tones of Scotland as a hation of shopkeepers. Out of scores of instances that might be named, it may be remarked that Gladstone, England's G. O. M., was the son of a merchant; Samuel Motley, who, as a British legislator, fought valiantly the Cause of the masses, was a great merchant; Joseph Chamberlain, Birmingham's proud son, is a king of commerce. Going further back, it may be noted that Sir Robt. Peel, following in the footsteps of his father, was a printer of calico. Our own country produces numbers of examples on similar lines.

Captains of Industry are not alone leaders in the Commercial world, but, the particular training that comes from activity in business, has shown to the people how Well fitted are men of business for that other business arena, where are made the laws by which our country is governed. Complaint is sometimes made that parliament and the legislatures are controlled by men of the professions, especially of the legal profession. An analysis, however, of the composition of our governing bodies, will show that a very considerable sprinkling of them are business men, and that not a few of these take a foremost position in the councils of the country.

The lumbering industry has good reason to be proud of the many within its ranks, who have in the past, and to day, occupy a first position in legislative halls. In the local legislature we have one of the best representatives of the lumber trade, in the person of the Hon. E. H. Bronson, of Ottawa, one of the largest lumbermen in Canada, and a member of the Cabinet of Sir Oliver  $M_{-}$ Mowat. To go outside of Canada for the moment, it is Well known that in the state legislatures, as well as in Congress, lumbermen occupy a conspicuous place among the public men of the country to the south of us. One of the most noted of these is the Hon. R. A. Alger, the Michigan millionaire lumberman, who has been more than once spoken of as a likely candidate for the White House.

In the same legislature with Mr. Bronson, which has just now been dissolved, were Mr. W. C. Caldwell, B.A., of North Lanark; E. C. Carpenter, of North Norfolk; James Clancey, of West Kent; Robt. Ferguson, of East Kent; William McCleary, of Welland; Robert Paton, of Centre Simcoe; David Porter, of North Bruce; James Reid, of Addington ; E. W. B. Snider, of North Waterloo; A. F. Wood, of North Hastings; and A. Miscampbell, of East Simcoe, all lumbermen.

Among the new men who are seeking parliamentary honors in the forthcoming election for the local legislature are, Mr. R. A. Stark for North Grey, a saw mill operator; Mr. J. I. Flatt, a large lumberman of Hamilton, who is a candidate in North Wentworth, and the list is by no means exhausted here.

Were we to catalogue for the legislatures of Quebec, New Brunswick, Nova Scotia and British Columbia, We would ind a similar condition of affairs. At Ottawa, tal: taking in the Commons and the Senate, a number of the most prominent men in either House are lumbermen. TORONTO, ONT., JUNE, 1894

One of the most conspicuous lumbermen of Canada, the Hon. J. B. Snowball, occupies a seat as senator for New Brunswick, and a recent addition to that body is the Hon. Kennedy F. Burns, another lumber king of the Maritime provinces. In the Lower House the Hon. W. B. Ives has a seat in the Cabinet, as president of the council, a character sketch of this gentleman appearing in the LUMBERMAN of February, 1893. Who does not remember Mr. Alonza Wright, the King of the Gatineau, whose death occurred within the past year, and who was for years a popular member of the Commons? To-day the lumber interests are ably represented by such men as Mr. W. C. Edwards, of Ottawa ; Mr. John Charlton; Mr. John Bryson, and others whose names will be easily suggested to our readers.

But of all the names given none are better known in lumber circles, as also in public life, than the Hon. Peter White, Speaker of the House of Commons, and whose portrait we publish on this page. Mr. White does the fullest credit to the large commercial industry,



HON. PETER WHITE.

with which for years he has been actively and extensively identified. His career in the House is equally flattering to the commercial interests generally of the country, showing the high position that may be attained in legislative halls by business men.

Peter White is a son of the late Lieut.-Colonel P. White, a Scottish pioneer, who early in the century located in the eastern section of the province, and 65 years ago tounded what is now known as the town of Pembroke. In 1838 the subject of the present sketch was there born, as the fourth son to his parents.

Peter White, Senr., had followed the business of lumbering, and to the manner born, the younger Peter at an early age engaged in the business with his father. Always a careful student of his country's affairs, in 1872 the present Speaker of the House entered the field in North Renfrew as a candidate for parliamentry honors, Sir Francis Hincks having formerly occupied the position. This time he was unsuccessful, but two years later a vacancy occurring, he was elected for North Renfrew. At the general elections in 1876 he was reelected and he has continuously occupied the position up to the present time. On April 29, 1891, he was the unanimous choice of the Conservative members of the House for Speaker, and aside from party considerations, he was equally acceptable to the Opposition.

of the House, and carries with it a salary of \$4,000 a year. More frequently than not it has been held by a member of the legal profession, Mr. White's predecessors in the office being Hon. James Cockburn, Q. C.; Hon. T. W. Anglin; Hon. J. G. Blanchet, M. D.; Hon. G. B. Kirkpatrick, Q. C.; Hon. J. A. Oumet, Q. C. Only two out of these were laymen. The position is one that calls for great endurance, continuous toil, and familiarity with parliamentary rules. That a man whose life had been devoted largely to business affairs, should, with such marked ability, fill the position of First Commoner, is a tribute not alone to the high talents possessed by Mr. White personally, but also to the commercial interests of the country. The reply of the Spartan father, who said to his son when complaining that his sword was too short, "Add a step to it," would seem to have been the motto that has guided Mr. White in his whole conduct of life. Because a layman, and a business man at that, rather than of the academic class, was no reason in Mr. White's mind why he might not fill with all the proficiency necessary, a position that eminent Q. C.'s had occupied before him.

The position is one of the most honorable in the gift

As a member of the House of Commons, for now 20 years, Mr. Speaker has always taken an active, though at no time a very frequent part, in the debates. He has not deemed it necessary to be given to much talking in order to wield a large influence among his associates. Whenever he has spoken, however, he has always caught the ear of the house. In none of his speeches is there any attempt at high flights of eloquence, but he is exceedingly frank, open, clear and concise, without affectation, forcible and argumentative, and as a result is a very persuasive speaker.

Personally, the Hon. Peter White is one of the most popular members of the House of Commons. In his official position, despite the acerbity and bitterness that too often enters into parliamentry life, he is recognized by political friend and foe, if the latter term can really be used in his case, as a model chairman, and just and equitable in all his rulings. In manner he is genial and sociable, making friends wherever he is known. To some extent, doubtless, this fact counts for his popularity in and outside the House, for there can be no doubt that the man of strong social instincts attracts and makes friends where another, even though his abilities may be of the highest order, only repels when lacking in these essentials of human nature.

A CHAIN is no stronger than its weakest link, and a steam boiler may have some one spot weaker than other parts, and in estimating the safe pressure, the strength of this weaker part should be taken into account.

Factors of safety, as they are called by mathematicians, are used as a means of making allowance for unseen or suspected or possible weaknesses. For example, a boiler shell is made of plates the strength of which is known, but the riveted joint is weaker than the plate, and the fit of the rivets in the holes may not be perfect, hence some allowance must be made for unknown imperfections.

#### TRADE NOTE.

Mr. T. W. Walker, formerly the representative in Toronto of the Rathbun Co., has formed a partnership with Mr. J. Watson, under the firm name of Walker & Watson. Their office is at room 51, Confederation Life Building, Toronto. They will do a wholesale and commission business in lumber, shingles, &c., making a specialty of Canada pine and hard-woods. They have already received a contract from a starch company in Oswego for 2,000,000 feet of basswood.

#### TALKS WITH WOOD-WORKERS.

CARE is a necessary element to perfect work in hand-lng any machine. Some machines, however, more than others, call for greater delicacy in operation. This is the case with the moulding machine. If we are to have nice work, a point most essential, says Mr. N. A. Curtis in the Wood Worker, is first to see that the knives are evenly balanced ; second, have the chip-breaker and front pressure solid and placed as close to head as possible ; third, do not lace the belt so as to have a big lump underneath to strike the pulley so hard that it can be heard all over the shop every time it makes a revolution ; fourth, feed the material in the machine so the knives will cut and not against the grain. Above all things this writer tells us : "See that everything about the machine is adjusted and ready to perform its part of the work before the machine is started, so there will be no stopping it to try a piece, for if one gets in the habit of setting a machine by guess and then stopping and trying, there will not be much work done ; the operator is always in doubt as to whether the work is right or not. Start right ; set the machine up right, then start the machine and let it run, keeping a watch on it all the time so if anything gets out of order you will not be long in finding it. The instant you find there is something wrong, shut off the feed, go around the machine and find what it is. After finding it, stop the machine and fix it in short order, unless it is a clean break down; then you want to do your thinking in double-quick order, stopping the machine instanter."

#### \* \* \* \*

Frequently this journal has drawn attention to the number of deaths that occur in wood working establishments, as a result of carelessness or foolish bravado on the part of workmen. These accidents are powerful object lessons of the old adage, that familiarity breeds contempt. It certainly breeds rankest carelessness. The very fact that a man has become expert in the handling of sharp tools is one of the best reasons why he should be the more careful in holding this premier pos ition as a workman Just going outside of the immediate province of the wood-worker a daily paper told us the other day of an expert electrician about to deliver a lecture on electricity, who was killed when makin; his apparatus ready. Friends of the bench and the ma hineroom don't grow too smart, as the slang of the day runs, in handling your tools

#### \* \* \* \*

The proverbial den of the newspaper editor has gone into tradition as a place where the most manifest disord r and lack of cleanliness reigns supreme. Fortunately or the members of the fourth estate the proverbial den e: ists now only in tradition. There is no need for untidiness anywhere. Such elements hinder and never help work. The rule applies just as stringently to a wood-working " A establisment. A writer has nicely said : clean, neat wood-working plant is always attractive to customers, insurance men and others. Usually it shows that the manager is a good business man, one to be depended upon to fill an order properly, and who takes unusual precaution against loss by fire."

#### \* \* \* \*

The workman who simply works, as does a machine by his side, as a sort of automaton, may find it difficult to secure employment at times like the present, when business is depressed. But the mar of ideas in the dullest times will find his services in request. This is so in the field of mechanics as much as anywhere. In the lumber industry there is a present demand for anything that will reduce cost of production or improve products. A lumber journal has pertinently said on this point : "There are thousands of men connected with the saw mill interests or wood-working plants, that have as much natural inventive genius as those who invented the machines they are using, and have plenty of time to think over their methods of operation and plan improvements. It is a game in which, if you fail, you lose little or nothing, and, if you succeed in making a valuable improvement, you are a winner by long odds."

#### \* \* \* \*

A month or two ago I made reference to the importance that is to be attached to the mortising machine of a wood-working establishment Our contemporary, the Tradesman, emphasizes this thought in these words :

"Among the most interesting and important of woodworking machines (always excepting the saw, than which no more valuable tool was ever devised by man), are mortising machines. Only a few years ago, as history counts time, nearly all mortising was done by hand tools; now a hand-made mortise or tenon is rarely seen. Very skillful were those old hand-workers. It is doubtful if machines can do better work than they did, but it is ceriain that the speed secured by machines as compared with the excellent but slow hand work of by-gone years, will b realter and forever preclude the extended use of the old mortising chisel and tenon saw." IAS.

#### LUMBER DEBATE IN PARLIAMENT.

WHEN in committee of Ways and Means a week ago the question of the export duty on sawlogs going into the United States was brought under notice of the House of Commons.

Dr. Sproule said timber was being taken out of the Georgian bay district so fast that in a few years the forests would be destroyed. He was informed that over 50 townships were denuded of timber in this district every year. A result of the wholesale export of logs was that lumber for building in this district was very scarce and expensive. Formerly culls and refuse lumber were largely used for finishing doors, window sashes and shutters, but now this refuse could scarcely be had. He regretted the Government had not put an export duty on logs of \$3 or \$4 a thousand, which would compel a large quantity of timber to be sawed up in this country, and provide employment for 8,000 men the year round. It would create an additional market for the products of the farmer and merchant, where now there was almost stagnation. It was a very short-sighted policy that allowed such raw material to be taken out of the country free. He hoped the Government would reconsider its policy, and reimpose the export duty, otherwise the forests would be depleted in a few years. The result might be accomplished by a provincial enactment compelling lumber sold to be cut and manufactured in the province. This had not been done, and would not be done, and the only other way was for the Dominion Government to put an export duty on logs.

Mr. Charlton said an export duty was essentially a robbery. The hon, gentleman was altogether mistaken in his remarks. The result of the abolition of the export duty had been to increase the wages expended, and the number of men employed in the industry, and to confer greater prosperity on all towns engaged in lumbering operations in the Georgian Bay region. At present southern pine was forcing Canadian pine out of the market of the Northern states, and not a foot of the latter was sold on the Atlantic seaboard. Canada should be careful of this market, and try and retain it. By reimposing an export duty, Canada invited stringent import regulations by the United States.

Mr. Macdonell (Algoma) said he was credibly informed that tugs usually towed three times as many feet of lumber as was stated in their clearance papers. He urged the reimpesition of an export duty which would save to the country many thousand dollars a year. At present the exportation of logs destroyed fishermen's nets completely, but if the logs were sawed in the country they would not destroy the nets.

Mr. O'Brien was desirous that the logs should be cut in this country, but an export duty could not now be reimposed under existing conditions. He thought the statement made by hon, gentlemen that large quantities of saw logs were exported to the United States without being reported to the Customs Department, a serious charge against the department. But he believed hon. gentlemen were guilty of great exaggeration in their desire to have an export duty reimposed. With regard to the number of men employed in Parry Sound district, there never had been so many, nor labor so steady and constant, neither had wages ever been so good. If Americans were employed, it was simply because enough Canadians could not be got. So far from being an injury to the country, the extra quantity of logs taken out since the export commenced had given a great impetus to trade in the country. To reimpose the duty at present would paralyre trade from one end of the country to the other.

Mr. Macdonell (Algoma) said the Americans must have Canadian white pine lumber whatever it costs. They were going to buy it whether the duty was \$1, \$: or \$4 a thousand feet, and the consumer paid the duty.

Mr. O'Brien thought the Americans were not so de pendent upon Canadian white pine. In regard to the condition of the industry in the Parry Sound district or on the Georgian Bay, he said the principal mills were all running, and where any mills were closed, it was owing to the lumber trade having departed anyway If an export duty was reimposed, it would put such a barrier in the way of the Canadian trade that only the very best quality of lumber would be exported. He believed the statements were exaggerated, both as to the quantity of logs exported and as to the quantity of American labor employed in the lumber districts. While there was a chance of the import duty being taken of the Canadian Governmen, should not reimpose an exper duty.

Mr. Peter White, the Speaker, who has had an extensive lumber experience, said that he had a great deald sympathy with those gentlemen who asked for the reimposition of the duty upon logs, but they should remember that the evil effects which they depicted were, toal o great extent, local in their character. They were confined almost exclusively to the north shore of the Georgian Bay. They should remember that the interests of British Columbia, New Brunswick, Nova Scotu, Quebec, and a large part of Ontario, were in the direc tion of obtaining free entry of lumber into the United States. If the views of those gentlemen who advocated the imposition of a prohibitive export duty were to prevail, Canada might be prevented from obtaining the which every member of the House would admit would be a great advantage to the different portions of the Dominion to which he had referred. It seemed to him that it would not be proper for the Government to m pose an export duty on logs until they ascertained whether the Senate of the United States would continue lumber free. If lumber was continued on the free is it would be detrimental to the lumber industry in Canda if the export duty were reimposed.

Mr. Edwards, one of the largest lumbermen of the Ottawa, said that no one who understood the question would stand up and coatend that an export duty would be of any benefit. Nor would anyone who understood the situation and the interests involved have introduce this discussion at such an inopportune time as the present when the Wilson bill and free lumber wen before Congress. The other night the member for Eas Simcoe (Mr. Bennett) had said the lumbermen of the Ottawa valley had 75 per cent. of their product sell before it was cut. To this he would say that he had not \$5,000 worth of his this year's product sold in the United States., and did not expect to until the Wilse bill was settled, and he would tell the House that me more serious blow could be aimed at the lumber inteests than to bring on this discussion at this time. I they desired to promote the lumber interests of the country they would advocate the protection of the forest from the ravages of fire. After some experience he be lieved that 20 times as much timber had been bund as had been cut. Looking at the question from a broade standpoint than one section of the country, he believed there could be no question that the interests of Canada required that no export duty be imposed.

Mr. Bryson (Pontiac) said that the lumbermen shoeld know what was in their own interest. The platform fa the Government to accept was that the American should be given free logs provided they would adm lumber free. His earnest desire was that the Goverment should adhere to the ground it had taken.

The item passed without any change being mades the tariff at this point.

A new material for paving is being introduced inx London. It is composed of granulated cork and bits men pressed into blocks, which are laid like bricks a wood paving. The special advantage of the mateni lies in its elasticity. In roadways it furnishes a splends foothold for hoises, and at the same time almost abd light ishes the noise which is such an unpleasant feature d the city traffic. It is used in Austria with good results

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#### VIEWS AND INTERVIEWS.

A Sione In .. Tree.

Smoke

Nuisance.

The LUMBERMAN adds to its many stories of curious "finds" in trees the following : Two men were at

work with a big circular saw in Reading, Penn., recently, sawing up a white oak log, which came from a farm in the vicinity, when suddenly the saw struck something hard, and before they knew it every tooth was gone. They held an examination, and found a granite pebble some six inches in diameter, embedded in the solid wood. It is a question how the stone got into the tree. There are no such pebbles in the neighborhood where the tree grew, nor was there any sign of a hollow, by which it got inside the tree. The wood was perfectly sound all around it, and the rings of the wood would undicate that it had been there not less than two hundred years.

> Washing air of its imputities by passing it through water screens or through chambers into which water

is profusely sprayed is a well-known and much used process in heating and ventilating practice. A somewhat analogous method is being applied by an English factory owner to the much discussed smoke nuisance. According to the published description, somewhat indefinite, perhaps, in a few respects, the apparatus used by him consists of a large cast-iron tank, in which is a slotted barrel, which is fitted with perforated beaters, and the tank is partly filled with water. The smoke is drawn into the barrel from the machinery by a powerful fan, and undergoes a scrubbing process. The barrel rotates very rapidly, churning up the smoke with the

water. On the top of the barrel are several semi-circular trays or seives, which are perforated, and effect the purpose of further washing the smoke. The smoke which escapes from the beaters, is caught again by these seives, and dashed down again by a very fine spray of water from the beaters. The black sludge of solid matter is forced to the top of the cham. ber, and thrown over into a chute, which coneys it to a wooden tank. The smoke which hnally escapes from the machine is said to be comparatively inoffensive, and there is certainly good reason to believe that this should be so. It is interesting to note, however, adds a writer in Cassier's Magazine, that the use of the apparatus does not end with the cleansing of the smoke-The black deposit gathered by it is taken off in

barrels to be used in the making of paint and printing ink, yielding an acceptable revenue instead of polluting the atmosphere, and the remaining liquid is said to have proved itself a most valuable disinfectant. Thus a two-fold purpose is accomplished, either one of which would seem to be quite sufficient to commend the process to manufacturing communities in which smoke suppression is a live topic.

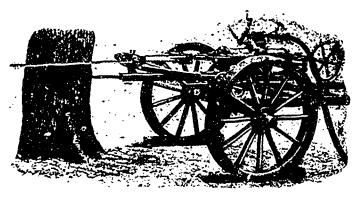
Forest Noth Pests. Recently a m

Recently a most remarkable fact in the history of a forest plague has been reported. During 1880 a plague

known as the "nonne" moth, wrought great havoc in the magnificent pine woods of South Germany, especially in the neighbourhood of Munich. The abnormal increase in number of the "nonne" moths was first observed in the summer of 1888, when the electric light in the industrial-arts exhibition in Munich attracted them in great swarms. But it was not till the spring of 1890 the alarming discovery was made of the ravages ought in the forest of Ebersberg by enormous numbers of the caterpillar of this moth. The mischief spread with rapidity, and in a very short time the trees on large tracts were stripped of their needles and had to removed with expedition. Every effort was made to stop the mischief. The population of the infected district took a hand in collecting and destroying the end my at every stage of its existence, egg, caterpillar, chryralis and moth. The electric light was used to lure the moths to their destruction, and millions were destroyed. The moths were drawn by the dazzling rays of the electric light into a huge funnel, whence they passed to a crushing machine, which speedily converted them into a paste that made excellent food for poultry. The undergrowth of the infected trees was burned off, the top growth syringed with strong antiseptics and poisonous washes, and incisions were made in the bark of the tree and filled in with pitch. Every possible remedy known to the science of forestry, which has reached such perfection in Germany, was tried. The effect of these remedies in 1891 proved to be absolutely nil. The plague continued to make havoc in the pine forests all through that and the following year. Now comes the extraordinary fact in the story of the scourge. In 1893, which had been looked to with great anxiety, the plague suddenly and unaccountably ceased after a course of five years from its beginting. The cause of the cessation is still a mystery.

#### NEW TREE FELLING MACHINE.

TWO months ago we gave an account of tree felling by electricity, a successful experiment in this line having been made in Sweden. The following account of an English effort to fell trees by other than manual labor is given in the current issue of Cassier's Magazine. The new machine of which we furnish an illustration is the invention of Mr. Allen Ransome, of Chelsea, and reminds one very much, in appearance, of the now so familiar rock drill, the drill proper, of course, being supplanted by a reciprocating saw blade, substantially in the manner shown in the accompanying sketch. The piston to which the saw blade is attached works in a cylinder of small diameter but rather long stroke, pivotally supported on a pair of wheels, so that the whole arrangement is readily portable. Steam is intended to be supplied to the machine from a portable boiler



#### NEW TREE FELLING MACHINE

through a long steam hose, so that the boiler can remain in one place until the machine has felled all the trees within a considerable circle around it, the place cleared, of course, depending upon the length of the hose. Cutting down a tree, however, is not the only function to which the machine is limited. By partially rotating on its axis the saw can be set to cut in a vertical direction, or at any angle between the horizontal and vertical positions. so that, having been felled, a tree may be quickly cut up into desired lengths. It generally happens that when a large tree falls it does not lie flat, as its branches hold the upper part of the trunk from the ground, and in order to squarely cross-cut trees lying in such a position it is necessary to incline the saw somewhat from a direct vertical line. This is readily done by the adjusting capacity just mentioned. Suitable adjustments also are provided to enable elevation or depression of the saw to accommodate high or low-lying trunks, as the case may bc. It is not uninteresting to note that Mr. Gladstone, whose prowess as a woodman, in addition to his better known talents, was so widely exploited two or three years ago, has honored the machine with a very favorable comment, being reported to have said, after seeing it in operation, that it would do as much work in a minute as a woodsman could do in an hour.

#### A THREE CENT STAMP DOES IT.

ON receipt of a three cent stamp we will mail free to any address a copy of our little hand-book entitled "Rules and Regulations for the inspection of pine and hardwood lumber," as adopted by the lumber section and sanctioned by the Council of the Board of Trade, of Toronto June 16, 1890. Address, CANADA LUMBER-MAN, Toronto, Ont.

#### THE BRITISH BOILER EXPLOSIONS ACT.

[N Britain there are acts of Parliament relating to the use of steam boilers known hs The Boiler Explosions Acts, 1882 and 1800. Under these Acts the owners of steam boilers must report every accident of the nature of an explosion within 24 hours of its occurrence. From the last report to the Secretary of the Board of Trade by the Solicitor having charge of the workings of these Acts, we learn that the year ending June 30th, 1893, there were 72 investigations held. Some of these were merely preliminary inquiries, but 26 were formal investigations. Of the 72 accidents, 32 were from deterioration, or corrosion or some part of the apparatus having become defective. 23 were from ignorance or carelessness on the part of the attendant, 8 were from defects in design or workmunship, and in 9 cases the causes could not be definitely placed under any of these divisions.

It is interesting to note that the English law does not compel a boiler owner to place his boiler under the charge of a man holding any kind of a certificate, but the law holds the owner responsible, and in event of an accident he must prove that he employed a "competent" man. It goes further, and if at any of these formal investigations, it is proved that the accident was due to negligence on the part of anyone, whether attendant or owner, maker or seller of the boiler or its attachments, the law is strong enough to reach him, and inflict some form of punishment.

Here are samples from the report before us. No. 582 - Manufacturing engineers blamed for reckless conduct, and to pay £20 costs; No. 590.— Managing director blamed for neglect and ordered to pay £40,

costs; No. 608.—Owner blamed for not employing a competent person and ordered to pay  $\pounds$ 85, costs; No. 623. Owner blamed for want of proper supervision, and attendant blamed for neglect. Owner to pay  $\pounds$ 20, and attendant  $\pounds$ 5, costs; No. 651. Owner held responsible for negligence of his engineer, and a blacksmith who ignorantly advised owner as to the working pressure was blamed. Owner to pay 20 shillings and the blacksmith  $\pounds$ 20, costs.

We commend this to all parties interested in steam boilers. The acts have been in force a number of years, and have given good satisfaction. A similar act in Canada would do much to improve the steam appliances, and would make ewners careful as to what kind of a man they employed.

The investigations refer not merely to what are usually called boiler explosions, but cover accidents to any connection of the boiler which is under steam pressure. The breaking of a steam pipe, the supture of a tube or the bursting of a blow-off pipe must Le reported, hence owners are much more careful.

Some of the accidents investigated were of boilers which were insured. The report says: "As regards the Boiler Insurance Companies, no cause has arisen in connection with the working of the Acts which shows any serious neglect on the part of their inspectors, nor has any blame been attached to them by the Court in any formal inspection which has been held during the year."

#### A NEW INVENTION.

A NEW crank, which does away with the dead point, is the asserted invention of a French engineer. The crank-pin works in a slot cut in a steel disc fastened to the end of the shaft, and is pressed upon by a spring, which is so adjusted that at the ordinary working steam pressure it is held firmly in place. If, however, the crank be at a dead point, when the full pressure of steam is admitted into the cylinder, the spring is compressed, the crank-pin slides in the groove so as to assume an angular position to the shaft, and the latter begins to revolve. As the pressure of the steam in the cylinder, while the engine is in motion is less than in the boiler itself, as soon as the shalt begins to turn the pressure against the spring is relieved, and the crank-pin flies back to its usual position. The tension of the spring is adjusted as necessary.

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PUBLISHED ON THE FIRST OF EACH MONTH

#### -15-C. H. MORTIMER

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#### LOG EXPORT DUTY.

Ar the sessions of the Donanion Parliament each year that section of the lumber trade, who feel that the free export of logs to the United States, is an injury to the saw mill business in Canada, have not failed to make their protest heard. This season, however, these claims have been urged with much greater energy and force than ever before. All along the northern lumber section of the province, an effort in one direction and another to influence parliament to reimpose the log duty has been made. The question was brought before a recent meeting of the Orillia town council and a resolution on the line of preventing a continuous export of logs to the States was vigorously discussed by the municipal fathers of that burg. Early in the month a strong deputation, representing a considerable percentage of the lumber interests in the Georgian Bay district, waited on Sir John Thompson and pressed upon him the importance of placing an export duty on logs exported from Canada to the States. It was alleved by the deputation, in consequence of the regrowth in this method of lumbering, that many mills in that district were closed down.

According to the despatch that appeared in the daily and weekly press, both in Canada and the United States, the statement was made to the Premier that over 500,000,000 ft. had been sent from the United States to Canada during the past year. Obviously this was an egregious error on the part of the gentleman, who acted as spokesman for the Georgian Bay interests. or else it was a very unwise statement to make. In dealing with matters, as exact as those of commerce, exaggerated statements must always react upon those who make them. So able and enthusiastic an advocate for the protection of our forests as Mr. William Little does not place the export much beyond one half of 500,000,000 ft. It is probable that the total export during the past year was about 300,000,000 feet, and owing to a smaller cut, a result of the depression in the lumber trade, the export of logs for 1894 will hardly exceed this figure.

In a more public way the question of an export duty came before the House a few days ago, Dr. Spronle introducing the matter. He argued that the export of logs from Canada was steadily increasing. These were the figures given as taken from the trade and navigation returns In 1889, \$440,805; in 1890, \$615,194, in 1891, \$615,320; in 1892, \$1,044,134, and in 1893, \$1,517,000 worth of logs. It is to be remembered, of course, that at the time the smaller figures prevailed an export duty of \$3.00 per thousand ft. on logs existed, and further that after the removal of the export duty American lumbermen became extensive purchasers of Canadian limits. Dr. Sproule made the statement that 50 big mills on the Georgian Bay had been closed down, as a result of this change in the tariff, and thousands of dollars worth of machinery were lying idle and rusting away because of this policy.

Mr. Charlton in reply to Dr. Sproule, noted the point that the source of supply for the Collingwood, Parry Sound, Midland and other idle mills on the Georgian Bay was just as far distant as to the mills on Saginay and other American points where Canadian lumber was being sawn. So far as any practical purpose was concerned Dr. Sproule's suggestion did not meet with favor by the House and the tariff on this point remains undisturbed. A summary of the debate is published in these columns.

The CANADA LUMBERMAN has, during recent years, presented this duty question in its many different bearin s There has been no interest that has not been fully represented. By Mr. Little, "Canadensis" and others the argument in favor of holding to Canadians our Canadia ( lumber has been very exhaustively presented, wadst other writers, with as great fullness, have given the opposite view of the question.

The contention of some that the closing down of our mills is a great sacrifice of Canadian labor and machinery is met with the statement that the larger cost goes on the logs before they reach the mill and any circumstance that gives an impetus to extensive logging, means an enlargement of the labor market. Then there is this to be remembered that, with the removal of the export duty on logs, came the concession from the United States Government of a reduction on the duty of manufactured lumber from Canada to the States, and it is a matter of commercial record that the result of this has been to very largely augment the trade in the United States for Canadian lumber. Not without its force is the statement that the change in the tariff oas also been the means of introducing into Canada large amounts of foreign capital, that would not, probably, have been placed here under other conditions.

That the people generally of the towns and villages in our northern district should feel warm on the question is natural, and Canadians everywhere must sympathize with them in their efforts to prevent, what, they believe, means the destruction of those commercial interests that have proven the main stay of their different communities. To men and women, who live in a community, who probably own their little properties there, whose social and family ties are centered around and about these places, it is no trifling affair to find, as it were, the cord that has held all these interests together being broken at one point and then another, and they forced to make sacrifices and seek other fields to make their bread and butter. This, we believe, is the strongest force at work in an agitation for a reimposition of the export duty on logs and it is ene that calls for much consideration. When this phase is presented to lumbermen, who believe that the best interests of the trade are served by leaving tariff conditions, as they exist at present, the reply is that ' ie local view of the question, as affecting certain districts of the country, must give way for the wider view, touching the country as a whole.

It is to be remarked, so far as parliament is concerned, while it is said that the cabinet is divided on the question and the Minister of Finance has shown a strong disposition favorable to protection of our forests, that the Hon. W. B. Ives, president of the council, himself a saw mill owner, 1 not an ultra-protectionist, so far as lumber is concerned, and nearly all the promuent lumbermen in parliament, including speaker White, are opposed to a change.

There is a Canadian or national phase of the question,

that is not often discussed, and yet it is one of much moment to our people as a people, independent of any commercial interest in the article of lumber. We refer to the statement frequently made, that in Ontario, at least, our forests are becoming rapidly depleted ; and it is worth considering how far we should sacrifice a present advantage only to meet with ultimate and al most irrecoverable loss.

#### TARIFF CHANGES.

CERTAIN tariff regulations, as affecting the lumber interests of the country, announced by the Minister of Finance in his budget speech, have, within the past ten days, undergone material change. It will be remembered that wood pulp was placed on the free list by Mr. Foster. We pointed out in the April LUMBERMAN that this was placing Canadian wood pulp manufacturers at very unfair advantage in competition with Americans. The wood pulp industry at the time of the changes effected by the McKinley tariff, was unfairly dealt with, and the step taken at the opening of parliament was only an aggravation of the evil. We are glad to see that the Minister of Finance has struck out wood pulp from the free list, a duty having been placed on this article of 25

The consideration, as frankly stated by Mr. Foster in his budget speech, in placmg lumber and shingles on the free list was to concluate the Northwest farmers. It was clear from the outset, so far as shingles were concerned, that this change would, if not immediately, certainly at no late date, work serious injury to the red cedar shingle industry of British Columbia. Washington territory shingle interests have been sufficiently disorganuzed for some time to make the manufacturers of those territories anxious to place their shingles wherever it was possible to secure a market, even though this should be done at a considerable cut in price. Pressure was promptly brought by British Columbia commercial mterests on the government, and a result has been that shingles have been taken off the free list and placed at a duty of 20%, as before the change.

In the case of the lumber interests of Manitoba, the situation, if anything, has been aggravated by Mr. Foster adding to the item of undressed lumber on the free list, the words, " or dressed on one side only." He sad that the original concession was not found to be as use ful to Manitoba and the Northwest as it was intended to be. The government intended to give the peopled these territories their lumber in the best availably form, without entirely making lumber free and entrenching too much on the large interests involved in dressing and preparing lumber for completion in its various forms Mr. Martin, the Liberal member for Winnipeg, sad that in this the government was making a valuable corcession, but he would like it to go still further, and moved an amendment to add the words, " and including matched lumber." The amendment, however, was de defeated, and the item as amended by the Finance Minister was carried. A rejoinder by Mr. Haslam @ Mr. Martin that the farmers of Manitoba wanted the whole earth and the fence around it, very pertinently expressed the situation as it affects the lumber interests of Manitoba. In the framing of our tariff, at all tunes it is unfortunate that politics more often than business is the preponderating influence in fixing rates. If cer tain changes will secure votes in some particular date tion, the change is usually made. Nothing has been plainer than this in noting the many and continued changes that have been made in the tanff since it was first presented to the House at the opening of Parlia ment. It was felt that something would need to be College College done to conciliate the discontent that had staken posses sion of a considerable section of the farming population of the Northwest, and even though a large and impor-Sicilian Sing Stat Stat and inte Seni tant industry, like that of lumbering, was to be sacrified at the altar of politics, it mattered not. Just how Mr. Mather, of the Keewatin Lumber Company, and other lumbermen of that section of the province feel, s told in their own words on another page. They have had the serious drawback of excessive freight rates, and other difficulties to contend, with, in competition with the lumbermen of Minnesota. From a business point ness seel of view the Minister of Finance would find, on investgation, many stronger reasons for considering the claims

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JUNE, 1894

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of the lumbermen of the Northwest, than can be presented for concessions granted to many other lines of manufacture.

The question of lumber still further received the consideration of the House by Mr. Foster moving that elm toys be included among the logs, upon which the government will have power to put an export duty, not exceeding \$3.00 per thousand ft. The logs coming within this schedule are pine, Douglas fir, balsam, cedar and hemlock.

#### EDITORIAL NOTES.

To his other schemes, Gen. Booth, of the Salvation Army, will, it is said, in his efforts for the relief of the unemployed, enter the lumber business. The intention is to purchase a timber limit in Muskoka, upon which will be erected a comfortable shanty. The proposition is to send men from the city, who are out of employment, to work there, and a wood yard, which is to be established in Toronto, will furnish a market for the product.

THE Manitoba Government are wrestling with the question of granting aid to the South-Eastern railway. The extension of this road would be a boon to the lumbermen of the Lake of the Woods district. In the face of recent tariff regulations, making lumber free, of which we have something to say elsewhere, these lumbermen are going to have hard times unless relief is secured in improved shipping and freight conditions. The promoters of the road promise the logs will be brought from Lake of the Woods for manufacture in Winnipeg. Competition in freight rates will also be secured by the extension, and viewing the matter in this light, a late report from Winnipeg says that Ministers are disposed to grant a favorable bonus. The Prairie Province will strengthen its position generally every time that new railway competition can be secured.

As an evidence of the dullness of the lumber market in Canada and in the United States for the past year, it is pointed out that seldom have investors been more slow to make any move in the purchase of lumber or timber limits. One writer draws attention to the fact that, while timber in the Saginaw district is practically out of the market, and speculators must look to the neighboring states of Wisconsin and Minnesota, or to Canada, in all of which places they have already made large investments, yet, just at the present time there is almost no trading going on. One of the largest speculators has said that he could not remember any time when so many tracks were offered or such opportunities mesented for bargains as now. Concessions could be obtained to-day that, 18 months ago, would have been laughed at.

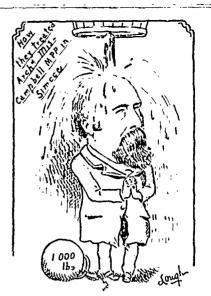
It has been known to business men for some time that the system of gathering export statistics of various products going from Canada through the United States has not shown our export trade in the fairest light. The writer remembers some time ago speaking to a Canadian natmeal exporter, who sent his product to the West Indies through a New York commission house. "All this stuff," he said, "reached the Indies as United States meal." The Canadian Manufacturer has drawn attention generally to this question and states that collectors have been instructed to use every effort toascertain correctly the country of destination of all goods entered for export at their port to the end that the export statistics of the department shall be as correct as possible as to such foreign destination. " It is this lack of accurateness in ascertaining the destination of merchandise exported from Canada," says our contemporary, "that has heretofore told so unfavorably against our trade with countries other than the United States. We have occasion to know that much of our exports of agricultural implements to Australia has been credited to the United States trade with that country because the shipments were made to a United States shipping port without the statement at our export port of the precise destination ; and in the same manner much of our Canadian lumber, intended for the West Indies and other foreign markets, sent in bond through the United States, has been credted to this latter country through the lack of accurateness alluded to, and which the Government is now seeking to remedy.



EDWARD Jack, of St. John, N. B., who has for years given considerable attention to lumber matters, has expressed himself on the question of the log export duty. United States lumbermen having paid large sums into the Ontario treasury for certain timber limits, subject to no restrictions as to where the logs might be cut, he considers the government would have been guilty of a breach of trust should they have inserted afterwards, that these logs be cut within the province. "Suppose," says he, "that after a man had bought a thousand bartels of flour in Toronto, deliverable in one year from date, the Dominion government imposed an export duty of \$1 per barrel on this flour, who would justify such an act? Placing to one side questions of justice, as well the implied rights of purchasers, how much money is lost when logs are taken to the United States to be manufactured? The cost of sawing, about \$1 per M feet B. M ; the log hauler wants no export duty imposed, for he usually receives a higher price for hauling from Americans than he can get from the Canadians. Why, then, close his best market merely to please the mill owner, in aiding him to shut out all competition in the matter of log purchasing In New Brunswick we vant no export duty, in fact a duty could not be collected here unless at a most enormous expense, as the rivers St. John and St. Croix are for a considerable distance the boundary between Canada and the United States, and when a log floats across the centre line of these rivers into the United States, it can be sawn there without the payment of duty. Further, it is not to be supposed that our friend Jonathan will look calmly on and see his sons wronged, and there cannot be any doubt but that if the Dominion government imposes such an export duty, he will act and will place, much to our detriment, a duty on sawn lumber additional to present charges sufficient to counterbalance an export duty which the Dominion government may place on sawn logs."



JOS. OLIVER, of the firm of Donogh & Oliver, Toronto, is one of the best known lumbermen that takes the road. Whether at home or abroad he has a large clientele of friends. Like all great men he has a hobby on which he works off his surplus energy, and fills in the spare hom. from business and domestic duties. Oddfellowship is his hobby, Mr. Oliver at the present time occupying the position of chief executive officer of the order in Ontario. I am glad to be able to present here a picture of Mr. Oliver and his favorite goat; with which he has about as familiar acquaintance as with 1 x 10 dressing, or xxx shingles.



UP in Sincoe they have always treated Mr. A. Miscampbell, Sincoe's lumberman-representative in the Local Legislature, with a decent majority of votes, when the hour of counting the ballots has arrived, and he expects that on the 26th June they will be equally kindly with him. But with the belt of them, the road of the politician is beset with trials and tribulations, and our artist has depicted Mr. Miscampbell as he experienced some of these pleasantries when being initiated the other evening into the mysteries of one of our secret orders, membership in which is supposed to count for something when the day of election arrives.

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He is not exactly a lumberman, but the well-known registrar to Toronto, Mr. Peter Ryan, has rubbed against prominent lumbermen of the Dominion often enough to become fairly well posted in lumber affairs. Moreover, it is said, he owns a timber limit or two, not excepting the Quebec deal that has been bringing him some newspaper notoriety recently. I dropped in on Mr. Ryan in his office a few days ago to see if he knew of anything special going on in the trade. Of course he was modest enough, as is the wont of an auctioneer, to tell me that the newest and best thing was the big tunber trade sale he had announced for the Board of Trade rotunda in August next. I had seen the printed list of properties and must say he is going to make it worth while for lumbermen from anywhere to visit Toronto at that time. Peter Ryan has a not on that he can hold at least one big timber limit sale here once a year, and I don't know but what the scheme is a good one. But enough of shop, said I to my friend of the hammer, I asked : "What is the outlook for lumber so far as your somewhat frequent meetings with lumbermen would indicate ?' "Well, just at present," replied Mr. Ryan, "things seem in the dumps, and yet I find that everybody has confidence in the future of lumber. What is wanted for this country is free lumber; and it is free lumber, that is going to give renewed vigor, also, to the lumber trade of the United States. Knowing this much, at least, of the views of lumbermen, it makes me mad." And who wouldn't give a quarter, thought I, to see Peter Ryan mad, if he could ever be got there. "Yes, it makes me mad,' said he, "to think that as lumber matter stands to-day there should be some folks, calling themselves statesmen, at Ottawa, who would want to raise a disturbance over the log export duty just at this particular time. What are they thinking about ?' "You know Ontario forests pretty well," I remarked. "Do you think they are as nearly denuded of their timber as we are sometimes told?" "There is more timber yet in Ontario," said Mr. Ryan, "than many people suppose, and yet the real fine white pine, those old stalwarts of the forest primeval, that have been made memorable in song and story-there are few of them to-day in Ontario. The best of our pine has gene." "By the way, said Mr. Ryan, as I was about to take my departure, "Did you see my letter in the World re that attack of L'Liectcur, of Quebec, made on me concerning that same Quebec timber steal, as they call it. I rather think I laid out Brother Pacaud. Read it and see."

#### OTTAWA LETTER.

[Regular correspondence CANADA LUMBERMAN.] DECLINE of the square timber trade, which I have noted A in these columns on other occasions, is becoming more and more marked. Even in this wooden country, where we were supposed to have a plethora of timber, it is now getting too scarce to ship in this way. A leading shipper here has said that in a year or so square timber will be a thing of the past. This year not over 1,000,000 feet will go down the Ottawa to Quebec, where a few years ago from 5,000,000 to 8,000,000 feet was the usual cut.

Some little uncertainty prevails here in regard to the lumber tariff. Agitation from the Georgian Bay territory has, in some respects, become quite pressing, and it is being remarked that the government organs, more particularly, perhaps, the Empire, has been quite strong in its deliverances of late for a reimposition of the log duty. It is thought that the Minister of Finance has strong leanings in that direction, and yet it is known that the stronger influence, in the past, in moulding lumber legislation, has been centred in this district; and Ottawa lumbermen are not favorable to a reimposition of the duty.

A question of much interest to Ottawa and indirectly to leading lumber firms here was raised in the House the other day by Mr. Casey, who had the following questions on the order paper : Who are the lessees or users of the water power privileges at and around the Chaudiere Falls? What are the respective rentals or dues which they are charged? How much, if any, is each of them in arrears up to the end of last fiscal year ? How are their respective rights defined ? Have they right to encroach by permanent building on the fall itself? Are all the practical workable privileges taken up, or controlled by private parties? The minister of public works replied : The agreement of lease of 19th Nov., '89, gives as the lessees Messrs. Perley & Pattee, J. R. Booth, R. Blackburn, J. & T. M. McRae, M. Petrie, A. H. Baldwin, Bank of Montreal, Milton Merrill, Bronson & Weston Lumber Co. An annual rent of \$100 for each lot is paid for 15 lots on Chaudiere Island and 10 lots on Victoria Island. Only one lessee was in arrears at the end of the last fiscal year and he made the required payment on Oct. 5, 1893. The other lessees had previously paid up. The opinion is expressed that the workable privileges are at present controlled under the leases above referred to. INDIFFERENT LENGTHS.

A fair amount, only, of activity is observable around the mills.

Some of the New Edinburgh folks were recently alarmed by a large explosion in the Ottawa River, an examination of which, showed that it was a sawdust explosion. The roar was like a crash of thunder.

J. R. Booth's large mill has at last commenced operations. Many men have been anxiously looking forward to this event. It is probable that the mill will keep running straight along, as there are plenty of logs on hand.

The cut at McLachlin's mills at Amprior, will, it is thought, be curtailed to some extent this season, as a number of logs are "hung up" because of low water in the upper streams and lakes.

OTTAWA, Can., May 22, 1894.

#### TRENTON LETTER.

#### [Regular correspondence CANADA LUMBERMAN].

S INCE the starting up of the Gilmour mills on the 1st inst. about 150,000 feet board measure has been the average daily cut. The new Allis band mill placed in the works this spring is in active operation, with highly satisfactory results. Over four and a half million feet of lumber have already been moved by the company this spring, shipments being principally to Ottawa and Oswego. The steam barge "Iona" is still engaged in carrying to the latter point.

Trade is rather quiet in this locality, although local sales are beginning to pick up, and a very large trade is being done in egg cases and fillers.

The Rathbun Co.'s tug "Rescue" has been chartered by Gilmour & Co. to tow their logs from Belleville gap to Trenton. The first tow arrived this morning, over five thousand pieces being taken to the mills.

Mr. Peter Pomery, one of the best known salesmen in the Gilmour employ, was engaged in showing a customer some lumber on a high pile a few days ago, and making a mis-step fell a distance of some fifteen feet, alighting on his back and shoulders. He was picked up unconscious and conveyed to his home, where, upon examination it was found that he had sustained a fracture of the shoulder. Several ribs were also broken, and he was generally shaken up. At present, however, he is on a fair way to recovery.

Mr. A. W. Hepburn, of Picton, has just completed the construction of a new steam barge to ply on the waters here. It is built principally for the grain and lumber trade, and will ply between Picton, Fairhaven and Montreal.

Taken on the whole the lake trade is rather quiet, and there are few new boats engaged in the transportation of freight.

Telegrams are being daily received by Gilmour & Co., giving accounts of the success of the log-way at Dorset. The logs are now being rapidly passed over the slide, and with the exception of a slight trouble with defective chains everything works satisfactorily. All the winter's cut of logs will be tailed in Lake of Bays in two weeks, and it is expected that the loghaul will handle these logs at the rate of from eight to ten thousand pieces per day. Mr. David Gilmour and Chief Engineer D. Clark are at present in the new limits noting the success of the scheme.

TRENTON, Ont., May 21, 1894.

#### NEW BRUNSWICK LETTER.

[Regular correspondence CANADA LUMBERMAN].

THE fact that the shingle industry of this province is not in the most hopeful shape, has not prevented the employees of the Miller & Woodman shingle mill here from going out on strike. They are asking for \$2.00 per day where \$1.75 had been the wages.

Considerable shipments of deals are being sent from Sussex to St. John this spring by Joseph Campbell.

The larger mills in the province are now pretty generally running. This, of course, includes the large mills of Hutchinson, Snowball, and Flat, on the Miramichi, and Gibson's mills at Marysville.

Activity is prevalent in driving along all the streams on the St. John, Miramichi, Restigouche and other rivers of the province. A lot of logs that were "hung up" at Seven Islands, above Grand Falls, last season, have already reached the booms at Fredericton.

ST. JOHN, N. B., May 21, 1894.

#### BRITISH COLUMBIA LETTER.

#### [Regular correspondence CANADA LUMBERMAN.]

L UMBERMEN here retain a lively interest in the building of the Nicaragua Canal. They know that that route will so shorten the distance between this province and the United Kingdom, that it must mean very great things to the lumber trade. It is calculated that in place of taking several months to reach England from Vancouver, as now, that when the Nicaragua Canal is completed, the time will be reduced to about sixty days, whilst steamers will be able to make the canal in 8 days and from the canal to England in 16 days. It is not unlikely that when this time arrives the Canadian Pacific Railway will arrange for a line of fast steamers between British Columbia and England. The larger part of wood pulp has hitherto been mainly supplied the European markets from Austria, but with the Nicaragua Canal, as a matter of fact, the supplies can be profitably drawn from this province. It is said that the gumless spruce grown here is superior to any pulp in the market and that it is next to impossible to find any wood that will compete with our cottonwood for the manufacture of fine quality paper. This wood is also used in European cities for block paving.

#### COAST CHIPS.

H. H. Spicer, of Vancouver, is shipping large quantities of shingles to Toronto. It is said that his Toronto agent has already placed about 23,000,000 of these shingles in Ontario this season.

NEW WESTMINSTER, B. C., May 18, 1894.

#### MICHIGAN LETTER.

#### [Regular correspondence CANADA LUMBERMAN.]

PERHAPS, one would not need to enquire of the oldest in-habitant but he would a habitant, but he would need to go back a long time in the history of the lumber trade in this district to find dullness continue so successfully to drag its slow length along. I have never found lumbermen so discouraged before at the opening of a new season's trade. Manufacturers, dealers and timber ownerseverybody, in fact, who touches lumber-are filled with a spirit of discontent. Congress continues in session, though it would be a good thing if they would close up, and lumbermen then might have some idea of what would be best to do. The tariff uncertainty is doubtless at the bottom of present troubles.

#### BITS OF LUMBER.

John J. Rupp, who has an interest in the Vermillion Lumber Company, owning a tract of timber on the St. Lawrence River, in Canada, the product from which is cut at a mill at Three Rivers, Que., says the deep snow last winter has operated against a large log cut. In place of putting in about 12,000,000 ft., the cut will not run beyond 7,000,000.

The Tittabawasee River Boom Company are now into the season's log rafting.

150 sticks of oak timber are to go from Petersburg, Mich., to Quebec. The timber runs from 25 to 60 ft. long.

Col. A. T. Bliss will erect a stave and shingle mill at Sandford.

J. S. H. Clark, of Newark, N. J., has opened a lumber yard at South Bay City. He had formerly operated yards at New York and at Tonawanda, but will, it is said, close out the latter.

There has been some showing of discontent among mill workers along the river, but it is thought wise counsels will prevail, and that there will not be any trouble this season-There has, however, been some trouble with the Longshoreman's Union, who asked for 40c. an hour for loading boats. An effort to compromise at 35c. has proven unsuccessful. With much justice the mill men say that they are already heavy losers over the depression of last year and the tied-up capital at the present time. If the contest continues a good many logs that would otherwise come here will be driven to other points.

The Thompson shingle mill at Alpena is cutting 20,000 \$ day and has been running steadily all spring.

Bill stuff is reported in good demand at Manistee. A report is current that Wiley Bros., of Saginaw, have sold a track of white pine near Grand Marais, Lake Superior, to Ross & Con of Ottawa, for about \$75,000 cash.

SAGINAW, Mich., May 19, 1894.

#### WHY STEAM-BOILERS EXPLODE.

WHY do steam boilers explode? They do explode, and lives are lost and property destroyed, and there is a cause for the trouble in every case. In a large number of such instances it is safe to say the trouble would not have occurred if those in charge had given heed promptly to some trifling defect at the proper time. It is the old story of the stich in time and when the stich is not made the rent enlarges, and in a steam boiler a rent is a serious affair. Some statistics have come to us from the Hartford Steam Boiler Inspection Com pany, which give much needed emphases to the moral we have here drawn. We are told that since the company began business they made 796,725 visits of inspection, inspected 1,580,060 steam boilers, made 608,786 complete internal inspections, tested 102,195 boilers by hydrostatic pressuse, found 1,206,309 defects, of which 154,749 were dangerous, and condemned 8,406 boilers. Concerning their work in November, 1893, they say : "During this month our inspectors made 6,745 inspection trips, visited 14,706 boilers, inspected 5,241 both internally and exter; nally, and subjected 537 to hydrostatic pressure. The whole number of defects reported reached 10,471, of which 1,058 were considered dangerous; 27 boilers were regarded unsafe for further use." Of their work in December, 1893, they say : "During this month our inspectors made 7,642 inspection trips, visited 15" 971 boilers, inspected 6,647 both internally and extern ally, and subjected 574 to hydrostatic pressure. The whole number of defects reported reached 12,335, of which 1,385 were considered dangerous ; 83 boilers were regarded unsafe for further use." The summary for those two months is as follows :

two months is as tonows .				
	Novemb	er. Dan-	Decen	Dau
Nature of Defects.	Whole Number.	ger-	Whole Number.	ger. ous.
Cases of deposit of sediment Cases of incrustation and scale Cases of internal grooving	810 1,591 87	39 65 7	1,127 2,266 179	125
Cases of internal corrosion Cases of external corrosion	523 654	30 44	776 887	40 45 89
Broken and loose braces and stays Settings defective Furnaces out of shape	161 229 361	39 25 17	276 291 410	89 40 17
Fractured plates	345 227	67 26	430 320	71 33 25
Blis.ered plates Cases of defective riveting Defective heads	276 1,282 93	12 113 20	338 1,149 165	80 53
Serious leakage around tube ends Serious leakage at seams Defective water-gages	2,365 359	322 29	1,845 550	34° 62 76
Defective blow-offs Cases of deficiency of water	331 115 11	80 42 6	315 164 15	44 21
Safety-valves overloaded Safety-valves defective in construction Pressure-gages defective	52 80	11 23 38	97 96 601	45 26 57
Boilers without pressure-gages Unclassified defects	471 3 45	30 3 0	3	3
Total	10,471	1,058	12,335	1,385

A Port Townsend, Wash., dispatch says: The Ha waiian ship John Eva, cleared from this port yesterday for Port Pirae, Australia, with the largest lumber cargo ever shipped in a single vessel. The ship carried 2,625747 feet of lumber.

#### THE CANADA LUMBERMAN

#### THE NEWS.

#### CANADA.

-D. S. Clemens is crecting a new heading and stave factory in Guelph.

-Chas Wickens, lumber dealer, Sombre, Ont,, has assigned to C. B. Jackson.

-John H. Shantz has started up another saw mill at Bloomingdale, Ont.

-Cyr & Cossitt, saw mill, Stone Valley, B. C., has been succeeded by Cyr Bros.

-S. McIlvaine and W. G. Ellis have purchased the Bissette saw mill at Vernon, B. C.

-Ewen Morrison, lumber, Victoria, B. C., is successor to the Rock Bay Lumber Yard.

-Peter Genelle, saw mill, Naksup, B. C., has admitted J. E. Poupore into partnership.

About 50 men are employed in the planing mill of J. & T. Charlton, at Tonawanda, N. Y.

The St. John River Log Driving Co. will handle onehundred million of logs this season.

The Minnesota and Ontario Lumber Co. write us that they are closing their office at Norman, Ont.

-T. Paradis, saw mill and lumber merchant, Levis, Que., has assigned, with liabilities of about \$65,000.

The capital stock of the Brunette Saw Mill Co., of New Westminster, B. C., is to be increased to \$300,000.

Lumbermen in the vicinity of St. Andrews, N. B., are jubilent over the prospects for getting out lumber this summer.

-G. V. Clark, of Lost Channel, Ont., has built a new shingle mill with a capacity of twenty-five thousand feet per day.

-A successful test was recently made by Gilmour & Co. of a tramway and sleuceway for carrying logs from Lake of Bays to the Trent River.

The saw mill of Messrs. R. Grant and L. Mounce, at Wellington, B. C., has passed into the control of the Shawingan Lake Lumber Co.

Three lumber yards situated at Hartney, Souris and Winnipeg have been united under the business management of the Hughes, Atkinson Co.

Messrs Rouke, of St. Martins, N. B., have their steam saw mill in operation. It is 60x100 feet and well equipped with first-class machinery.

The Hastings mills, Vancouver, B. C., have purchased 5,000,000 feet of logs on Puget Sound. The price paid is said to have been \$5.00 per M.

Messrs. E. F. Keene & Co., of Sherbrooke, Que., intend erecting extensive saw mills in Spaulding, Beauce county, adjoining Lake Megantic.

The Nicaraguan barque, Don Carlos, is chartered to load lumber at Hastings Mill, Vancouver, B. C., her usual destination being Moumea, New Caledonia.

Winnipeg is asking for sealed tenders for the supply of from four hundred thousand to one million feet B. M. pine lumber. The date limit is June 7.

-E. Davison & Sons, Limited, Bridgewater, N. S., are applying for incorporation to build and operate saw mills, pulp mills, etc. The capital stock is \$25,000.

Hon. Mr. Flynn, commissioner of Crown lands, for Quebec, has issued a circular giving specific instructions to Crown lands agents as to their duty in disposing of agricultural lands to settlers.

What is said to be the largest leather belt ever sold in the Province of New Brunswick is 27 feet long and 48 inches wide and was purchased by Dunn Bros, for their mill at Grand Bay.

The Burrard Inlet Red Cedar Co. are erecting a new mill at Port Moody, B. C. The mill is to have all the latest improved machinery. Its capacity will be 75,000 feet daily.

A Quebec despatch of the first of May, announced the atrival of the first new timber raft from Ontario, comprising oak, elm, hickory, etc., manufactured this winter, and belonging to the Calvin Company.

The coal strike among the miners of the United States, causing a scarcity of coal, is likely to effect freight traffic on the Grand Trunk and C. P. R. Lumber merchants fear that a refusal on the part of the railroads to transport lumber at this time of the year will seriously inconvenience them.

A syndicate consisting of Edward Aylford, of London, Eng., E. Nash, of Toronto, and F. W. Balsmyder, of Chicago, has purchased a considerable track of land in the new town of Cedarburg, Mich. Messrs. Aylford and Nash own large quantities of spruce timber in Canada, and propose erecting a pulp mill at Cedarburg, to manufacture chemical pulp. The two saw mills now in existence will be run full capacity.

-W. G. Nutson's mill and lumber yard, at Windsor, Ont., has been purchased by Piggot & Sons, of Chatham. Mr. Nutson is in the happy position for a lumberman, in these days, of being able to retire on a competency.

—Thos. Wilson has been arrested on the charge of having set fire to Fawcett's large planing mills at Strathroy, Ont. Wilson is a carpenter, and is said to have done the deed with the object of providing himself with employment. The mills were entirely consumed and the owners unfortunately were uninsured.

—The Wm. Cane & Sons Mfg. Co., of Newmarket, has completed the purchase of what is known as the Baxter Timber Limit, from the Georgian Bay Lumber Co. It is 22 miles square and comprises a whole township in Muskoka District on the North Shore. The company hope to get material for their pail department from this reserve for many years to come.

—The cut on the Tobique River, N. B., during the past winter is reported to have been about one-third larger than last year, and the 2,000,000 feet of lumber that was hung up last spring will be got out this year. The driving is getting along nicely, the water being at the right height for the operations. Mr. Frank Whitehead estimates the amount of lumber to be handled as follows: Mr. Fred. Hale, operating on the left-hand branch of the Tobique river, 3,500,000. James McNair, on the right-hand branch, 2,500,000. Mr. R. Estey, on Two Brooks and Sisson branch, 2,500,000. Mr. Donald Fraser, on the Odell river, 3,000,000. Crawford Bros., on Trout Brook, 700,000. The following lumbermen are operating in several locations: Mr. A. J. Beverly, 2,500,000; Mr. George T. Baird, 2,000,000.

GENERAL.

-High water again threatens the saw mill interests at Minneapolis,

—Serious damage has been caused by floods at the Cloquet lumber yards, near Duluth. Many million feet of lumber have been lost.

—The shipments of doors from California and Oregon to Melbourne, Australia, last year amounted to 637 doors. In 1886 Australia took 15,394 doors from the two states mentioned. A duty on foreign doors has cut down the imports.

—It is seldom that wood which has grown more than 4,000 years before the Christian era is used in the construction of a present day residence, and yet this really happened recently in Edinburgh, where a mantlepiece was fashioned from wood said to be 6,000 years old.

#### FIRES AND CASUALTIES.

FIRES.

-F. W. Sentel, shingle mill, Vancouver, B. C., burned out. -E. B. Doliff's sash and door factory at Fitch Bay, Que., destroyed by fire.

--Fawcett's sash and planing mill at Strathroy, Ont., was burned recently. Loss, \$3,000; cause, incendiary.

-R. Inchis planing mill at Sudbury, Ont., was destroyed by fire a few days ago. Loss, 3,500; insurance small.

--A sawmill at Smith Lyon, Mich., owned by G. P. Mc-Gann, Toronto, was destroyed by fire the early part of May.

—The steam saw mill of J. M. Ruiter, at Brome Corner, Que., was consumed by fire recently. Loss, \$6,000; insurance, \$3,000.

-The Ontario and Western Lumber Company suffered a loss of \$125,000 by fire at their Rat Portage lumber yards. Insurance \$80,000.

--Price Bros. & Company's steam saw mill, at St. Thomas, Que., was destroyed by fire on the 6th of May. The loss is stated to be \$20,000.

-A shingle mill belonging to James Brenan, at Vespra swith, between Collingwood and Minesing station, was burned recently. No insurance.

The branch establishment of the Waterous Engine Works at St Paul, Minn., was destroyed by fire a fortnight ago. The loss will be \$20,000, covered by insurance.

—The planing and saw miil of Burns, Rankin & Mills, corner of Dundas and Sheridan avenue, city, was completely destroyed by fire a fortnight ago. Loss, \$20,000; insured for \$6,000.

—One hundred cords of shingle bolts, the property of D. A. Macdonald, of Sundridge, Ont., together with a iarge quantity of standing timber, were destroyed by fire the carly part of the month.

-The saw-mill of W. R. Thompson, Teeswater, Ont., was destroyed by fire on 7th May. A large quantity of shingles, maple blocks, and broom handles were burnt. Loss about \$5,000; insured for \$1,500.

#### CASUALTIES.

-Moise Joanisse, a mill-wright employed in Gilmour and Hughson's saw mill at Chelsea, was killed while reparing a turbine which had been set in motion by men who were unaware of Joanisse position. A verdict of accidental death was returned at the inquest.

--Wm. Smith and James Anderson were hauling a car of lumber from II. T. Eaton & Son's saw mill at Milltown, N. B., when the bridge over which they were crossing gave way and they were precipitated into the rushing water. Smith had one of his legs broken, and Anderson, it is thought, is hurt inwardly.

#### PERSONAL.

At a convention held at Dundas, on the 2nd of May, Mr. John Ira Flatt, lumber merchant, was nominated to contest North Wentworth in the Reform interest at the approaching provincial elections.

Our British exchanges announce that J. W. Todd, and Mr. Mackarell, of Watson & Todd, lumber merchants, and Mr. W. H. Wilson, of Fairey, Crockfort & Co., have sailed for Canada in the interests of their respective firms.

Mr. Peter Thompson, of Winnipeg, Man., has been appointed superintendent of Alonquin Park, and Mr. John Simpson, of Mount Forest, Ont., civil engineer. Mr. Thompson has been acting superintendent since the park was dedicated.

Mr. John Donogh, of the lumber firm of Donogh & Oliver, accompanied by Mrs. Oliver, sailed for a trip to Europe a week ago. A large number of friends bid them adieu at the train on the day of leaving. Bon voyage will be the sincere wish of Mr. Donogh's many friends in and out of the lumber trade.

The rumor is current that Mr. E. B. Eddy, of Hull, Que., the extensive pulp manufacturer, and ex-lumberman, will be asked to fill the vacancy in the Senate caused by the death of Sir. John Abbott. If the Senate wants the services of one of the brightest and shrewdest business men in Canada, Mr. Eddy is the man for the place.

#### PUBLICATIONS.

With the current May (number), the Canadian Magazine begins its third volume, and begins it well. The illustrations are numerous and good, and the articles well written and of rich variety.

#### QUALIFICATIONS AND TESTS OF ENGINEERS.

**E** VERY engineer and fireman ought to know perfectly well, without the necessity of any elaborate calculating or theorizing, what results will ensue should he over load his steam engine, his boiler, or any of the machinery under his charge, and he would not be compelled to call in the services of most expert engineer to tell him clearly and concisely what would occur under such conditions. He would know that in the vast majority of cases he would be subjecting himself to the possibility—in fact, high probability—of a speedy breakdown, and before that event actually transpired, to endless trouble of every description, all the results of poor judgment, or unfortunate necessity, which led him to work his boiler, engine, or machinery up to double, or perhaps treble what it was intended for.

Every applicant of an engineer's license should be prepared to answer all questions that will show that he is mentally well equipped to provide against possible disaster. He should be well skilled in the construction, care, and manipulation of pumps, injectors, inspirators, all the devices by which the boiler is supplied with water. He should be familiar with the use of the gagues in use for determining pressure of steam, or the quantity of water in the boiler. The safety-valve should be under his care, always ready to perform its functions. Then he should have some idea of the difference between fibrous and crystallized iron; should be able to tell when a boiler had become weak and needed repairs, and have the courage to say so, and refuse to fire it. He should have skill sufficient to enable him to frequently inspect the boiler, and determine if the factor of safety is enough to insure absolute safety. He should be able to take such care of the boiler, that large or dangerous deposits of scale and mud are not possible ; also, should know what to do when "priming" or "foaming" is evident. He should inform himself as to the effects of corrosion, internal scale and deposits, improper setting, impeded circulation, and improper steam and water.

# FRADE REVIEW.

Office of CANADA LUMBERMAN, May 25, 1894.

#### THE GENERAL SURVEY.

WERE it to be said that the lumber business in Canada was booming, the statement would be taken with a large grain of salt by business men generally, because commerce as a whole, in Canada, nor hardly anywhere else, seemingly, is not rushing at the present time. All over the world a depression in business exists, and Canada is not beyond the effects that touch the general body, though it can, with fairness, be said that there is nothing approaching the severity of distress here that has found a place in other countries.

Lumbermen will not, this season, make a pot of money, and yet of present trade it is to be said that matters are doing fairly well. Practically all mills at the leading lumber points are in operation. Word from Ottawa tells us that the large mill of J. R. Booth, as well as the other extensive mills of that district, are now running and expect to be able to keep going throughout the season. In the Georgian Bay territories the chief mills there are in operation. The Parry Sound Lumber Company have been sawing for a month past, and the mills of the Georgian Bay Lumber Company are also cutting. In the Ottawa, it is thought the logs will come along nicely, and that there will not be any delay in work for want of logs, but in the Georgian Bay section the outlook is not so hopeful and it is feared that a good many logs will be "hung up" in the streams this year. Export lumber trade, in the words of a prominent Chaudiere lumberman, is slow. The Quebec market for deal timber is considered to be somewhat improved over last year, but shipments to the United States are not brightening up very rapidly. With navigation opened, the trade between Ottawa, Albany and Oswego will, no doubt, develop, measurably, at least. Wholesalers do not tell of any large sales of lumber. What business is being done is of a very careful character. Sales are small. On another page the views of leading lumbermen in the Lake of the Woods territories are given. The trade there are agitated over the change in the tariff, making United States lumber free. They say that if any considerable quantity of Minnesota lumber should be brought in it is probable that both freight rates and prices would need to be reduced to meet the competition. In the meantime the uncertainty of the situation is giving a stagnant character to the lumber trade in those parts, that is not very acceptable at the present time, when trade is expected to be booming.

British Columbia conditions are not very much changed within a month. People there are not concerning themselves a terrible lot over the tariff changes, and yet they apprehend that these may have an influence on the trade of the province that will call possibly for some fresh moves among lumbermen. What export business is doing is not of an extensive kind. A number of vessels are loading for various points of shipment, but the actual selling of lumber for export is light. Shingle men are doing quite a good trade and they seem to be very well satisfied with the hold they are securing on Ontario. Some considerable shipments have gone forward to the east recently.

The mills in the Maritime Provinces are now at work and a large quantity of lumber will, it is expected, be cut this season. An improvement in the British markets, though slight, encourages the lumbermen in these provinces to look forward to a larger trade.

Nothing very bright is to be written of trade that is being done by local lumbermen, either in province, town or city.

#### UNITED STATES.

It would hardly be correct to say that the lumber trade of the United States is as badly in the dumps at the present writing as was the case a month ago. The new season being now well advanced, there is some measure of business activity. Lumbermen are recognizing that if they are going to do any trade at all it must be done now, and they are shaking off the lethargy that has grown upon them because of the long siege of dullness and uncertainty. Building operations are moving fairly well in some of the larger centres, and this is giving strength to the lumber trade. Fears of labor troubles that had commenced to show themselves at some points are disappearing. The drives are coming along in much better shape than was thought for a month ago. Whilst Congress continues to haggle over tariff affairs, still the feeling is that there is not going to be any radical change now in the tariff, and business men are beginning to accept that as the situation, and are disposed to enter with less fear into new ventures. These are the main features of the situation here, and are of a better class than the despondency and depression that has prevailed for so long a time. Yet these are not conditions that foretell any large amount of trade. This will only come by degrees. Prices are not just as firm as might be, but it is not thought that in white pine at any rate there will be any serious drop in prices.

#### FOREIGN.

If we say that the lumber trade in Great Britain is moving slowly that is the most that can be remarked of that field of operations.

Farnworth & Jardine, of Liverpool, Eng., in their monthly wood circular say of Canadian woods: "Of Waney and Square Pine the deliveries have been very small, values are practically unchanged, and stocks though not heavy are sufficient for the limited demand. Red Pine : The demand is almost nominal, the stock is light but quite sufficient. Oak : The deliveries have been on a very small scale, values have a downward tendency, and the stock is excessive. Ash moves off very slowly, prices are somewhat lower, and the stock is heavy compared with recent previous years. Elm has been in somewhat better request, prices are steady and the stock light. Pine Deals : The deliveries have been about the same as last year, values have been fairly maintained, several sales have been made for shipment, and the stock has been reduced to a more moderate compass."

The South American trade is considerably improved over what it was 12 months ago, and a good deal of lumber has been sent forward to those ports of late. Whilst there have been indications of further internal troubles in that country, it is not thought that these will develop to an extent to paralyze trade, as has been the case on former occasions. Australia is prominent before the people of this country at the present time owing to the visit of the Hon. Mr. Reid. It is likely that our trade with that colony will, in the future, increase, but at present lumbermen have not much to hope for from the Antipodees, commerce there being still very depressed.

#### TORONTO, ONT.

#### TORONTO, May 25, 1894. CAR OR CARGO LOTS.

CAR OR CARGO 1013.			
1 1-4 in. cut up and better	33	00	36 00
1x10 and 12 dressing and better	20	00	22 00
ixio and 12 mill run	16	00	17 00
1x10 and 12 common	13	00	14 00
1x10 and 12 spruce culls	10	00	11 00
IXIO and 12 mill culls	TO	00	11 00
i inch clear and picks	28	00	32 00
i inch dressing and better	20	00	22 00
1 inch siding mill run	14	00	15 00
I inch siding common	12	00	13 00
I inch siding ship culls	11	00	12 00
I inch siding mill culls	0	00	10 00
Cull scantling	ó	00	0 00
I I-2 and thicker cutting up plank	24	00	26 00
i inch strips 4 in, to 8 in, mill run	14	00	15 00
I inch strips, common	12	00	13 00
I I-4 inch flooring			16 00
T 1-2 inch flooring			16 00
XXX shingles, 16 inch	2	50	2 60
XX shingles to inch		50	1 60
Lath, No. 1		50	2 15
Lath, No. 2	1	80	1 85

YARD QUOTATIONS.

Mill cull boa					00			
Shipping cul						1 1-2 in flooring, dres'd 26 oo	30	oc
cuous wi	dths .			13	00	" " rough 18 00	22	
						" " dres'd 25 00	28	
Scantling and						11-4 in. flooring, un-	20	00
""	"	~p.c.	18 ft					
"	"	"				dressed, B.M 16 00		00
	"	**	20 ft			11.4 in. flooring, dres'd 18 00	20	00
			22 ft			" " undres'd 12 00	15	00
"	"	"	24 ft	19	00	Beaded sheeting, dres-	-	
"	""	"	26 ft	20	00	sed 20 00	35	00
"	"	" "	28 ft			Clapboarding, dres'd		00
"	"	**	30 ft			VVV	12	00
"	"	"				XXX sawn shingles		
4		"	32 ft			per M 2 60		70
•		••	34 ft	29	50		2	<b>6</b> a
				23	50	Red Oak 30 00	40	00
4	"	**	36 ft	31	õo	White " 37 00		oc
6	"	" "	38 ft	22	00	Basswood, No. 1 and 2 28 00	30	
4	"	40 to	44 ft	33	~~	Champe No. 1 and 2 20 00		
Cutting up			44 16	31	00	Cherry, No. 1 and 2 . 70 00	90	
Cutting up	pianks,	1		~		White ash, 1 and 2 24 00	35	00
and thick	ker, ary	1 : 2	5 00		00	Black ask, 1 and 2, , 20 00	30	00
••			B 00	24	00		•	
Dressing blo	cks	. 16	6 00	20	00			
Picks Am, in					00			
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	HARDWOODSPER M. FE	
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" black,	1 1/2 16 00 18 00 1	10CK I 1/4 14 00 10
Birch, sq.,	1 " 4 17 00 20 00 "	1/2 3. 15 00 10
	444 0X0 20 00 22 00 11C	
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#### OTTAWA, ONT.

				 )ttawa, N	1ay 25,	1894
Pine, good sidings, per Pine, good strips, Pine, good shorts,	M feet, 1	.m		 	.\$32 00	40 00
Pine, good strips, '		"		 	. 27 00	35 00
Pine, good shorts, '		"		 	. 20 00	27.00
Pine, and quality sidin	gs, per M	feet.	b.m	 		
Pine, 2nd quality strip	s, "	"	"	 	. 18 00	22 00
Pine, 2nd quality short	s, "	"				18 00
Pine, shipping cull sto	c <b>k. "</b>	""				16 00
Pine, box cull stock,	·	"	""	 		13 00
Pine, s.c. strips and sid	ings "	**	"	 	. 11 00	~ . 04
Pine, mill cull				 		10 0
Lath, per M						199

#### QUEBEC, QUE.

QUEBEC, May 25, 1894

WHID	E PINE-I	N THE	RAFT.				cts.
For inferior and ordinary measured off				quality		cts. 14 '	
For fair average quality, acc For good and good fair avera	ording to a			measure	d off.	14 10 23	21
For superior	B°,	"	"	"	"	28	30 35 30
In shipping order	6	" "	**	"	**	29	32
Waney board, 18 to 19 inch Waney board, 19 to 21 inch	**	**	"	**	**	35 37	s. N
REI	PINE-IN	THE	RAFT.				
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оак- By the dram, according to a	-	l quali				45	51
By the dram, according to a	ELN verage an			10 50 fee to 35 fee		30 25	33 28
14 inches and up, according	ASI to averag		quality	· · · ·		30	34
16 inch average, according	BIRG to averag		quality			20	23
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Merchantable Pipe, accordi W. O. Puncheon, Merchant	STAV ng to qual able, acco	and s	p'efet'n to quali	nomir ity	ual . \$: • •	330 90	\$35 <sup>0</sup> 100
	DEA	LS.			• •	*	on for
Bright, according to mill sp 2nd, and \$37 to \$42 for	pecification	1, \$115 V	to \$12	3 for 15	<b>., \$</b> 78	to ¥	• • • •
2nd, and \$37 to \$42 for Bright spruce according to	3rd quant	y.					a \$28

Bright spruce, according to mill specification, \$40 to \$43 for 1st, \$27 to for 2nd, \$23 to \$25 for 3rd, and \$19 to \$21 for 4th quality.

#### OSWEGO, N.Y.

OSWEGO, N. Y., May 25.—The opening of navigation has not brought with it very much activity for the lum ber trade. Compared with some recent years trade <sup>15</sup> quite slow.

No. 1, cutting up, " " 34 00 No. 2, cutting up, " " 24 00 In strips, 4 to 8 wide, selected for moulding strips, 14 to 16 ft. 32 00	35 00 25 00 34 00
1 in dressing	17 00 15 00 12 00
12 and 16 feet, No. 1 and 2, barn boards	24 00 20 00 31 00 16 00
12 and 13 feet, dressing and better.  26 00    1xto, 14 to 16 barn boards.  18 00    12 and 13 feet, No. 1 culls.  16 00    12 and 13 feet, No. 2 culls.  15 00    14 to 16 feet, mill run mill culls cut.  21 00    14 to 16 feet, mill run mill culls.  26 00    14 to 16 feet, No. 2 culls.  17 00    14 to 16 feet, No. 1 culls.  17 00    14 to 16 feet, No. 1 culls.  15 00	23 00 28 00 19 00 17 00 23 00 23 00 18 00 18 00 16 00 12 00
10 to 13 feet, No. 3 culls	18 00 16 00
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15 00 14 00
6, 7 or 8, mill run, mill  1X5 INCHES.    culls out	17 00 15 00
XXX, 18 in pine	3 7° 2 7° 2 00
LATH. No. 1, 1¼ 2 30 No. 2, 1¼	2 25

#### SAGINAW, MICH.

SAGINAW, Mich., May 25.-Marking a start in the season's business, two transactions of some size were re ported the early part of the month. Joseph Turner, of Bay City, closed a sale of 7,000,000 ft. E. T. Carrios ton is said to have sold 11,000,000 ft., which, it is though

JUNE, 1894

ras Spanish River stock, Mr. Carrington having a mill a that point ; prices obtained are not given These transactions have not, unfortunately, been followed up by many more of the kind. General trade continues juste dull. The hardwood market is unusually dull here.

e	FINITATING LUBBER HOUGH,
	Upper, 1, 13/ and 13/45 or 1 in
	siding,
	Mar 14 in
í	7s in 48 00 7s in 34 00
	Schol, 1/2 in
	Clear, 1/2 in
	TIMBER, OIST AND SCANTING.
ļ	14 no 10x10, 12, 14 and 16 ft. ( 1 00 20 ft 14 no
1	13 It
1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

4	For each additional a ft add \$1, 12 m. plank and timber \$1 extra , o for sizes above 12 m.	CX.	tra
	501/1GUE%		
1	XXX 18 in, Climax	1 2 1	00 25 50

ath, No 1, white pine.... 2 25 | Lath, No. 2, W. pine, Norway 1 65

#### NEW YORK CITY.

NEW YORK, May 25 .-- A little more life is shown in he lumber market at this point, but buying continues to be marked by the greatest caution. Fair demand vists for white pine, but the call is seldom for the better grades. The effort is to keep prices firm. One does hot hear of any large amount of stir in the export trade.

. in	WHITE PI	NRW	STERN GRADES.	
1	Unters 1 in . \$44 000	(45 00 )	Coffin boards 20 00 22	00
- 4	1 M 1/4 and zitt 46 00	47 00 1	Boy, in	50
-	1 and 4 in 55 00	58 00	Thicker	50
	Selects 1 in 40 00	41 00	Ceil'g, base, fig. No. 1 40 00 44	00
4	1 in., all wide 41 00	43 00	No. 2 35 00 37	œ
, č	1%, 1% and 2 in 43 00	44 00	No. 3 24 00 26	00
1	1 and 4 in \$2 00	53 <b>w</b>	No. 3 24 00 26 Shelving, No. 1 30 00 32	00
0	1 10 00 1 10 00	27 00	No. 2	60
1	14.14 an 18 00	40 00	Molding, No. 1	00
- 7	1 and 4 in 40 00	48 00	NO, 2	<b>00</b>
ेंदु	Cutting up, 1 in. No. 1 28 no	30 00	Bevel sidig, clear 22 50 23	00
17	No. 2 21 00	\$3 00	No. 1 22 00 22	şo
	Thick, No. 1 29 00	32 00	No. 2	so
1	No. 2 24 00	20 00	No. 3 16 00 17	œ
-	Common, No. 1, 10		Norway, cl, and No. 1 23 00 25	00
1	and 12 in 27 00	23 00	_No. 2 20 00 22	00
1	No. 2 20 00	21 00	Common 18 00 19	00
-	No. 3 17 00	18 00	l	

#### ALBANY, N.Y.

ALBANY, N. Y., May 25 .- An improved and better feeling is shown in the white pine trade. The canal is opened for all the business that will come along, but it s not thought that boatmen will have a particularly meany season. Prices are working downwards, some-What, and orders do not run into large figures.

2	PINE.
「「「「「「」」」」」」「「「」」」」」」」」」」」」」」」」」」」」」」」	15 in and up, good
ALC: NOT	LATH.      Fire

#### BUFFALO AND TONAWANDA, N.Y.

TONAWANDA, N. Y., May 25 .- A trade in lumber is eng done from day to day, but it is of a light characer. The feeling is that the season's trade will run into comparatively small figures. At Buffalo pretty much he same conditions exist. Railroads are feeling the ant of business and the lake trade is slow. What ales are being made are for common grades. Very ittle demand for better stocks.

	WHITE	I PINE.	
Up'rs, 1, 1 %, 1 % and 2		Shelving, No. 1, 13 in	
II\$47 00	50 00	and up, 1 in 31 coo	ĝ <u>33</u> 00
25 and 1 m 55 00	\$7 00	Drewing, 1 1/ in 25 00	28 00
4	00 00	1 1/ x10 and 12	28 o <sup>o</sup>
Selects, 1 in 38 00	40 00	1% x10 and 12 24 no	25 00
1% to 2 in 40 00	42 00	2 in 26 50	28 00
21/2 and 3 in 50 00	52 00	Mold st ps, 1 to 2 in 33 00	35 00
4 in	54 00	Barn, No. 1, 10and 12	
ine common, 1 in 35 00	38 00	in 21 00	24 00
14 and 15 in 37 00	28 00		23 00
a in	40 00	No. 7, 10 and 12 in. 19 00	10 00
3 ຫ	45 00	6 and 8 in 18 00	10 00
	45 00		ıố co
at g up, No. 1, 1 in. 28 no	20 00		15 59
1% to 2 in 34 00	36 00	Common, 1 in 10 00	18 00
No. 2, 1 in 18 00	20 00	134 and 134 in 18 50	
No. 2, 1% to 2 in 24 00	26 00	2 in 20 00	2. 00
No. 3, 1% to 2 in 18 00	10 00		••
		1	

1x10 and 12 in. (No 3	BOX.	3
out)	Natrow	18 00
1x6and 8in (No. yout)	13 50 1% in 15 00	18 00
1x13 and wider 15 00	17 00 2 in	13 00
18 in. XXX, clear . 3 85 18 in. XX, 6 in. clear.	shind Rs. 4 co 1 16 in., "A extra 2 fo 2 85 16 in. clear butts	
No. 1, 4 ft 2 50 No. 2, 4 ft	LATII. 2 (0   No. 1, 3 ft	1 10

#### BOSTON, MASS.

BOSTON, Mass., May 25 .- From the fact that some business is doing, there is a more hopeful and pleasant feeling in the trade this month than last month, and yet there is a littleness about the kind of trade that does not auger large things for the whole season. Pine from the west is said to have improved with stocks somewhat small. The shingle trade has not reached the volume that was hoped for at this time of the year.

· · · · · · · · · · · · · · · · · · ·				
KASTERN VINK- CA	ROO OR CAR LOAD.			
Ordinary planed	34 inch			
boants \$12 w	11-16 inch 9 (4)			
Coarse No. 5 16 or				
Refuse 11 00 12 00				
Outs				
Boxboards, 1 inch 10 75 11 on				
WESTLRN PINE BY CAR LOAD.				
Uppers, r in, \$52 ook(54 oo	Fine com., 3 and 4 in 42 ou 46 no			
134, 14 and 2 in 52 00 55 00				
3 and 4 in 60 00				
Selects, t in 45 co 46 co				
154, 154 and 1 in 18 oc 50 00				
3 and 4 in 51 co	No. 3			
Moulding boards, 7 to	Cuture, tto 2 in 24 00 j2 00			
11 in, clear 36 00 38 00	[ Coffin boards			
60 per cent. clear 31 00 36 00	Common all widths. 22 00 26 00			
Fine common, tin. 49 00 41 00	Shipping culls, 1 in 1, 15 00 15 50			
1/4, 1/4 and 2 in 41 00 41 00	do 134 in. 15 50 16 50			
STRUCK-INY CARGO.				
	Coarse, rough 12 00//14 00			
random cargoes 14 00(415 00	Hemlock lists, rough 12 00 13 00			
Yant orders, ordinary	" " dressed 12 00 14 00			
sizes	Clapbele, extra, 4 ft . 27 00 30 00			
Vend walk of a star	Clear, 4 ft			
Yard onle 1, extra sizes				
Clear floor boards 19 00 20 00				
No. 2 16 00 17 00	ł			
LA	TII.			
SIUS	GLRS.			
Eastern sawed cedar, extra\$3 00 \$3 25	Eastern shaved sawed			
extra\$1 00 \$3 25	cedar, 1st quality. 5 00			
clear	cedar, 1st quality.  5 or    2nd quality.  4 75    3rd  3 85    4th  3 00    4th  3 00			
211d	3rd " . 385 4 00			
extra No. 1	411 "			
5 19	Spruce No. 1 1 59			
	• •			

#### NORTHWEST OPINION ON THE LUMBER TARIFF.

AKE of the Woods lumbermen are a good deal LAKE of the woods function and a standard over tariff changes. They say they will not be able to compete under the new tariff unless freights from the mills to Winnepig and western points are reduced. John Mather of the Keel atin Lumber Co. states "that the prospects for the lumber trade were never worse than at present. The mills at Keewatin will not be operated this season. With the present freight tariff on the Canadian Pacific Railway it is a question whether it will ever pay to run the mills there till a large reduction is made." Mr. Graham, a lumber merchant of Fort William, stated, "that in view of the very high freight rate on lumber charged by the Canadian Pacific Railway, the shipping of lumber to Manitoba has been rendered unprofitable. The value of lumber has decreased through competition from the south, and lumbermen felt that the Canadian Pacific Railway should participate in the reduction of values generally by reducing its freight rates." D. C. Cameron, of the Ontario and Western Lumber Co., said : " While the tariff on lumber was enforced the mills here were making a small profit on the same, but now that the tariff has been done away with, and competition from the south is so keen, we find that we cannot hold our own. The amalgamation of the six lumber companies a year ago, now known as the Ontario and Western Lumber Co., was brought about by the fact that some of these companies were actually running at a loss, showing that the profits in this business, even with a protective tariff, are small. It may even seem strange that we are unable to produce lumber as cheaply as our competitors to the south, but this is owing to the fact that we have to move our logs by water a distance of about 300 miles, which entails a cost of about \$3 per thousand feet ; and while this water haul is in the direction of the market, and thus shortens the rail haul to that extent, yet, as compared with the firms in the same business to the south of us, we labor at that much of a disadvantage, inasmuch as we have still to pay a freight rate to the average point in Manutoba almost, if not quite equal to the freight rate alone of our United States competitors. I think that the Canadian Pacific Railway should freight our lumber as cheaply per mile as other railways do to the south of us."

#### CORRESPONDENCE

Letters are invited from our readers on matters of practical and timely interest to the lumbering and wood-working trades. To secure insertion all communications must be accompanied with name and address of writer, not necessarily for publication. The publisher will not hold himself re-sponsible for opinions of correspondents.

#### A LUMBERMAN ON THE LOG DUTY. To the Editor of the CANADA LUMBERMAN :

Sir, Much is at present being said in the Dominion Parliament and elsewhere throughout this country regarding the export duty on sawlogs. Recently a deputation of influential gentlemen waited on the Premier in Ottawa and urged the Government to reimpose this duty, because large quantities of logs had been taken from Canada, to be sawn in United States mills, thereby causing mills in Midl and and in other places to stand idle. The fact is, no mill owner in Midland, or anywhere it this province was ever compelled to shut down his mills because of the export duty on logs having been removed. The removal of this duty is one of the best things the Dominion Government ever did for mill owners. It gained for this country a reduction of \$1.00 per M feet B. M. on all pine lumber entering the American market from Canada. It at once caused numerous American buyers to come over here in search of lumber, which immediately advanced in value, and has ever since commanded higher prices than it ever did before. At the same time logs also have advanced in value, and mill owners in Midland or anywhere on the Georgian Bay could, if they desired, sell their logs to Americans at such prices as would give nearly as much net profit as could at any previous time have been made by sawing the stock into lumber and at the same time evade the usual risk of water, fire, and of making unsafe sales. Surely we ought to let well enough alone, especially when it is dangerous to do otherwise,

Without the American market there would be no use whatever for more than half of the sawmills there are now in Canada, and it is beyond doubt that if the duty referred to is reimposed there will be danger of such a retaliation being put in force by the American government as will totally exclude all grades of our lumber from their market, causing an inestimable loss to this country. It is often said : "What need we care for the American market, why not ship to the English market ? This is easily answered, for there is not now and never has been a profitable market in England for any of our lumber other than deals, and only a very small per cent. of an ordinary stock of logs is suitable for making deals. Therefore we are depending almost entirely on the United States market for the sale of our lumber.

Canada is not losing as much by the logs that are taken away as is generally supposed, as the cost of cutting, skidding, hauling and driving usually amounts to from \$4.00 to \$7.00 per M ft. B. M., nearly all of which is spent in Canada, and the cost of sawing into lumber, which is not spent here, is only \$1.00 per M ft. B. M. Most of the logs referred to are made out of the limits purchased from our Government and from private parties at the highest prices, at a time when there were no restrictions as to where they should be sawn, and it would be unjust to restrict the owners of limits from sawing their logs wherever it would be most profitable for them to do so. Yours, &c.,

Orillia, Ont., May 17, 1894.

#### APPRECIATION OF "THE LUMBERMAN."

MR. Herman Noss, York, Pa., writes : "I failed to see my CANADA LUMBERMAN for April. Please see that April number is sent at once. Also see that I get it regular every month, as I am lost without it."

A. TAIT.

Mr. J. K. Ward, Montreal, writes : " Please find enclosed one dollar, one year's subscription to THE LUM-BERMAN, with which we are well pleased. Hoping for its success, and that your influence may be exerted in getting the Government to reimpose the export duty on logs, unless the U.S. Government puts our lumber on the free list."

THE Ottawa Lumber Co., of Ottawa, Canada, have purchased the output of the McCracken, Boyle & Co. white pine logs which were cut on the Gatineau River. They are now having them sawed at East Templeton, and expect to turn out about five or six million feet B.M.

#### JUNE, 1894

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#### THE "MORSE" VALVE RESEATING MACHINE.

 $\mathbf{W}^{\mathrm{E}}$  present to the lumbering trade, an illustration and description of the above machine for reseating steam or water valves.

The makers claim the following advantages for this machine : 1st. That the valves can be reseated or repaired without disconnecting them from the pipes, a very important point, as the saving in labor and new pipes and valves is immense. 2nd. That it is the only machine that can be attached to all make of valves from  $\frac{14}{7}$  to  $12^{\prime\prime}$  inclusive, either flat or taper seat, regard less of the size of thread or diameter of opening in the valve. This machine is made in three different sizes, as follows : No 1 machine for  $\frac{14}{7}$  to  $4^{\prime\prime}$  valves ; No. 2 for 3<sup>''</sup> to 9<sup>''</sup>; No. 3, 9<sup>''</sup> to 12<sup>'''</sup>. 3rd. The "Morse" Valve Machine is so constructed that it will make a perfectly steam tight joint, without having to grind the seat after it has been faced with the cutter.

The accompanying cuts show machines Nos. 2 and 3, and the tools furnished with each outfit.

The makers have these machines in use in the largest mills and factories throughout Canada. They supply them on 30 days trial, and if they do not prove satisfactory they can be returned at their expense. Within the past eighteen months they have sold 200 machines, and feel sure that it will pay parties with steam plants of any extent to look into the merits of this machine.

For further particulars apply to Darling Brothers, Reliance Works, Montreal.

#### INDIFFERENCE TO BOILER FIRING AND MANAGEMENT. BY DANIEL ASHWORTH, MEM. AM. SOC. M. E.

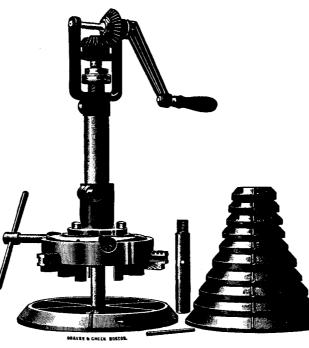
OBSERVATIONS extending over a period of a quarter of a century in a practical and professional way have presented opportunities to note, in the greater number of manufacturing establishments, a continuous decline in the grade of service of those in the position of firemen and boiler room managers, this corps of operatives seeming, at least, to have remained in "statu quo." The evil has become so glaring and the results so palpably fraught with disaster, destruction and waste as to warrant an effort to call the attention of those who desire to progress, to the false and inconsistent position which they occupy by permitting such a narrow policy in management, so widely at variance with true economy ignoring directly that the better intelligence renders the more valuable, and, hence, more profitable service.

It goes without saying that, during the past ten years, the concentration of efforts by scientists and eminent

mechanics looking to the more perfect development of the steam engine in its various types has produced results which challenge the admiration of the most critical in this line of thought. Within the same period, from every source, there have been a multitude of features in the torm of designs and novel applications of boilers, all converging to the important factors of increased economy, efficiency and safety. In the engine sphere, condensing, compound and triple expansion engines, with and without jackets; in brief, seemingly, all the necessary refinements have received and are now receiving close attention. In the boiler domain there has been also the evolution from the plain cylinder type to the tubular, and from that through the multifarious forms of water-tube designs, each striving for a superior degree of excellence. The amount of research and practical application that have been and are being instituted in attempting to increase

efficiency and economy, is such as to be incalculable. A retrospect of the past, viewed in the light of present results, shows that these efforts have been of an exceedingly fruitful character.

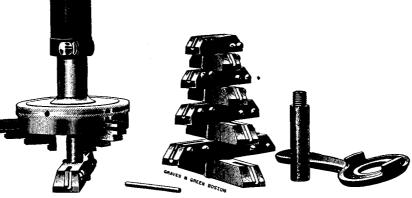
The development has carried with it the imperative advancement of those in charge of engine management to such an extent as to create almost anew this body of men. Such an intellectual advancement in the department of mechanics, the writer believes, is without precedent, and in every sense challenges admiration from every quarter. Notwithstanding these favorable features we are constrained to say that all this is somewhat like the play of Hamlet—with Hamlet left out; or, in other words, we are radically defective at the very threshold of this field, by reason of relegating the firing of boilers to the most ignorant of operatives; or, to put it in a plain way, there seems to be an almost unanimous idea that any one who can shovel and throw fuel is good enough for a fireman. Close observation and contact for a period of years, with numerous plants of varied character, increase the conviction of the writer upon this point. Recognizing, as we all do, that the furnace of the boiler is the prime feature and great initial point from which comes the source of power, does it not properly follow that if economy and efficiency are deserving of efforts in the advanced stages, as has already been pointed out,



4" TO 12" OUTFIT.

this is the very point that should be treated with every consideration of intelligence? Should not the fuel, furnace and boiler receive the thoughtful attention that the engine receives from the careful engineer? I think this will be accepted by every one interested in advanced ideas. No one, I think, will question the fact of the importance of the initial point of the boiler and its furnace, and that with mismanagement these other efforts of refinement are rendered, in many cases, completely void. It would seem so simple that argument

would be unnecessary, were it not that on every hand the matter is entirely ignored, resulting in waste and destruction. We would ask—are not the efforts of the best furnace designers often completely set at naught by reason of the manner



3" TO 9" OUTFIT.

in which they are operated? Is it not a glaring fact that in all cities where smoke abatement has been and is being attempted, the great stumbling block is the low grade of intelligence and low grade of the boiler operatives?

In looking upon this subject from a mechanical and engineering standpoint, we are fully alive to all the requirements to give complete combustion and thorough distribution of heat units, proportion of grate area and openings. Proper amount of air, conduction of the heated gases, all are carefully considered. When all is completed we have the wonderful spectacle of these conditions being turned over to the simple treatment of ram-jam shoveling and slice-bar operations. I claim that the fireman should know, at least, the elements of combustion, the importance of proper management of fires to produce the greatest results with the least er penditure of fuel. It may be said that the application of mechanical stokers makes intelligent firemen unneces sary, a point that is frequently (and I believe without thinking) claimed by those interested in placing such stokers. This is a great mistake, well known by those conducting tests, the results always being superior with the greater intelligence of the operator of the machine.

Within the past few years, in every community where cleanliness, taste and health are considered, there bas

come forth a crying appeal to the authorities 10 lesson the great evil of smoke in the atmosphere In response to this, inventive genius has promptly come forward. The multitude of devices that have been perfected and put in operation furnishes ample testimony of this fact. Many of these, when properly operated, accomplish satisfactory results smoke abatement, but no inventor has ever had the temerity to label his machine or furnace, "No skilled fireman required." Per contra, it is well known that the most intelligent fireman produces the best results, and it is also an undeniable fact that the best devices are set at naught by incompetent oper ating. The writer has been brought in contact with large fields of boiler practice, and in many cases, aside from other disqualifications, the firemen were unable to speak or understand a word of the  $E_{nb}$ lish language. It may be said, as I have heard " said, that these men are not paid to think, but to do Well, they do do. They will "do up " a coal pile, fur nace and boilers with alarming rapidity. I say alarming to those whose views are broad enough 10 consider the initial and important points. On the other hand, it is a lamentable fact that there are a great number of men in official positions, as super intendents and proprietors of establishments, who

seem to be utterly incapable or unwilling to note the importance for the necessity for a higher grade of labor in the firing and management of boilers.

One of the most surprising features in connection with this state of affairs is the tendency of those in terested to place boilers claiming, among their numerous merits, that less attention is required for them than for others, precisely on the old exploded claim applied to engines, "No skilled engineer required." I have now before me a letter from a boiler representative, who claims that his boiler will give the utmost satisfaction with one-half the attention that others receive.

What is greatly needed at present is to lay aside the idea that any one is good enough to fire and manage boilers. When you engage a man for your office do you not require that he shall possess some qualifications for

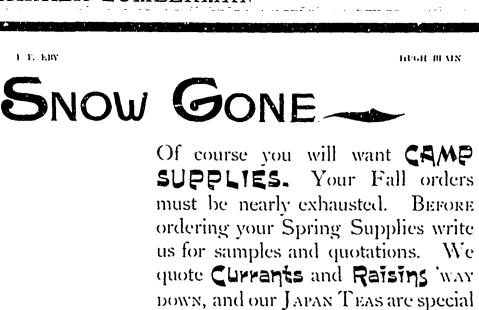
the position, and if aptness is shown do  $y^{0^4}$ not show appreciation by advancement to<sup>3</sup> higher plane, the interest being mutual? Why not apply this to the selection of firemen? A<sup>5</sup> it now stands we cannot but exclaim, "Strange, what a difference there should be twixt tweedle dum and tweedle-dee !" There are many plants in operation where, by incompetency in this line the steam efficiency is greatly lessened, furnaces and boilers are working in neglected conditions, fuel is wasted and the community is begrimed with volumes of un necessary smoke. In addition to these evils lives and property are jeopardized. Unless this matter is considered and such action taken as will improve this corps of opera

tives, it would seem absurd to be continually reaching and extending into the higher refinements of steam engineering. Under these conditions do not the pertinent questions present themselves to the employers: Are we not occupying a false position by this indifference? Do we not retard the development of a class of labor which, by a recognition, by an appreciation, that some skill and judgment are required, would be animated by some spark of ambition to qualify for advanced positions?

Is not this condition of affairs a gross inconsistenc<sup> $y_1$ </sup> nay, a mockery, in the face of the query put by th<sup>ost</sup> guilty of this indifference.

#### THE EXPANSION OF CHIMNEYS.

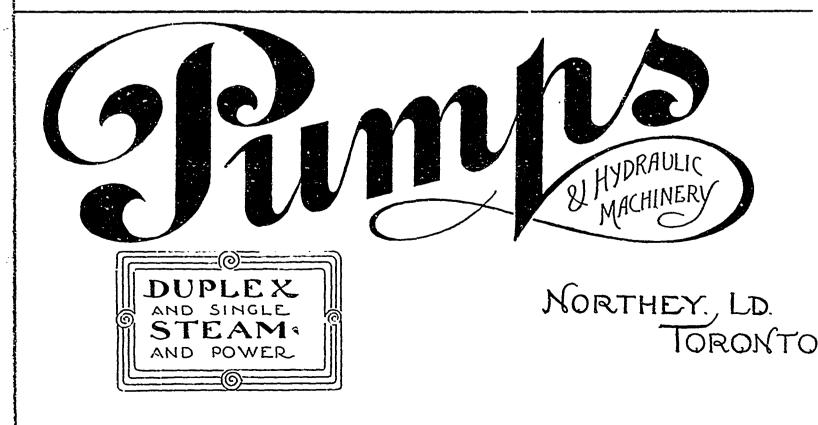
IT is seldom that facilities are afforded for the making of exact measurements of the expansion and contracuon of a factory chimney. It is generally conceded that boiler chimney shafts should not be attached to the salls of any important building on account of the risk of cracking the walls by the expansion of heated brickark, but data on the subject are scanty, and there are even persons who have doubts whether brickwork really espands or contracts when heated. An excellent opporjunity of settling this question has recently presented itself in Ergland. It was necessary to erect a casing of mamental brickwork around a boiler chimney of 90 feet logh, the inside of which was provided with a brick hae up to over one-third of its height. The near completion of the brickwork surrounding the chimney gave the opportunity of observing from the top of the casing any mesement of expansion or contraction of the chimicy uself. As the boiler fires were drawn on Saturday fireneen, and relighted on Monday morning, the chimney cooled down, and observations made from the top of the cosing will show a contraction of the chimney of multimeters, or 2-10 inches during that time. As the state adding wall was still about six feet below the top of the channey when the measurements were made, and the tirst 33 feet of the shaft remained practically old on account of the air space between it and the entre flue, it may be taken that the length of the brockaotk in which the expansion took place was about sofert According to this a shaft 100 feet high would spand 4 to inches when in use. It is probable that the pansion observed would have been 50 per cent. greater the channey had been allowed a longer time to cool.

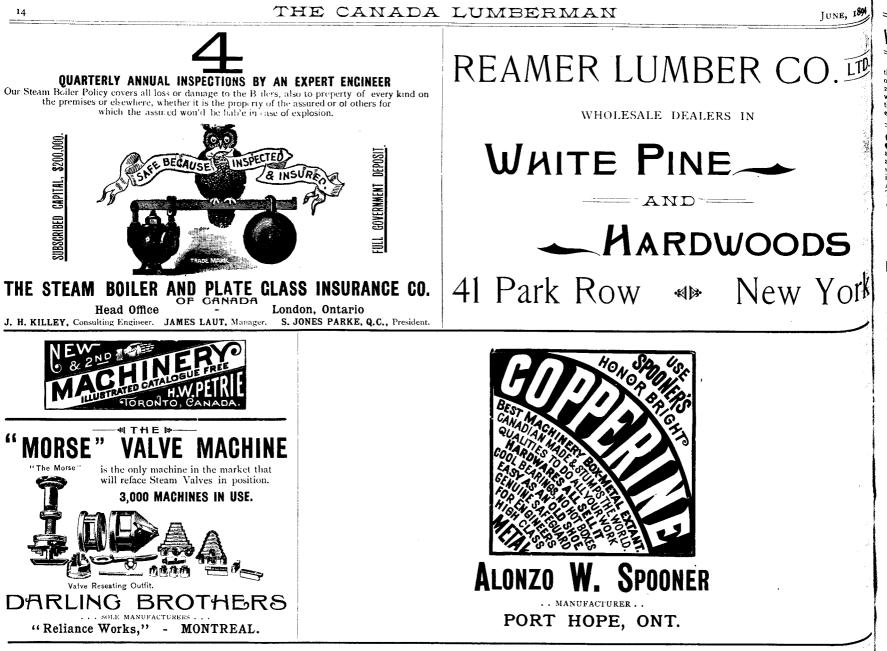


value. Just drop us a line.

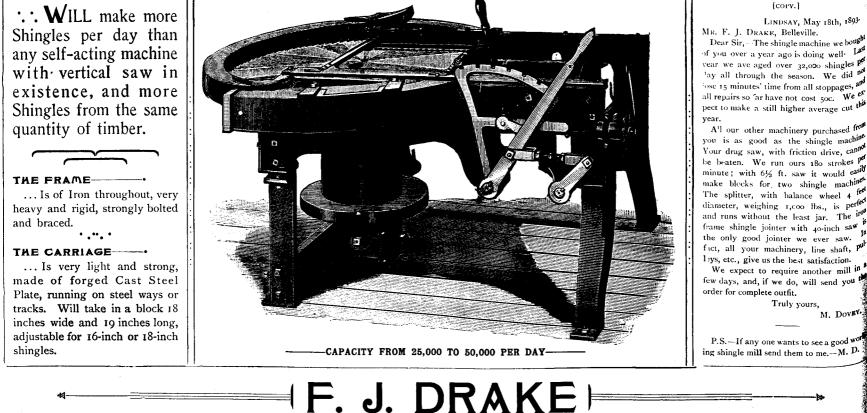
## EBY, BLAIN & CO. WHOLESALE GROCERS - TORONTO.ONT.

MANUFACTURERS OF MANUFACTURERS OF WANUFACTURERS OF SAUGUMENT SAWS MANUFACTURERS IN THE WORLD WHITE SAWS MANUFACTURERS IN THE WORLD WHITE SAWS IN LANGE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE WORLD WHITE STOTHE UNIFED STATES THE ONLY SAW MANUFACTURERS IN THE SALE FROMMITIONS OF THE SUCHT CHANGES OF THE PROFESS OF THE STORE ST





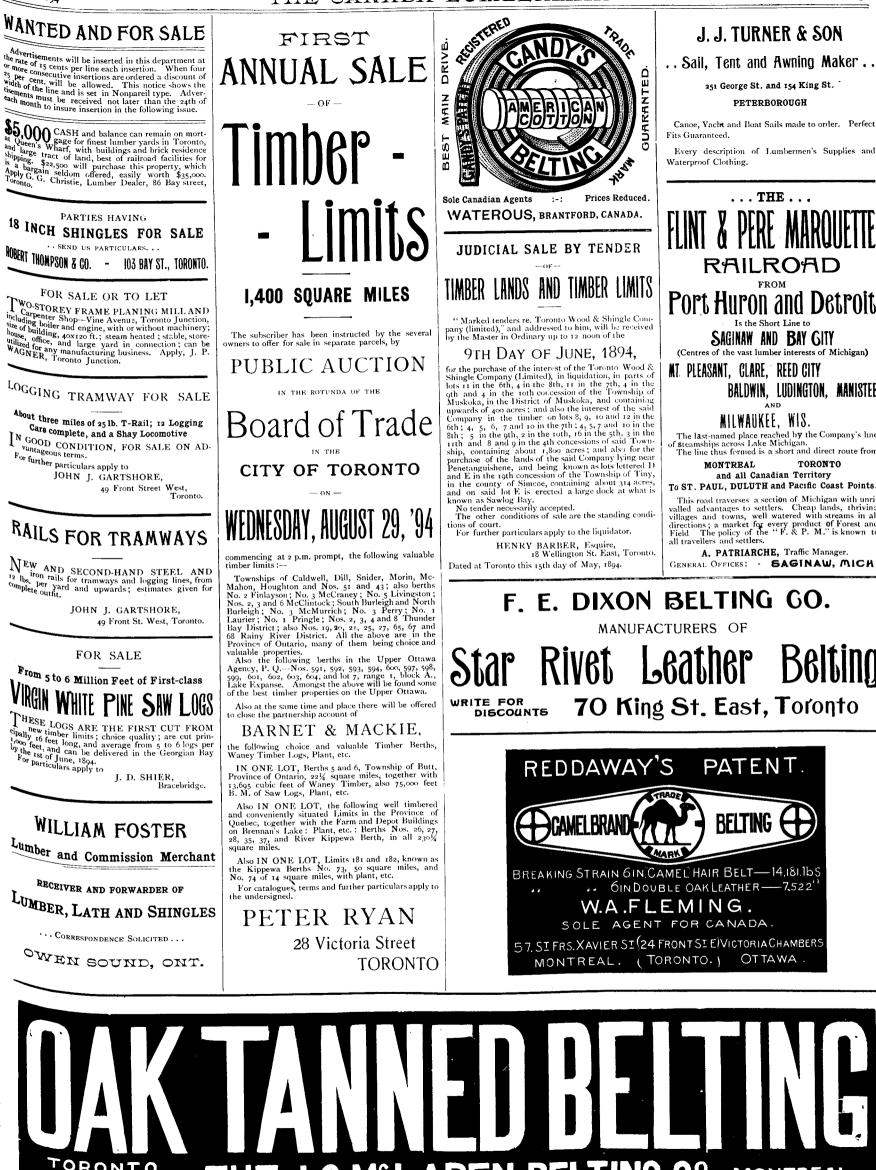
# Dauntless Shingle and Heading Machine



F. J. DRAKE PATENTEE AND ... SAW, SHINGLE AND LATH MACHINER BELLEVILLE. ONT.

#### THE CANADA LUMBERMAN





PARTIES HAVING 18 INCH SHINGLES FOR SALE ... SEND US PARTICULARS. .. ROBERT THOMPSON & CO. - 103 BAY ST., TORONTO.

FOR SALE OR TO LET FOR SALE UK IV LLA WO-STOREY FRAME PLANING MILL AND including boiler and engine, with or without machinery; house, office, and large yard in connection; can be willized for any manufacturing business. Apply, J. P. WAGNER, Toronto Junction.

LOGGING TRAMWAY FOR SALE

About three miles of 25 lb. T-Rail; 12 Logging Cars complete, and a Shay Locomotive

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JOHN J. GARTSHORE, 49 Front Street West, Toronto.

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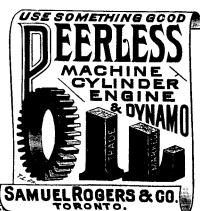
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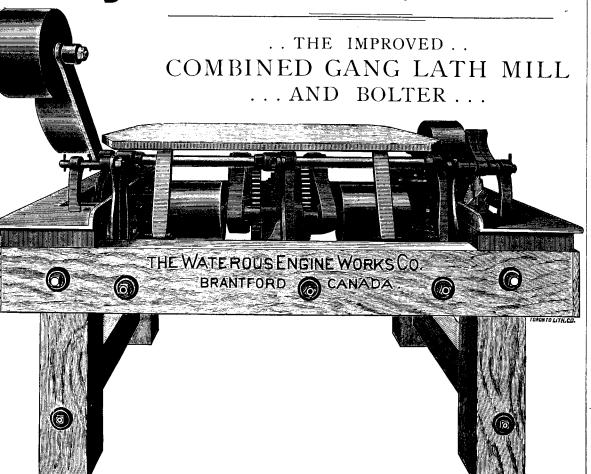
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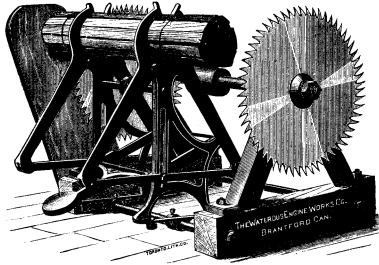
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