

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/  
Couverture de couleur

Covers damaged/  
Couverture endommagée

Covers restored and/or laminated/  
Couverture restaurée et/ou pelliculée

Cover title missing/  
Le titre de couverture manque

Coloured maps/  
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/  
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/  
Planches et/ou illustrations en couleur

Bound with other material/  
Relié avec d'autres documents

Tight binding may cause shadows or distortion along interior margin/  
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/  
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:  
Commentaires supplémentaires:

Coloured pages/  
Pages de couleur

Pages damaged/  
Pages endommagées

Pages restored and/or laminated/  
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées

Pages detached/  
Pages détachées

Showthrough/  
Transparence

Quality of print varies/  
Qualité inégale de l'impression

Continuous pagination/  
Pagination continue

Includes index(es)/  
Comprend un (des) index

Title on header taken from:  
Le titre de l'en-tête provient:

Title page of issue/  
Page de titre de la livraison

Caption of issue/  
Titre de départ de la livraison

Masthead/  
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



PUBLISHED  
SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION  
\$2.00 PER ANNUM

VOL. 4.

PETERBOROUGH, ONT., DECEMBER 15, 1884.

NO. 24.

**A FEMALE SAW MILL PROPRIETOR.**

There is a woman in Tukertown, Fla., who owns and manages a saw mill. The circumstance was so unusual that the *Northwestern Lumberman* wrote to her for an account of her experience, and the following unique letter was the result, from which men in business might get "pointers":

Your letter of a late date requesting me to give my experience as a lumber manufacturer is at hand. I will state at the start that I am not in the business through choice, but having loaned money to parties with which to purchase a saw mill, I was compelled by their failure to make even the first payment to take the machinery from them. I then put my son-in-law, Ernest Wever, who promised great things, in charge. I told him I knew nothing of saw milling, but I knew that the sawdust was too fine and the scratches on the boards too close together. I left him to run the mill, but in a short time I found he could do no better than other men and I took him out of there so quick that it made his head swim. I moved the mill a distance of 26 miles, fording the Hillsborough river, and placed it near my house, at an actual expense of \$9; and in a few days I had every thing in good order. I have my own teams and carts, and take the timber from my own lands.

Although accustomed to manage my own affairs, commencing by the time I was grown, I found difficulties enough in making lumber, and I have often said that a saw mill and saw belong to the same family, and some people say that since I became the owner of one they are sure of it; but while they talk I am at work. This is the trouble with half the country saw mills: There is too much talking and not enough work. Why, Mr. Editor, the most of men talk over a log long enough to saw it into inch boards. Then when they get started they discover that the fireman has not steamed enough; then they meet all sit down and talk again. By the time steam is up and one of the two boards sawed, a bolt must be repaired, which might just as well have been attended to before working hours in the morning or at noon. Then one man sews the belt while all engage in talk again. When the belt is ready the sawyer gets it into his mind, that machinery needs oiling; then he hunts up the oil can, for he never has a place for anything, and goes around squirting oil into every hole but the right one, while the other hands go on with their talking. The next day they are out of logs and the mill hands do nothing except to allow "their time to go on."

The day following, some of the men are reported sick and more time is lost. At the end of the month there is little lumber and no money and they all wonder why saw milling does not pay.

I knew well enough that machinery was made

to run, and when running it should be at work, and all I had to do was to keep the saw cutting for 10 hours a day and six days in the week. In order to do this the mill must be kept in good order, not by repairing broken parts but by keeping it from getting broken. And I soon saw that the parts of machinery out of sight were neglected the most. I would suppose any man would know that it is the inside of things that needs attention—the inside of the boiler, the inside of the cylinder, the inside of the pump or inspirator is of far more importance than the outside. Nothing makes me more angry than to see a man rubbing up the outside of his boiler when I know that the mud is six inches deep inside, baking, burning and blistering the iron; yet I have seen but few saw mills except my own. But I saw how that was managed before I took possession of it, and I am told that others are managed no better.

Many a man in the saw mill business would do well if he could get skilled labor, but this state is cursed with a tribe of saw mill tramps who claim to know everything and when tried can do nothing. They are always on foot and out of money, yet if we are to believe them they have been the superintendents of the largest mills in America. Everyone of them has been Gov. Drew's principal sawyer for at least ten years, receiving not less than \$6 a day. They all know more of machinery than the men who make it, and are ready, not to commence sawing, but to commence cutting, changing, splicing and rebuilding with a promise that if I will give them \$3.50 per day and board they will double the capacity of my mill and be ready for work in about three weeks. I have never been deceived by one of them, but they leave their mark wherever employed. One half of them ought to be hung and the other half sent to the penitentiary. One came to me a few days ago who was an exception, for, notwithstanding he was "the best sawyer in Florida," he was willing to work for \$10 a month and board, or \$12 if he boarded "his self"—hungry looking wretch! I wouldn't have boarded him even a day for \$2, and I knew he couldn't board himself at any such price. Said I, "Do you see that road out there?" He very meekly said he did. "Then," said I, "you go out there, and when you get to it you take either end you like; the one that will put you out of my sight the quickest will suit me the best." He went. If he had not I would have put the dogs after him in three minutes.

I employ none but the best hands—not paying too much or too little, for one fault is about as bad as the other.

I can't say just what my lumber costs me, but I know that when sold I have taken in more money than I have paid out. I am 52 years

old, or about that, was born in Florida, and was raised at a time when bookkeeping was not thought of.

I now have my second husband, and I am the mother of nine children, seven of whom are now living. Several of the older are doing business for themselves, yet they always come to "mother" for advice, and when they don't take it they wish they had. I have always managed my own business, and I expect to while I live. I awake in the morning and plan the day's work while the men are asleep, and at the breakfast table I give every one his orders, including my husband, who never objects to my doing the thinking for the family.

My first advice to men who contemplate going into the saw mill business is—don't do it, for not one in twenty of you has the ability to succeed. If, however, you are determined to try it, be careful that you get the best machinery, strong and heavy enough to stand the bad treatment of awkward hands. Buy the most durable belts, no matter what they cost, for half the failures in our backwoods mills are caused by constant breaking of belts. And when a complete outfit is secured, locate where you can get timber and sell lumber. Keep your machines in good order, taking special care of all parts out of sight. Pay your hands in cash, and not in promises, for they work for the money, and not for any love they have for you or your business. When you can't pay, shut down, stack your lumber and discharge all hands. Your mill will neither eat, drink nor wear anything while standing still. But when you do run work everything to its full capacity.

HARRIET SMITH.

**BANGOR BUSINESS.**

The *Mining and Industrial Journal*, under date of November 13th, gives the following review of the lumber trade of Bangor, Me. "There is no change in lumber prices or freight rates to mention, and the only change will probably be an advance in rates on the last few cargoes that leave port. Considerable lumber will be shipped from Bucksport this winter by Bangor dealers. Nearly all the mill men closed the sawing season Wednesday of this week, although some steam mills, the *Dirigo*, for instance, will saw up to the close of navigation. Transactions in logs are about over for the season, and owners have been, and are, busy getting their stock into suitable winter quarters. Many millions of logs are 'shingled up' along the river shores in coves, out of the way of damage by ice or ordinary freshets. There will be more manufactured lumber on hand at the close of the season than in 1883, but yet no great amount such as covered the wharves in certain former years. The log scale for the season was 101,000,000 feet, which pretty nearly represents the cut of last winter. This amount

added to 40,000,000 feet of logs carried over from 1883 gives a total stock of 141,000,000 for 1884. It is estimated that there is now on the river 39,000,000 feet of logs, distributed principally among manufacturers, and to be carried over to next season, thus leaving 111,000,000 feet as the amount sawed. The amount of lumber produced was, of course, considerably more than this number of feet, being increased by the scoots."

**A MOST EXTRAORDINARY CASE.**

George Sabins, son of Eli M. Sabin, living in the township of Cramahc, was sawing in his father's mill on Nov. 14th, when an edging falling across the circular saw, was thrown with immense velocity, striking the young man in the inner part of the left eye, blinding the eye instantly, and displacing it forwards and outwards. Although bleeding profusely, he walked home, a distance of half a mile. A doctor was sent for and tended him up till Monday. The case not progressing satisfactorily, the father brought him to Port Hope to consult Dr. Hamilton. The doctor, after probing the wound an inch deep, discovered a foreign body—in the orbit of the eye—and advised an operation for its removal. This operation was performed at 12 o'clock Tuesday, by Dr. Hamilton, assisted by Dr. Corbett. After placing the patient under chloroform, and enlarging the external wound, what was the doctor's astonishment to find that on laying hold of the foreign body with a strong forcep, it was almost immovable, but on using vigorous fraction, inch after inch was drawn out, till a piece of pine wood two and three-quarter inches long, three fourths of an inch broad and half an inch thick was removed from the poor fellow's eye. And fancy this big piece of wood nearly four weeks in his eye, what intense suffering he must have experienced during these long weeks? We are glad to be able to state that the poor fellow is likely to make a speedy recovery, but with loss of sight of the left eye. This is certainly one of the most extraordinary cases on record.—*Port Hope Guide.*

**FORESTRY CONGRESS.**

To the Editor of the *Canada Lumberman*.  
DEAR SIR,—Inclosed please find \$2.00, one years subscription to the *CANADIAN LUMBERMAN*. I was sorry to see the *Northwestern Lumberman* speak so hard of the Forestry Congress held at Saratoga Sept. last; liking the crowd to spring chickens, etc., etc.—and though not as well attended as it might have been, yet, there was a good deal of interesting discussion. Nor were all of those present extremists, arguing that our forests would be denuded of their wealth in a very few years.

Yours, &c.,  
Montreal, Dec. 2nd, 1884. J. K. YARD,

**DRYING AND PRESERVING WOOD.**

I have read several articles in the lumber journals on the subject of drying or seasoning of lumber, which I think have not exhausted the subject, and if you would afford the space I would like to give my views based on facts, and an experience of over thirty years in the business. The drying of lumber is expelling the sap or fluids contained in it, and to treat it properly we must be informed of the quantity and nature of these fluids. One cord of wood (128 cubic feet) contains one hundred and eighty-five gallons of pyroligneous acid, or in one thousand feet of lumber 83½ cubic feet, one hundred and twenty gallons, the balance being substance. We must now consider the effect of the fluid upon the substance when left to act naturally.

The creator of all animal and vegetable bodies has decreed that when life ceases the body shall be destroyed, and has placed within each body the means for its destruction. The animal body is said to be composed of 50 per cent. of substance and 50 per cent. of corruption, which is the blood and fluids. During life these fluids are the life sustaining principle, but when life ceases they are instantly changed to a destroying power, and commence immediately their work of destruction. In the vegetable kingdom the same natural laws exist. The sap in the vegetable takes the place of the blood and fluids in the animal. During life it is the life-sustaining principle, and when life ceases decay begins.

The distillation of wood is carried on quite extensively in the United States and Canada. Professor J. A. Mathieu, of Detroit, Michigan, has erected a large number of retorts to be used for this purpose. The acetic vapor being condensed, the product is as before stated, 185 gallons of pyroligneous acid; from this is obtained myrtle alcohol, acetic acid and tar, and from acetic acid are obtained the acetates of lime, lead, copper, nickel, iron, manganese, etc. This shows the power of these acids on mineral substances. The following is given as the product of one cord of Georgia pitch pine: 15 gallons of turpentine, 80 gallons of pine oil, 150 gallons of pyroligneous acid, 45 pounds of vegetable asphaltum; and from yellow pine, two gallons wood alcohol, 12 gallons turpentine, and 160 gallons pyroligneous acid. By the slow process of weather drying these acids are allowed to carry on their work of decay so long as moisture remains, and the fibre is eaten away and the wood rendered more porous and spongy, becoming weaker and more brittle. In order to preserve the wood in its most perfect condition and strength, we must extract the pyroligneous acid as soon as the tree is dead and cut into lumber. This may be done by heat in a properly constructed lumber dryer. One cubic inch of water makes one cubic foot of vapor or steam thus increasing its volume about 1,700 times. When the lumber is heated to 140° or 150° Fahr., the volume being so increased the vapor is rapidly forced out of the lumber to the surface. Now if a rapid current of dry, hot air is caused to pass through the interspaces of the pile of lumber to absorb and carry off the vapor as rapidly as it comes to the surface, the lumber will be thoroughly dried in six to eight days, and retain all its natural strength, and being entirely sound, will absorb far less moisture than when weather dried. The whiskey distillers say that a barrel made from green staves, kiln-dried, will absorb one gallon less of whiskey than a barrel made from old weather dried staves. If the wood can be made incapable of absorbing moisture, it will not swell or shrink. I found in the manufacture of barrels from green staves, kiln dried, that breakage in bending in the truss was far less than in old weather dried staves. It is my conviction that green lumber quickly dried in a perfectly constructed lumber dryer, is stronger and much less capable of absorbing moisture, and consequently much less affected by the changes from damp to dry and dry to damp, and much more durable. There are two conditions in which it may be said that wood is imperishable. In drying of lumber we can only extract that part of the destroying element alluded to, which is susceptible of being vaporized, and there still remains an essential part of it, but in

a dormant state; deprived of power to act in the entire absence of moisture, and when kept in this state the wood will last for ages. Then add the moisture, and this dormant enemy awakes to activity and will soon accomplish its work of destruction. Here is, one condition in which we may hold the destroyer powerless, not conquered.

There is another condition by which we can accomplish the same results, viz., by submerging. Timber submerged will last for ages; then it is not the water that destroys, but holds this element dormant by a superabundance of moisture. When brought to the surface and relieved of this superabundance of moisture, this element awakes and begins its work of destruction. To render wood imperishable in all conditions has long been the study of man, but up to the present time he has not been able to conquer and destroy this mysterious element.—*P. G. Finn in Lumber World.*

**SALT AND SAW MILL WASTE.**

There are doubtless many saw mill operators in the South, and on the Pacific coast, to whom saw mill waste is a nuisance, who are not acquainted with the part which this waste plays in the production of salt at several points in Michigan, notably in the Saginaw valley, where salt springs of great strength and purity occur adjacent to some of the largest lumber industries in the country.

The principal item in the cost of manufacturing salt is the fuel required to evaporate the brine, which as pumped from depths of from 700 to 800 feet, and occasionally much deeper, usually contain about 95 per cent of a saturated solution of salt, and a certain amount of the water it contains must be expelled by heat before crystallization of the salt can take place. This operation is performed in the Saginaw valley in what appears at first to be a very crude and primitive method, but closer examination shows it to be the most effective which can be devised where artificial heat is used.

The salt solution, or brine, is pumped directly from the wells or springs into wooden tanks from which it is allowed to flow as required into shallow evaporating troughs of wood about 20 feet long, six feet wide, and 18 inches deep, each trough containing a series of galvanized iron steam pipes immersed in the salt solution from which the heat necessary for the evaporation is obtained. In large works a series of these evaporating pans are placed side by side in the same building and the steam coil carried through the whole series, the steam entering the coil in the first pan and the condensed water being discharged from the last.

Where the salt works are on a small scale the exhaust steam from the saw mill engine is sufficient to perform the work of evaporation, while in large works this supply is supplemented with live steam. In both cases, however, the steam used for evaporating the salt solution, as well as that required for power to drive the saw mill engine, is generated by the combustion of sawdust which is taken directly from the saws, usually by means of a conveyor chain and carried through a sheet-iron trough extending over the boiler furnaces, from which, through openings in the bottom, it drops between the boilers into the fires.

During the sawing season, steam is generated for both these purposes almost exclusively with sawdust, the remainder of the waste, consisting of slabs, edgings, etc., being piled in the vicinity and held in reserve to generate steam for evaporating the salt solution in the winter, when the mills are not running, and no sawdust is being produced.

By these means, nearly all the saw mill waste produced in the locality named above is very advantageously utilized, and the salt manufacturers, who are generally also saw mill operators, as has been seen, have an effectual method of "killing two birds with one stone," a method which gives them a decided economical advantage over their less fortunate brethren in other localities, who are obliged to purchase fuel to evaporate their brine.—*Northwestern Lumberman.*

A RAILROAD route is being staked out between Grand Rapids and Muskegon.

**PETER ROBERTSON**

CHAUDIÈRE, - OTTAWA,

MANUFACTURER OF

**LUMBERMANS' TOOLS!**

Which took every honor awarded at the Centennial Exhibition.

THE CELEBRATED

**Lightning Cant Dog.**

PETER ROBERTSON, Chaudière, Ottawa.

2017

**Driving by Friction.**

An objectionable method of employing friction driving is to use a metallic surface against a wooden or leather surface; two surfaces of wood are better; but if iron and wood are used together, the driver should, in all cases, be made of the softer material. For when the driver is thrown in contact with the driven, it must take a number of revolutions before its contact will be sufficient to start the driven wheel. It is evident, therefore, that if the driver is of iron while the driven is of some softer substance, it (the driver) will wear a crease that will injure the driven wheel. It is much better, where it is practicable, to make both the driving surfaces of wood.—*Scientific American.*

**"No Physic, Sir, in Mine!"**

A good story comes from a boys' boarding-school in Jersey. The diet was monotonous and constipating, and the learned Principal decided to introduce some old-style physio in the apple-sauce, and wait the happy results. One bright lad, the smartest in school, discovered the secret mine in his sauce, and pushing back his plate, shouted to the pedagogue, "No physic, sir, in mine. My dad told me to use nothin' but Dr. Pierce's Pleasant Purgative Pellets, and they are doing their duty like a charm!" They are anti-bilious and purely vegetable.

266th Edition. Price Only \$1

BY MAIL POST-PAID.

**KNOW THYSELF.****A Great Medical Work on Manhood,**

Exhausted Vitality, Nervous and Physical Debility, Premature Decline in Man, Errors of Youth, and the untold miseries resulting from indiscretion or excess. A book for every man, young, middle-aged and old. It contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the Author, whose experience for 23 years is such as probably never before fell to the lot of any physician, 300 pages, bound in a beautiful French muslin, embossed covers, full gilt, guaranteed to be a finer work in every sense—mechanical, literary and professional than any other work sold in this country for \$2.50, or the money will be refunded in every instance. Price only \$1.00 by mail, post-paid. Illustrative sample 6 cents. Send now. Gold medal awarded the author by the National Medical Association, to the officers of which he refers.

This book should be read by the young for instruction, and the afflicted for relief. It will benefit all.—*London Lancet.*

There is no member of society to whom this book will not be useful, whether youth, parent, guardian, instructor or clergyman.—*Argonaut.*

Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4 Bulfinch Street, Boston, Mass., who may be consulted on all diseases requiring skill and experience. Chronic and obstinate diseases that have baffled the skill of all other physicians are a specialty. Such treated successfully. **HEAL THYSELF**

**50 Per Cent. Reduction**

ON OLD CATALOGUE PRICES.

Gent's 14k. Gold Watch reduced to \$25.  
Ladies' 14k. Gold Watch reduced to \$20.  
Gent's Key Wind Jewel, Cut Expansion Balance, in Solid 3oz. Coin Silver Case. Hunting or Open Face reduced to \$8.  
Gent's Patent Lever, Jewelled, Cut Expansion Balance, Solid Coin Silver Cases, reduced to \$7.  
Men's size, Heavy, Useful, Cheap Watches, Hunting Case, Key Wind, White Metal Silvered, \$4.50; Yellow Metal, Gilded, \$4.50.  
Nickle, Stem Wind, Open Face, \$4.50.  
Sent by Mail. Prepaid; Safe Delivery guaranteed.

**CHAS. STARK,**

52 Church Street, Toronto, Near King  
Importer, Wholesale and Retail Dealer in every description of Fire Arms, Gold and Silver Watches, Gold and Silver Jewellery, Diamonds, Silversware, etc.  
Send address for our 120-page Catalogue, containing over 500 illustrations of all the latest and most elegant designs.

**A PRIZE** Send six cents for postage and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All of either sex, from first hour. The broad road to fortune opens before the workers, absolutely sure. Address Tait & Co., Augusta, Maine.

# The William Hamilton Manufacturing Co'y

MANUFACTURERS OF

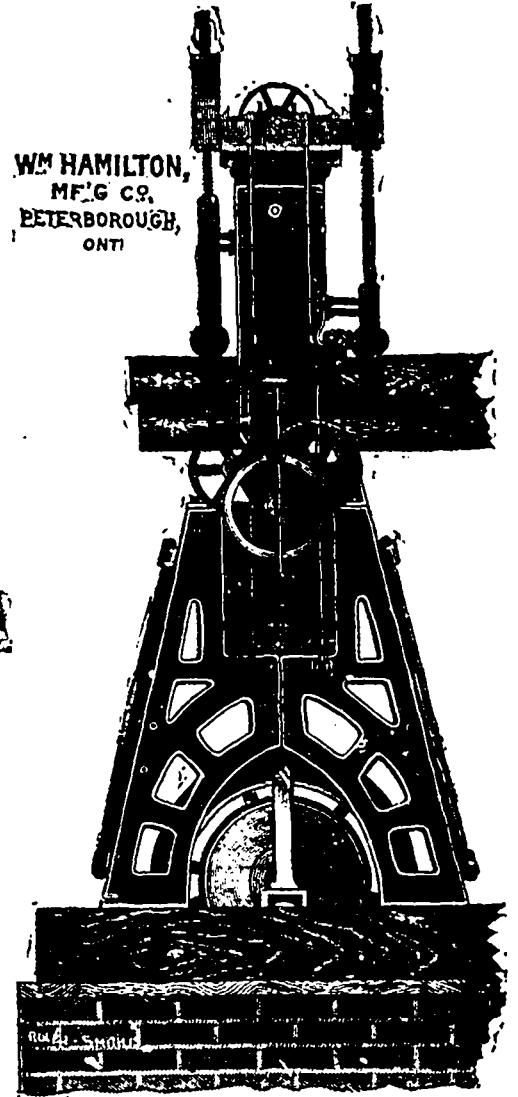
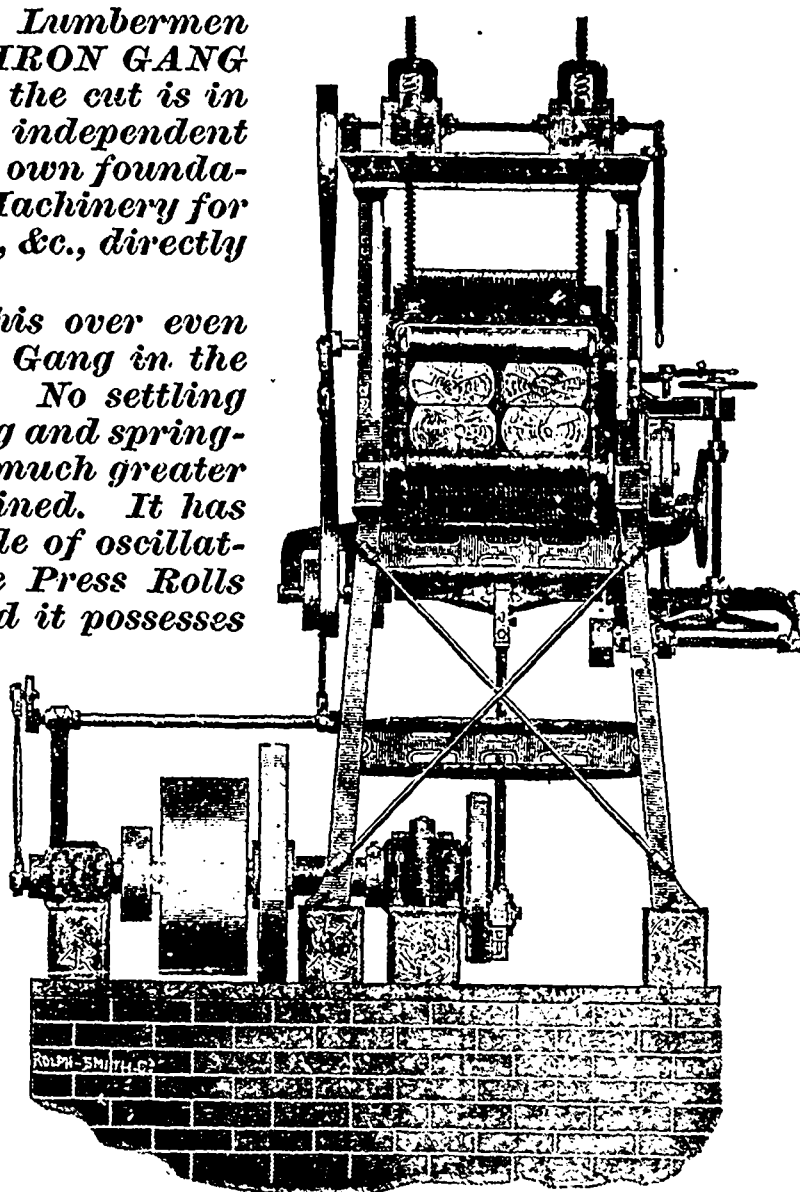
(LIMITED,)

## Saw Mills and General Machinery

PETERBOROUGH, - ONTARIO.

*We introduce to the Lumbermen of Canada, our New IRON GANG which will be seen by the cut is in itself a complete and independent Machine, resting on its own foundations, having all the Machinery for operating, feeding, &c., &c., directly attached.*

*The advantage of this over even a well built ordinary Gang in the mill frame is evident. No settling out of line, no yielding and springing of timber, while a much greater working speed is obtained. It has the most improved style of oscillating motion, it has the Press Rolls operated by power, and it possesses generally all the good features of best American Gangs, with heavier frame work, and heavier shafting, all with a view to rapid, steady & correct working. A good look at one of these massive machines satisfies the sawmill man that they are in every way capable of continuously performing heavy duty throughout the season.*



WM HAMILTON,  
MFG CO,  
PETERBOROUGH,  
ONT

We make these GANGS one of our Specialties, and manufacture different sizes.

*The Wm. Hamilton Manufacturing Company, Limited, Peterborough,*

*GENTS,—We are doing big work with the Mill. We recently cut 122 thousand feet of inch Lumber in one day, with the Gang and Largo Circular, without any crowding whatever. We are making a steady average of from 90 to 100 thousand feet per day. I cannot say what amount the Gang is really capable of cutting, as we have not yet been able to stock it to run it at its full capacity. I can, conscientiously recommend the Gang as the best built in Canada.*

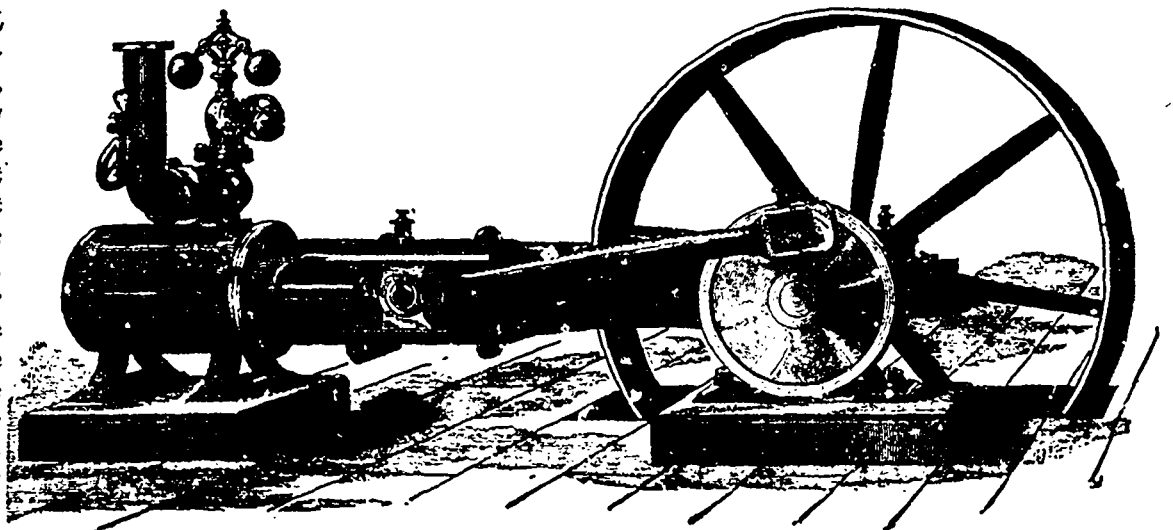
*I remain, yours truly,*

*(Signed) WM. THOMPSON, Mill Manager for COOK BROS.*

SIXPENT RIVER, September 28, 1884.

## Also, ENGINES and BOILERS.

*This cut represents our SAW MILL ENGINE, of which we make the following our Standard sizes, 12x16, 16x20, 18x24, 20x24, and 24x30, built Strong and Substantial for Heavy Work. The Piston Rod, Cross-head Pin, and Wrist Pin, are made heavy and of the best steel; the Connecting Rod has solid ends and is tightened up by screw and wedge, avoiding all danger of keys getting out; the Slide Valve has a simple balance valve, requiring no attention from the Engineer, as it is self-adjusting. The Engine Shaft and Fly Wheel made very heavy. Belt Pulleys put on when required in place of Fly Wheel, all regulated by the Judson Governor.*





### MORE TIMBER IN ALASKA.

The San Francisco *Alta*, of a late date, contained the following: "Some time during last year the Corwin left this port, under instructions from the Government, with a number of presents for the natives on the Siberian coast, who had rendered assistance to the unfortunate Rodgers. Lieut. Stoney, who was one of the officers of the Corwin on this trip, in making explorations, discovered an unknown river which he named the Putnam river. He explored it for about 40 miles, and upon his return to San Francisco reported his discovery to the navy department at Washington, upon which information the Ounalaska, which arrived at this port on Saturday last, was placed at his disposal, in order that a fuller exploration might be made. The Ounalaska sailed from the bay of San Francisco on Saturday, April 13, of this year, arriving at Hathaw Inlet July 10, and left there September 7 to ascend the Putnam. The banks of this river are heavily timbered with birch and pine. Two hundred miles up the Putnam the party found a beautiful valley, which contained timber and many wild flowers, similar to those grown in the United States, and at a distance of 400 miles the river took the shape of rapids, and small boats had to be used. At that distance wild strawberries and salmon berries were found. Indians inhabit the country thereabout, who are clean, intelligent, peaceable and honest. They use birch boats, and baskets to bail water, and are more advanced in civilization than those who live near the sea. At 300 miles up the Putnam good coal beds were found, and traces of gold. At a distance of 500 miles Lieut. Stoney found the source of his discovery in the form of a lake, as clear as crystal, far on top of a mountain. The natives in this portion of the country had never seen a white man before, and were much frightened, the women taking to the bushes at the sight of the explorers, and it was only through the medium of presents being thrown to them that they were induced to come near the boats. No accidents occurred to the Ounalaska nor her occupants during the voyage, and the exception of a few heavy gales met with, the officers express themselves as having had a rather enjoyable trip."

### HINTS FOR CLEANING BOILERS.

The Hartford Steam Boiler Inspection and Insurance Co., Hartford, Conn., in its monthly journal, *The Locomotive*, has the following to say concerning the cleaning of steam boilers: Following the application of any boiler-purger or other substance for loosening scale or deposit upon the shell, heads or flues of a steam boiler, special care and attention should be given to cleaning out the boiler with a prompt removal of such loose fragments as may have become detached and fallen down. These particles, if not removed, are often swept about by the various currents within the boiler, and collecting in a conglomerate mass upon some part of the fire surface, prevent access of water to that particular part, and thereby it is overheated and is bulged or bagged as it is sometimes called—often inflicting a dangerous injury to the boiler and requiring a considerable outlay for new sheets, a patch or perhaps other expensive repairs.

In the use of soda and other preparations used for the removal of boiler incrustations, that are soluble in water, a separate vessel may be provided suitably connected to the feed pipe, so that the preparation, in its proper proportions as recommended, may be first dissolved, and when properly prepared fed into the boiler. When there is a heater the solvent may be prepared and emptied into that. Log-wood or oak chips, leather clippings and many other waste products of a manufacturing establishment that contain some useful ingredients as tannin, soda, or starch, may often be used advantageously when they are recommended and their use directed by an inspector, otherwise serious difficulties may result, perhaps endanger the safety of the boiler.

We should not have a great deal of sympathy for the man who, declining to avail himself of the services and advice of a physician, ruined himself by dosing with all sorts of nostrums of which he was ignorant, but such a man at the

worst can but ruin himself; while another, who persists in dosing his boiler may not only lose his own life, but he may sacrifice many other lives in the same foolish way. We know of an instance in which a party who had some condemned bacon in his store house which he thought to use advantageously in cleaning and lubricating his boiler, he having somewhere read that grease was an excellent thing for the purpose. As he described it afterwards, the boiler nearly turned inside out, and he fondly hopes he may live long enough to get even with the man who recommended it to him. Another case was that of a fireman, whose duty it was, under the direction of the engineer, to fire and keep clean a battery of boilers, who, happening to hear some one of his mates say that oil was an excellent thing for softening scale, thought to make a trial of it on his own account. So, one Sunday when cleaning out his boiler he went through the shops connected with the establishment and gathered up the refuse oil and grease from various drip pans, securing in this way two or three gallons, which he poured into one of the boilers and afterwards filled it with water. Soon after steam was got up the fire-sheets became bagged and beautifully corrugated and leaked like a sieve.

In boilers under our supervision we have used crude petroleum a great many times for the purpose of loosening lime-scale and with the most satisfactory results. We don't approve of the use of grease, and we deem the application of animal oils or fat to the interior of a boiler for that purpose as very hazardous. As a rule, when a boiler is in service, a systematic daily charge of a proper solvent graduated to the capacity of the boiler will be found more efficacious than a charge at longer intervals, and it is less likely to cause foaming and kindred difficulties. An important matter sometimes overlooked is the need of regular times for cleaning and the preparation which should be made for it.

When about to put a boiler out of service for a thorough cleaning it will be found an excellent plan to let the boiler cool off gradually and the pressure fall slowly until it has reached about five pounds, when the safety valve may be raised and the remainder blown off. Run off the water and relieve the hand hole when the scale will be found much softened and easily detached, while the deposit can be readily washed off with a hose.

Blowing down a boiler between the limits of high and low water, or in other words between the upper and lower gauge-cocks is often very beneficial, and assists materially in freeing it from the ill-effects of scum and other impurities. If, however, this blowing down is not intelligently done there is a probability of great waste and serious loss. For, in blowing out good water at the temperature of the steam pressure, and replacing it by other water perhaps of no better quality at a much lower temperature of the feed there is a great loss of heat and consequent waste of fuel. Blowing down a boiler, can, however, under no circumstances be depended upon to thoroughly clean it and remove loose fragments of scale and much of the deposit commonly found. This can only be done by a systematic, periodical washing out at intervals to be determined by the circumstances of the case.

### THE NEW "STAVE-SHEET" BARREL.

We paid a visit a short time since to 24, Botolph Lane, the temporary office of the patentees, to see a new method of barrel-making, and as we hear that a factory on the river-side is about to be started for the manufacture of the stave-sheet barrel, we now give some particulars respecting it.

The novelty of the invention, as the term "stave-sheet" implies, consists in making the body or cylinder of the barrel in a flat sheet, which is subsequently formed into a barrel by the aid of a simple and inexpensive apparatus worked by a manual power. The barrel in the flat sheet, of course, occupies very little room, and as the operations of jointing the ends of the stave sheet and fixing the heads are very quickly performed, it will be seen that this feature may be of great advantage to those who have to store any large quantity of empties,

especially as the barrels are easily returned to the flat sheet after use, and consequently may always be stored in this manner. The most important element, however, in the invention is that it enables the production of a very cheap and merchantable-looking barrel, whilst, owing to the method employed in making the stave-sheet, various descriptions of barrels are obtained, meeting special trade requirements. The barrels are all cylindrical in shape, and of any size, and samples are shown with staves of from 3-16 in. to 2 in. thick. Those with the stouter staves are iron hooped, and so as to facilitate the rolling, guiding, and up ending, they are provided with a broad wooden hoop around the centre, which appears effectually to produce the results obtained from the bouge of the ordinary barrel. This renders these barrels available for the carriage of heavy goods, such as cement, chemicals, fish, &c., as they are thus quite easy to handle.

There is one description of the stave-sheet barrel which we particularly noticed by reason of its essentially novel construction. It has the staves placed apart, and may be termed the crato-barrel. It is intended for the carriage of fish, game, fruit, vegetables, and other perishable articles, as when stowed it permits of a greater ventilation, than can be obtained with any square package. This barrel, like the others, may also be re-flattened at any time for convenience of storage as an "empty."

Although the samples made up to the present are intended for dry goods, still such close jointing is obtained that the barrels may be used to hold articles scarcely coming under that category, and it is consequently intended to make a trial stave-sheet cask to hold liquids. If this is accomplished, a surprisingly cheap wet cask will be obtained; but it remains to be seen if the saving in cost will to any great extent lead to the discarding of the old familiar bouge cask, though it is noticeable there is a very general tendency to diminish the bouge as much as possible, as by so doing a saving is effected, not only in material but in freightage. A special interest that this invention may have for the trade is that it is likely to create a new outlet for a large quantity of waste timber, a 2 in. stave being, if anything, preferred to a wider one. The invention has also received protection abroad.—*Timber Trades Journal*.

### DELIVERY CARGOES.

At a meeting of the Liverpool Timber Trade Association, held at the Canada Dock, Liverpool, on Nov. 4th, a discussion arose upon the various wordings of wood charters, with special reference to the manner in which the cargo shall be delivered to and by the ship. The custom here has been based upon the procedure carried out under the old charters, made for the conveyance of Canadian or Colonial woods, whereby the cargo (with the exception of such hewn or sawn timber which can only be drawn from the port by horse-power) shall be landed on the quay and there stacked at the expense of the ship. This has been the established custom from the earliest times, but of recent years innovations have been made in this custom, not from within the trade here; but from charterers outside this port, hence when a vessel has arrived with a charter-party not in conformity with the Liverpool custom, disagreeable results follow as a matter of course.

It is needless to point out in detail instances of the manner in which these arise, but the decision at which the Committee has arrived will commend itself to all concerned, since its object is to put all charters upon a uniform and harmonious basis.

The following is an extract from a record of the proceedings:—

It having been brought before the notice of a Committee of this Association that there is a clause in some wood charters reading, "The cargo to be brought to and taken from alongside ship at charterers' risk and expense," or "The cargo to be brought to and taken from ship's board at charterers' risk and expense," which has given rise to misunderstandings and disputes resulting in some cases in litigation, it was resolved in order to prevent disputes the members of our trade be recommended not to adopt any form of charter-party containing either of the above clauses, but that instead the following

be substituted, which has for many years been printed in charter-parties: "That the usual custom of the wood trade of each port be observed by each party when not otherwise specially expressed." It was further resolved that a copy of this resolution be sent to the timber merchants, brokers, shippers and others interested.—*Timber Trades Journal*.

### INVENTION OF SAWS.

The saw was, it is said, invented by Dredalus, according to Pliny, but Apollodorus says the inventor was Telus. It is stated that the latter, having found the jawbone of a snake, employed to cut through a piece of wood, and then formed an instrument of iron like it. Beecher says saw mills were invented in the 17th century; but this is not so, it appears, for they were erected in Mederia in 1420, at Breslau in 1427. Norway had the first saw mill in 1530. The Bishop of Ely, ambassador from Mary of England to the Court of Rome, describes a saw mill there in 1563. In England, saw mills had at first the same fate with printing in Turkey, the crane in Strasbourg, etc.; the attempts to introduce them were violently opposed, and one erected by a Dutchman in 1663 was forced to be abandoned.—*Engineer*.

### TIMES IN THE STATES.

Since 1861, at the outbreak of the civil war, to the present time, twenty-three years, there have been but five really prosperous years as people generally regard years of prosperity, or, as they say, "good times." The other seventeen years have been characterized by dull markets, slow and unprofitable sales, liquidation, bankruptcy, unemployed labor, and distress. For about three years after the close of the war there was prosperity, high prices, and abundant employment; then came a decline that lasted several years, until 1873, when there was a collapse and seven long years of hard rubbing to get along, and much distress. It was the era of tramps, bread riots, strikes, and general disorder. In 1879 times began to be a little easier, and in 1880 there was a big crop, good prices, and a boom. It lasted two years, and then there was another decline, shrinkage of values, and distress. This year the pressure has been felt more seriously than since it first began in 1882. We call attention to the comparative fewness of prosperous years as a matter to cause surprise. Though only a little more than one out of five of the time during the past twenty-three or twenty-four years has been what can be called prosperous, the country at large has prospered and progressed nevertheless. There is much humbug in a so-called boom. The prosperity that it represents is largely fictitious. If the civilized world could ever get down to an even gait in industry and trade it would be better. There is but one mitigation in a boom, and that is in the demand for labor which it creates. In a boom even tramps can find a job, if they choose. But the way our industries are now organized the first intimation of hard times is sure to throw thousands out of employment.—*Northwestern Lumberman*.

The Wausau, Wis., mills, owned by nine companies and firms, will have cut at the close of this season 104,000,000 feet of lumber, of which 52,000,000 feet will be left over. The total number of men employed is 890. The boom received 113,000,000 feet of logs of which 104,000,000 were delivered.

Poor, despised hemlock is receiving more attention than ever before. Even in Wisconsin and Michigan men have held that none but a pine tree was of any value are now speaking in low tones about the future of hemlock. It will have a future, gentlemen, and the sooner you recognize it the better off you will be.—*Northwestern Lumberman*.

### "It Knocks the Spots,"

and everything in the nature of eruptions, blotches, pimples, ulcers, scrofulous humors, and in-cipient consumption, which is nothing more or less than scrofula of the lungs, completely out of the system. It stimulates and invigorates the liver, tones up the stomach, regulates the bowels, purges the blood, and builds up the weak places of the body. It is a purely vegetable compound, and will do more than is claimed for it. We refer to Dr. Pierce's Golden Medical Discovery.

**BULLETS AND DYNAMITE.**

Mr. Hanson, of Hanson & Co., contractors agents, of Toronto, arrived last night from Gravenhurst and reports two very exciting incidents which occurred in that vicinity. The first was a shooting affray. On Tuesday night an Italian in the employ of Hondrie, Symms & Co., contractors for the construction of the Northern and Pacific Junction Railway, entered the office of Mr. James Hendrie at Gravenhurst to receive his pay. A dispute arose as to thirty cents and the Italian threw the money he had received down on the floor. While Mr. Hendrie was stooping down to pick it up the Italian drew a revolver and fired a shot at him which fortunately missed a mark. The book-keeper of the firm, McKay, promptly grappled with the Italian, and the pair rolled out of the office and down the steps onto the sidewalk. After a desperate struggle the Italian got free and fired a shot at Mr. McKay, the bullet passing under his arm. Mr. Hendrie ran to Mr. McKay's assistance, when the revolver was discharged a third time, but without any more effect than the previous occasion. The blood-thirsty Italian, by the combined efforts of the two, was overpowered, and taken to the lock-up. During the night some of the Italian's friends attempted to effect a rescue. They obtained some dynamite and attempted to blow up one of the cells in order to effect an entrance. They were, however, unsuccessful. The Italian was taken to Barrie on Wednesday morning and was lodged in gaol to await his trial. He refused to give his name.—Mail.

**A TALE OF MISFORTUNE.**

QUEBEC, Nov. 30.—A family named Breton have just removed to Quebec in a very distressed condition, and under very painful circumstances. In the St. Lawrence, midway between L'Islet and Bay St. Paul, or at about seven miles from either shore, there is a small island known as L'Isle au Loup Marie, and owned by Toussaint, Ritchie & Co., its entire superficies being not more than a few acres. For three years this little spot of dry earth amid the waste of waters had been the home of the Breton family, who had not only cultivated it successfully, but had erected buildings on it and stocked it with a few domestic animals. In fact all went well with them until the night of the 5th of November, when the island was submerged by the stormy waves, and they not only spent a night of horror with two workmen in their employ, one of whom was nearly drowned and the other nearly died of fright, but they had the misfortune to see nearly all their possessions, buildings, crop and cattle, either destroyed or swept away. To cap the climax of their distress, the father of the family hurt himself while trying to save some of his stock. Finally, by means of signals of distress, they managed to attract the attention of some people on the shore of L'Islet, who gallantly put out and rescued them from their perilous situation.

**DARING ESCAPE.**

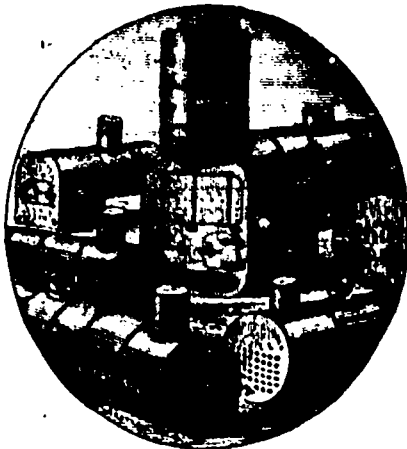
KINGSTON, Dec. 1.—William Johnston alias Jacobs, a seven years' convict in the penitentiary, placed a dummy in the bed in his cell yesterday afternoon, and by a series of fortunate circumstances escaped. He hid between two dead walls, climbed fifty feet to the roof, and with a bar broke through a wall of stone and cement and crawled up the rafters. Here he secured old overalls, and finding a lengthy piece of cord, knotted it, tied one end to the ladder and throw the other through a ventilator and crawled out and finally descended to the earth. He successfully avoided the guards in the yard, and by a ladder and a belt, secured his liberty over the walls. It is thought he left for the United States by the boat. Jacobs was an accomplished burglar, captured in Belleville a year ago. When arrested at that time it was at the top of a church spire, to which he had climbed.

**Throw Away Fusses**

when our new method is guaranteed to permanently cure the worst cases of rupture without the use of the knife. Send two letter stamps for pamphlet, and references. World's Dispensary Medical Association, 666 Main Street, Buffalo, N. Y.

**JOHN MCGREGOR & SONS**

Manufacturers of all kinds of STATIONARY, MARINE and LOCOMOTIVE



**BOILERS**

And SHEET IRON WORK.

SECOND-HAND MACHINERY Bought, Sold or taken in exchange for new work. REPAIRS PROMPTLY ATTENDED TO. All Boilers Tested by cold water pressure to 150 pounds to the square inch.

DOCK and WORKS:—

Sandwich Street, Windsor, Ont.



(ESTABLISHED 1852.)

**CURRIE BOILER WORKS**

MANUFACTURERS OF

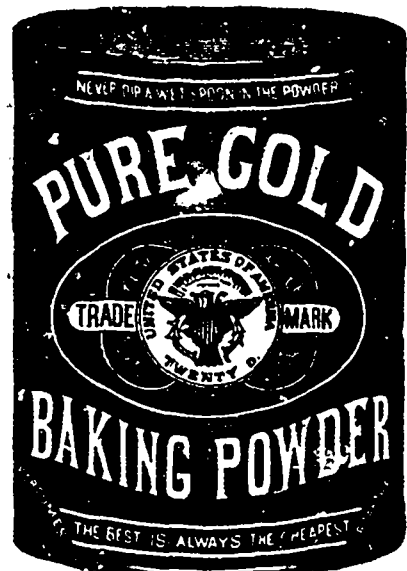
**Steam Boilers**

NEW and SECOND HAND ENGINES

and other Machinery on hand and for Sale.

**CURRIE, MARTIN & Co.**

Esplanade, Foot of Frederick Street, TORONTO.



If you want the PUREST and BEST goods in the market, use Newman's PURE GOLD Baking Powder, Spices, Flavoring Extracts, Cream Tartar, Saleratus, &c. put up under the above Trade Mark, and now in use by 50,000 families in the United States, Canada and the British Provinces. For sale by all first-class Grocers in the country. Manufactured by the PURE GOLD MFG. Co., Fairport, N. Y., & Toronto, Ontario.

**AGENTS**

wanted for The Lives of all the Presidents of the U. S. The largest, handsomest, best book ever sold for less than twice our price. The fastest selling book in America. Immense profits to agents. All intelligent people want it. Any one can become a successful agent. Terms free. HALLITT BOOK Co., Portland Maine.

**WM. LATCH**

Wholesale Dealer in All Kinds of PINE and HARDWOOD LUMBER SHINGLES AND LATH. CONSIGNMENTS BOUGHT AND SOLD ON COMMISSION. 26 Adelaide St. East, TORONTO, ONT.

**PRITCHARD & MINAGRD**

GENERAL ENGRAVERS. Stenoll Plates, Steel Stamps, Rubber Stamps, &c., OTTAWA, - ONTARIO.

**Canada Lead & Saw Works,**

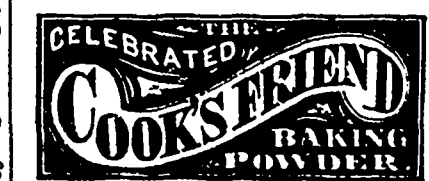
JAMES ROBERTSON, Metal Merchant and Manufacturer, Office: 30 Wellington St., MONTREAL, P.O. Box 1600. White Leads, Putty, Shot, Also, Gang, Circular, and Cross-Cut Saws of all kinds. Prices furnished on application. BRANCHES: TORONTO, Jas. Robertson & Co. ST. JOHN, N.B., James Robertson.

**J. T. LAMBERT,**

Lumber and Commission Agent. ORDERS FOR DIMENSIONS AND ALL OTHER KINDS AND GRADES OF

**American Lumber**

PROMPTLY ATTENDED TO. Timber Limits and the Square Timber Trade a Specialty. Office, Wellington Street, OTTAWA.



Is the Best and Most Economical article in use for raising all kinds of Biscuit, Rolls, Pancakes, Johnny Cakes, &c. It is made from the BEST MATERIALS MONEY CAN BUY, and is perfectly pure and wholesome. Breads ready for the table can be prepared by its means in TWENTY MINUTES after wetting the flour. Next to salt it is the most useful adjunct to camp supplies.

**McLaren's Cook's Friend**

IS THE ONLY GENUINE, BE SURE YOU PURCHASE NO OTHER.

**PATENTS**

MUNN & CO., of the SCIENTIFIC AMERICAN, continue to act as Solicitors for Patents, Caveats, Trade Marks, Copyrights, for the United States, Canada, England, France, Germany, etc. Hand Book about Patents sent free. Thirty-seven years' experience. Patents obtained through MUNN & CO. are noticed in the SCIENTIFIC AMERICAN, the largest, best, and most widely circulated scientific paper. \$3.25 a year, Weekly. Splendid engravings and interesting information. Specimen copy of the Scientific American sent free. Address MUNN & CO., SCIENTIFIC AMERICAN Office, 211 Broadway, New York.

**HILL'S BUCHU, One of the Best KIDNEY INVESTIGATORS IN USE.**

It is a specific in the cure of all diseases of the Kidneys, Bladder, Prostatic Part of the Urinary Organs, Irritation of the Neck of the Bladder, Burning Urine, Gleet, Gonorrhoea in all its stages, Mucous Discharges, Congestion of the Kidneys, Brick-dust Deposit, Diabetes, Inflammation of the Kidneys and Bladder, Dropsy of the Kidneys, Acid Urine, Bloody Urine, Pain in the Region of the Bladder, PAIN IN THE BACK, Urinary Calculus, Renal Calculus, Renal Colic, Retention of Urine, Frequent Urination, Gravel in all its forms, Inability to retain the Urine, particularly in persons advanced in life. IT IS A KIDNEY INVESTIGATOR that restores the Urine to its natural color, removes the acid and burning, and the effect of the excessive use of intoxicating drink.

PRICE, \$1; or, Six Bottles for \$5. Send for Circular. Sold by all Druggists. W. JOHNSTON & CO., 161 Jefferson Ave., DETROIT, MICH.

**J. K. POST & CO.**

LUMBER MERCHANTS And Shipping Agents. OSWEGO, N. Y.

**HENDERSON BROS. LUMBER AND TIMBER.**

Building & Bridge Timber Sawn to Order. Pine, Spruce and Hemlock Lumber by the Cargo. Steam Saw Mills, Box Factory and Yards, 342 to 350 William St., and 130 St. Constant St., Montreal. Steam Saw Mills, L'Assomption, P.Q. P. O. Box 804.

**HILLOCK & KENT**

Wholesale and Retail Dealer in Fine and Hardwood Lumber, Lath, Shingles, Veneers, Wave Mouldings & Fancy Woods. 103 Albert Street, TORONTO.

**The American Hotel,**

BARRIE, ONT. Collier St., Adjoining Market. RATES REASONABLE, CENTRAL LOCATION, FREE BUS TO AND FROM ALL TRAINS. Every accommodation for Commercial and LUMBERMEN. W. D. McDONALD, Proprietor.

**PLANER KNIVES**

Stave Cutter, Stave Jointing, Shingle do, Cheese Box, Veneer Cutting, Paper Cutting, Leather Splitting, Moulding and Tenoning Knives. Send for Circular Price List. PETER HAY, Galt.

**GRATEFUL-COMFORTING.**

**EPPS'S COCOA**

BREAKFAST. "By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—Chief Medical Officer, Army and Navy. Made simply with boiling water or milk. Sold only in packets by Grocers, labelled thus: JAMES EPPS & Co., Homoeopathic Chemists, London, England. Sole Agent for Canada: C. E. Colson, Montreal.

**DO YOU WANT**



Examine the list of "FARMS FOR SALE" and "FARMS WANTED" in the DAILY and WEEKLY MAIL. The MAIL has become The Recognized Medium for Farm Advertisements. And contains more of them than all other Canadian papers combined. It has 350,000 readers of the right class. ADVERTISEMENTS of "Farms for Sale" and "Farms Wanted," "Stock" or "Seed for Sale" or "Wanted" inserted in THE WEEKLY MAIL, for one cent per word each insertion, or twenty cents per word for five insertions, or in THE DAILY MAIL, at two and a half cents per word each insertion.

Address— THE MAIL Toronto, Canada. \$66 a week at home. \$5.00 outst free. Pay absolutely sure. No risk. Capital not required. Reader, if you want business which persons of either sex, young or old, can make great pay all the time they work, with absolute certainty, write for particulars to H. HALLITT & Co., For 1-nd, Main St. Send 145-1yw



DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE Peterborough Review Printing and Publishing Company (Limited), Peterborough, Ont.

**Terms of Subscription:**

One copy, one year, in advance..... \$2 00  
One copy, six months, in advance..... 1 00

**Advertising Rates:**

Per line, for one year..... \$0 50  
Per line, for six months..... 30  
Per line, for three months..... 20  
Per line, for first insertion..... 10  
Per line, for each subsequent insertion to 3 mo's..... 05  
Cards not occupying more than 12 lines (1 inch) per annum..... 8 00  
Cards not occupying more than 12 lines (1 inch) for six months..... 5 00  
Cards not occupying more than 6 lines per annum..... 5 00  
Cards not occupying more than 6 lines for 6 mo's..... 3 00  
Special rates will be made for page, half page and column advertisements.

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

All communications, orders and remittances should be addressed and made payable to THE PETERBOROUGH REVIEW PRINTING AND PUBLISHING COMPANY (LIMITED), Peterborough, Ont.

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

The CANADA LUMBERMAN is filed at the Office of Messrs. SAMUEL DRACON & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., DEC. 15, 1884.

E. R. PHINNEY intends this winter to build a steam salt block, to run in connection with his shingle mill at South Saginaw, Mich.

FIRES in the timber and lumber yards at Adelaide, Australia, early in November caused damage amounting to \$500,000.

"To whirl is hev man," said the punster who felt of a buzz saw to see if it was in motion.

THERE is said to be a poplar tree in Wright's valley, Va., which is 29 feet in circumference, and another into which a horseman can ride and turn around.

DEWING & SONS, Kalamazoo, Mich., December 3rd concluded the purchase of 3,100 acres of white pine stumpage in Jackson County, Tenn., estimated to contain 20,000,000 feet.

THE barque Alhama, bound from Mobile, Ala., to London with a cargo of 960,000 feet of yellow pine, was lost, the crew, however, being saved.

THE schooner Addie John, from Weymouth, N. S., from Boston, put into Portland, Me., November 28th, in distress. She lost part of her deck load of lumber.

THE schooner Loyalist, from St. John, N. B., for Boston, with hemlock bark, went ashore near Head Harbor Island, Jonesport, Nov. 28th and went to pieces, making a total wreck. Crew saved.

THE Oscoda, Mich., Boom Company has about completed operations for this year, having rafted out 175,000,000 feet of logs, as compared with 213,000,000 last year, and 200,000,000, in 1882.

THE Ludington, Wells & Van Schaick Company has nine camps started in the Menominee region, and will start two more. The input his season was placed at 25,000,000, as compared to 56,000,000 feet last year.

HIBBARD, THURBER & Co., Pequaming, Mich., will furnish the New Orleans exposition a piece of pine strictly clear, cut at their mill, 16 feet long, 41 inches wide, and four inches thick, as an example of what Lake Superior pine is.

THE steamship Great Eastern sailed from England to New Orleans with a cargo of exhibits for the world's exposition in that city. The monster ship will remain moored opposite the exposition grounds during the continuance of the show, as one of its attractions.

It is noted that Osterhout & Hugart, of Duluth, Minn., whose mill was burned recently, intend to rebuild on piles out in the bay, so that any fire in the mill will not be likely to reach the shore. The tramways will be so arranged as to be almost instantly detachable.

THE Chippewa Logging Company and the Chippewa Lumber and Boom Company will expend from \$50,000 to \$70,000 this winter in repairing dams and works on the Chippewa river, which will do something towards making good the lack of employment for working men in the woods.

IN the vicinity of Five Lake, Kalkaska and Grand Traverse counties, Mich., a larger number than usual of lumber camps have gone into the woods. As yet there are working short handed, but more will be put on the jobs later in the season. It is predicted that a large quantity of logs will be put in thereabout this season.

THE shingle shed belonging to J. H. Gibbs, near Edmore, Mich., together with its contents, was destroyed by fire November 26th. There were between 1,000,000 and 1,500,000 shingles in the shed burned, valued at \$4,000. The origin of the fire was supposed to be incendiary.

THE cabin of the new steel steamer Nyack now built for the Lake Superior Transit Company, will be finished in cherry. The steamer will be 301 feet 6 inches long, of 38 feet beam, 3,000 tons burden, and will carry 200 passengers. It is expected that her speed will be greater than that of Jewett, now the fastest on the lakes, and that the new steamer will run 15 miles an hour.

**THE OUTLOOK.**

The outlook for lumber operations in New Brunswick during the coming winter is not very promising, though it has been perhaps quite as dark before, and will doubtless brighten again in the not very distant future. The already long continuance of the depression is, of itself, an evidence that the change for the better may be near at hand. \* \* \* Reciprocal trade with the State would afford a great measure of relief if it could be secured, as we hope it yet may be. Meanwhile something more than has been yet accomplished might be done to turn to account the wealth of our hardwood forests. That our hardwoods are second to none in the world is established beyond question by the results of the by no means complete, though in many respects creditable display made at the Edinburgh Forestry Exhibition.—*St. John Telegram.*

**A PROJECTED RAILWAY.**

The Port Arthur *Sentinel*, in an article on a proposed new railway to be constructed within the municipalities of Port Arthur and Neebing and adjacent crown lands, at a cost of \$1,296,000, refers to the district through which it would run, in which it says:—

"The region immediately along the proposed route of the line is fairly well timbered with occasional belts of white and red pine, interspersed with other descriptions of forest trees, chiefly spruce, tamarac, birch and cedar, all of a size suitable for railway structures and telegraph poles; while poplar of fine growth is invariably found in the elevated places. The entire section, however, to the right and left of the line, and, in fact, from Lake Superior to the Lake of the Woods, is estimated by the late Surveyor-General of the Dominion, and by our worthy member from Algoma, S. J. Daw-

son, Esq., to contain some twenty-six thousand millions of feet, board measure.

When it is remembered that this proposed colonization railroad will pass through the heart of the richest mineral region of the Dominion; that its route is surrounded by agricultural and timber lands of good value, and that it will form important connections with two leading trans-continental roads, little more need be said to justify the wisdom and great utility of the project."

**LIST OF PATENTS.**

The following list of patents upon improvements in wood working machinery, granted by the United States Patent office, Nov. 11, 1884, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of American and foreign patents, No. 617 Seventh St., Washington, D. C. :—

307,739.—Boards, machine for matching—B. S. Atwood, South Abington, Mass.  
307,795.—Flooring clamp—T. A. Perry, Plymouth, N. C.  
307,901.—Lath attachment—B. A. Barnes, Oelwein, Iowa.  
308,037.—Saw handle clamp—A. McNiece, Newark, N. J.  
307,927.—Weatherboard gage—W. D. Dyer and T. W. Maxey, Nevada, Mo.  
307,934.—Log turner.—W. F. Fidler, Rock Cave, W. Va.

**PATENTS ISSUED NOV. 25.**

308,471.—Cant dog and pry combined—A. K. Doe, Stillwater, Minn.  
308,472.—Cant dog, pry and pike combined—A. K. Doe, Stillwater, Minn.  
308,347.—Lath friction brake—U. & H. E. Eberhardt, Newark, N. J.  
308,574.—Shingling gage—S. T. Poe, Covington, Ky.  
308,549.—Saw—A. & C. W. Boynton, Battle Creek, Mich.

**PATENTS ISSUED DEC. 2.**

308,746.—Carpenters gage.—A. J. Burger, New London, Wis.  
308,724.—Lath mandrel—H. L. Stevens, Erie, Pa.  
308,639.—Lath attachment—A. G. Wiseman, Webster Groves, Mo.  
308,801.—Planing and matching machine—J. A. Roberts, Detroit, Mich.  
308,670.—Saw filing machine—W. Hill, Mount Vernon, Ill.  
308,599.—Saw gummer—L. Fawcett, Cedar Lake, Mich.  
308,703.—Saw handle, fret—C. Richardson, Newark, N. J.  
308,701.—Wood steaming apparatus—L. Reed, Detroit, Mich.

**NORTH SHORE LUMBER EXPORT.**

A statement of the quantity of lumber shipped from Newcastle (Miramichi) to transatlantic ports during the season of 1884, is given to the *Advocate*. The quantities were 50,188,000 superficial feet deals, 5,431,000 sup. feet scantling and ends, 3,259,000 sup. feet battens, while of square timber there was exported 556 tons birch timber, 812 tons pine do. All this was carried in 115 vessels of 66,574 tons.

"The condition of the lumber business has been most unsatisfactory throughout the season, rendering necessary a curtailment in the exports—a precautionary measure which it is thought will have to be continued and made more general in its application before the much needed improvement can be expected on the other side of the Atlantic."

The exports of 1883 exceeded those of the season just ended by over twenty million sup. feet, and the number of vessels was 148.

The exports from Newcastle for the nine months ending September 30th are valued as follows:—

Produce of the fisheries.....\$ 25,753  
Produce of the forest..... 533,029  
Manufactures..... 142,560

The imports for the same period: Dutiable goods imported \$36,650; entered for home consumption, \$34,601. Free goods to the value of \$2,047 were entered.

At the port of Dalhousie, the shipments were more nearly on a level with those of the previous year. The totals are as under: 1884, shipments, 18,235,140 sup. feet deals, etc., 2,953 tons birch timber, 1,476 tons pine timber,

411 tons spruce timber, 8 tons poplar, do., 8,000 pieces palings.

The shipments of 1883 were: 48,726,737 sup. foot deals, etc., 7,723 tons birch, pine, spruce and other varieties of timber, 84 cords lathwood, 52,362 pieces palings. Last year 41 vessels of 26,847 tons were employed; this year, 43 vessels whose tonnage was 23,782. The principal shippers at the two ports were R. A. & J. Stewart, George MacLeod, D. & J. Ritchie & Co., Geo. Moffat & Co., Henry O'Leary, John McNair.

**DEFORESTING.**

The evils of entirely stripping our forests have been discussed again and again. Mr. S. W. Powell has published an article in the *Popular Science Monthly* on the subject, and as the subject is one of importance to this country, we take the following extract from it:—

"But there is further mischief, which, as being more widely diffused, is less sure to be assigned to the true cause—the stripping steep land of its covering of trees:

1. There is the failure of springs, because water of precipitation, which should have been delayed on the hillside by the roots, sprouts, mosses, fallen leaves, etc., which fill and cover the surface of the ground under a forest, till it could find the underground spring sources, runs off the bare slopes in a few hours. Dry springs mean parched pastures, small crops and unprofitable husbandry.

2 The increased cost of buildings, bridges, furniture, and implements of all sorts, which are, in whole or in part, made of wood. A large item in the current expenses of railroads is the outlay for ties, which must be renewed frequently. Wood for fuel or structural use is a prime necessity of civilized life; and, as it is bulky, its cost increases rapidly with the distance it must be carried to reach the consumer. Many countries have no stores of coal or peat, and must have wood, or be sorely stinted for fuel; that stinting is a waste of time, health, and vitality. Floods make the maintenance of roads difficult and costly, and so, of course, increases the expense of whatever must be hauled over them, especially anything so bulky as wood. Further, scarcity of timber means the cessation of many lucrative industries which use wood for their raw material, and which are especially desirable as affording employment during portions of the year, when agriculture or the care of flocks does not call for all of the farmer's time.

3. There is the derangement of climate and rainfall. It is by no means certain that, at least in some situations, more rain will not fall in a year upon a well-wooded than upon a bare region. Certainly, what does fall will not evaporate, and be carried away by the winds as quickly. Sudden changes of temperature and the resulting violent winds are also less liable to occur where woods abound. A forest is a better barrier against wind than a stone wall of equal height, because it divides its force, and does not stop it all at once, causing eddies and rebounds which may do damage elsewhere.

**A MODEL MILL.**

The Ottawa *Sun* of a recent date says:—The model mill of Canada, built on the Nation river for Messrs. Flatt & Bradley, timber merchants of Hamilton, is the source of attraction for the lumbermen of Quebec, as well as all over the Province of Ontario. It was visited yesterday by two prominent lumbermen of Montreal, and after inspecting the machinery, anxious to know her capacity, they requested Mr. Flatt, the senior partner of the firm, who happened to be there, to try her for one hour, which he did, and the result of which, to their astonishment, was equivalent to one hundred and ten thousand per day, which, they said, far surpassed any previous record for a single circular mill. This enterprising firm are to be highly complimented upon having thus reached the height of their ambition in this respect.

A MONUMENT is being erected by the Mohawks on the reserve at Deseronto to the memory of Chief Deserontyon, who landed there with the band just one hundred years ago. It will be about forty feet high and have 11x12 base.



# ST. CATHARINES SAW WORKS!

R. H. SMITH & CO.,

MANUFACTURERS OF EVERY DESCRIPTION OF

ST. CATHARINES, ONTARIO.

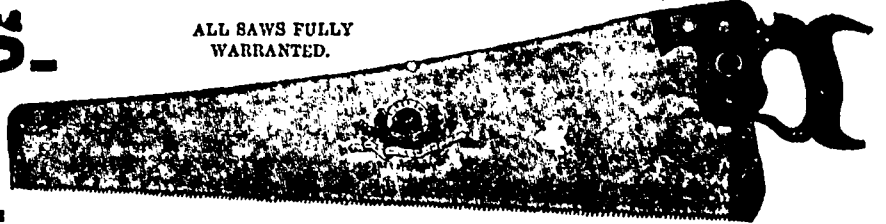
## SAWS.

ALL SAWS FULLY  
WARRANTED.

Sole Manufacturers for the Dominion of  
Canada of the

### "SIMONDS" SAWS.

All Our SAWS are now made under the "SIMONDS" PATENT PROCESS.



#### CAUSE OF DECAY OF WOOD.

Professor P. H. Dudley, well known to railway and scientific men in connection with his discoveries made by aid of the dynamograph of his own invention, has been for some time investigating the cause of the rapid decay of wood. His methods of investigation have been mostly microscopic and chemical. Some time ago he discovered the fungi that caused the premature decay of most of the woods used in railroad structures, and followed their operations on the secular structure of the wood. By use of the photomicrograph views, he kept a graphic record of the appearance of decaying wood tissue. After patient search Mr. Dudley has discovered the spore that acts as the seed of fungus, and he expects soon to find a means of destroying this seed before it produces growth. Some of the wood-preserving processes in use do not destroy the fungus spores, and they go on germinating their ruin-making fruit. Any sure means of arresting the premature decay of wood will prove exceedingly valuable to railroad companies, since bridges and ties often fail with half their natural age, and in failing often bring about disastrous consequences.

#### ALBERTA DISTRICT.

The following is an extract received by a resident of Peterborough from Calgary, N.W.T. :-

"It is a beautiful country round Calgary in the Bow River Valley. It is very hilly with swift and odd mountain streams; there is beautiful natural grades on which they raise very fine cattle ranches; the beef beats any meat I ever tasted. The cattle are left out on the hills all winter because the snow never lies deep on the ground, and is often swept clear away or melted by the warm Chinook wind from the Pacific, but they cannot raise wheat here on account of July frosts.

"Calgary is a lively, pretty and neat little town which will some day become a considerable city. There is plenty of good timber on the mountains which is floated down the Bow River.

"As I sit in the tent I enjoy a magnificent view of the Rocky Mountains. It is worth going a long way to see their immense blue masses capped with dazzling snow. Our work will lie principally among the foot hills of these grand old Rockies, to Fort Micheal and back to Calgary and so northeast to Edmonton.

Yours, &c.,  
C. N. T."

#### CONTRADICTIONARY REPORTS.

THE news received by telegraph from Egypt, if it cannot always be relied upon, has at least the value of variety. First we are told that Gen. Gordon has been killed, and, following this, reports come of his dolge at Khartoum. Then, to give variety to the news, we are informed that the Mahdi has expired, and soon after we are informed of renewed activity among the rebels, and of active measures by the (supposed to be) dead False Prophet. But even that is not enough, and one despatch informs us that the Mahdi attempted to lead his followers across the Nile and that 3,000 were drowned, while at the same time the information is given that his followers are leaving him because he will do nothing. On the same day another despatch says that daily attacks are made upon Khar-

toum! People may complain a trifle of the unreliability of the despatches, but they cannot grumble for lack of variety, unless they claim that these contradictory reports are becoming monotonous.

#### Horses Drowned by Thieves.

WINSON, Dec. 9.—On Saturday night two horses were stolen from the stables of Daniel Marantette and Daniel Field, on the Grand Marais road, in Sandwich West. The horses were finally traced to the river near the ice-house, Sandwich. It is supposed that the thieves had a boat here and intended to take the horses across the river. A tremendous gale was blowing on Saturday, and the river was unusually rough. It is evident that the parties did not succeed in getting the animals across owing to this fact, for yesterday both animals were found drowned and washed up on the beach near the breakwater at the Sandwich fish hatchery, about a mile below the village. Both the horses' heads were tied together with balts which belonged to the stables from which the animals were taken. They also had bridles on which belonged to the stables. The animals were valued at \$300.

#### Lynch Law.

MARYSVILLE, Mo., Dec. 9.—Chas. Stevens, a desperado known as "Omaha Charley," who killed Hubert Kramer on the 3rd inst., was this morning taken from the gaol by a mob of sixty masked men, who went to the gaol at two o'clock this morning, called up the sheriff and demanded that he deliver Stevens to them. The sheriff refused, and told the crowd he would fight to the last in defence of his prisoner. The mob then rushed for the door, and notwithstanding that the sheriff repeatedly fired into the crowd they forced an entrance, overpowered the sheriff, seized the murderer, and marched him under cover of a score of cocked revolvers to a railroad bridge, half a mile away, and hanged him. One of the mob was dangerously wounded by the sheriff.

#### Diphtheria in New York.

NEW YORK, Dec. 9.—Diphtheria, a scourge which never leaves this city, has taken a fresh start, and is raging fiercely. The habitual death rate of 50 per cent. of reported cases has been exceeded, and is at present 60 per cent. and over. Last week's deaths from diphtheria numbered 43 to 75 reported cases.

#### Broke Through the Ice.

ALMONTE, Dec. 11.—To-day, while one of our most prominent young men, Charles Shearn, jr., was attempting to cross the river on the ice he broke through, and before assistance reached him became chilled and went down. The body was recovered in a few moments, but life was extinct.

"Hello!" we heard one man say to another the other day. "I didn't know you at first, why? you look ten years younger than when I saw you last." "I feel ten years younger," was the reply "You know I used to be under the weather all the time and gave up expecting to be any better. The doctor said I had consumption. I was terribly weak, had night sweats, coughs, no appetite and lost flesh. I saw Dr. Pierce's Golden Medical Discovery advertised, and thought it would do no harm if it did no good. It has cured me. I am a new man because I am a well one."

ESTABLISHED 1856

## OAK TANNED BELTING

Acknowledged by all to be the

### Best Belt ever offered IN CANADA

EVERY BELT GUARANTEED

The Best Mills in the Country use it.

QUALITY is what I am at, the result being  
the Generous Support of all Manufacturers.

For Discounts and Terms, Address

## JNO. C. McLAREN, 292 & 294 ST. JAMES STREET WEST, MONTREAL.

Lace Leather, American Rubber and Cotton Belting, etc., always on hand

15mt.20

## HUGH GIBSON,

MANUFACTURER OF

KNIGHT'S PATENT "EXCELSIOR"

## SAW MILL DOGS

The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage  
while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. These Cants cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.

Manufactured by HUGH GIBSON, CHATHAM. EXCELSIOR DOG.

## HOPE FOR THE DEAF.

Our Improved Artificial Ear Disks cure Deafness in all stages. Recommended by scientific men of Europe and America. Write for illustrative descriptive book and testimonials from doctors, judges, ministers, and prominent men and women who have been cured, and who take pleasure in recommending them. They are unseen while in use, comfortable to wear, and make a permanent cure. Address, J. W. NICHOLSON, 7 Murray St. New York. d6478819





## THE LUMBER TRADE.

The Bobcaygeon Independent discourses thus on the subject of the lumber trade:

"There is at present a greatly reduced demand for forest produce, and the demand is not likely to increase either this season or next. The consequence will be prejudicial to the interests of our back country friends and to those lumbermen who are not in good pecuniary circumstances will be disastrous. The banks may prepare to lose heavily by the advances they have made to shaky lumbermen. Those engaged in lumbering who can struggle through the next two seasons successfully, will probably recover themselves speedily in the future, for the present stringency, curtailed production, and wiping out of the small lumbermen, will give those who pull through the hard times, a favorable chance of making profits. It must not be forgotten that no matter how hard the times a certain consumption of timber is absolutely essential. In hard times a man may put on repairing his house, or his picket fence, but decay goes on just the same, and when the year of hard times is passed he has two year's repairs to take in hand. In railway matters this is very clearly illustrated, for the repairs to a railway involve the consumption of immense quantities of timber, and if less is used this year, more must be used next year. It is the States that consume our forest produce, the Canadian consumption being but small as compared with the States consumption. If free trade existed between Canada and the States there would at once be an enormous leap in Canadian prosperity, for the whole of the fifty millions of Yankees would become purchasers of the Canadian forest produce."

## HOW CIGAR BOXES ARE MADE.

Some of the machinery used by Messrs. William Beck & Co., in their Cigar Box Works on Albert street, is of a novel description, and the work done there appears little less than wonderful to the casual observer. Recently a *Free Press* representative visited the works and was shown through by Mr. A. Beck, one of the principals of the firm. Amongst the heavy machinery on the first floor was the planer, which Mr. Beck was just starting when the reporter arrived. A rough cross-grained board was put through and came out perfectly dressed, with a surface absolutely free from roughness of any kind, and ready to be made up into cigar boxes. This machine wastes very little or nothing of the board, as the knives are adjusted to cut a very thin shaving. It works rapidly, and is kept free from dust by an air blast, which carries all the refuse off through a pipe, by which it is deposited in a corner of the engine room and used to feed the furnace. The finest saw in Canada, erected at a cost of \$800, has been placed in these works. It saws a perfectly even board any length required, and only the thirtieth part of an inch in thickness. Mr. W. Beck, who was operating the saw, showed what it could do by sawing off two strips of elm about ten feet long, not much thicker than a piece of ordinary pasteboard. They could be bent and twisted in almost any direction, or wrapped around a man's body like a sash. Mr. Beck explained that one great difficulty against which we had to contend formerly was that of obtaining thin lumber. They could buy it in New York, but the cost of the raw material was higher, and then they had to pay a duty on the sawn boards as partly manufactured stuff. He could now turn out finer kinds of veneers, used by piano and organ makers, and expected to do quite a trade in this line.

The process of manufacturing the cigar boxes is carried on in three flats, and some very ingenious machines are used, including a nail driver operated by a boy which fastens the boxes together, driving three nails at once with greater precision than could be done by hand. The boxes are finished by girls, who line them and paste on the labels, etc., in a room by themselves. The factory employs twenty-six hands at present, and turns out a thousand cigar boxes per day, about 700 being required by the London cigar factories alone. For their own use they require 300,000 feet of lumber per week, while a firm in Hamilton are supplied with 150,000 feet, and a similar quantity is

shipped to Toronto. The transformation wrought in the premises since these gentlemen have been in possession makes a very favorable impression on the visitor and speaks well for the energy and business capacity of the firm. Labor-saving appliances of the best kinds are provided, and sheds for storing and seasoning the lumber, drying kilns, tramways, etc., have all been constructed with a view to systematic and first-class work. Power is provided from a twenty-five-horse-power Corlis engine from the celebrated works of Cowan & Co., Galt. The title of the firm is "The Ontario Cigar Box Works and Thin Lumber Mills," William Beck & Co., proprietors.—*London Free Press*.

## A NEW AND NOVEL IDEA.

There has been numerous devices in connection with lumbering, but the following method of logging as described by W. A. Campbell, of East Saginaw, is quite unique:

"There is one problem, however, that has but recently presented itself for solution. Heretofore lumbermen have found their pick of timber on high ground and on the banks of streams, but as this has been cut away, they have been driven back to more expensive cuttings. Then there comes the swamp lands; lands growing fine timber but utterly inaccessible with trucks or sleds, and this growth must be left to itself unless some contrivance means other than those previously employed to get it out. It is stated that a demand produces a supply, and it is at this juncture that a most admirable contrivance is brought before the lumbering public. At the camp of Butters & Peters, near Ludington, there is an adaptation of the well known life line of the United States life-saving service, and one that is especially suitable for swamp work, particularly in the cypress swamps of the south.

A ordinary logging road is built to the edge of the swamp, and here a strong tree is chosen to which a heavy wire cable is attached. This is stretched about 25 or 30 feet from the ground out over the swamp for a distance of 400 or 500 feet, and fastened to another tree, both trees being well guyed to prevent them from breaking. Just at the side of the track there is placed a small but powerful hoisting engine, provided with three drums and suitable clutches for operating them. On this wire tramway, as it really is, there is a two-wheeled trolley, with an endless manilla rope attached, so that it may be drawn back and forth over the tight wire rope. The bottom of the trolley is further provided with a sheave and box carrying another rope, one end of which is connected with a drum, the other being spliced into an ordinary pair of skidding tongs. This rope with the skidding tongs is dragged into the swamp and fastened to the log to be taken out, the engine started and the log hauled until it is suspended in mid air directly under the trolley, which is then drawn onto the track and the log deposited upon the pile or loaded on the cars, as may be desired. The trolley is then run back and another log follows in the path of the first. As to the details of the construction of this novel adaptation little need be said here. The engine and boiler are placed upon a little car or truck that may be easily removed from the main track and run in any position that is desired, and its construction may be varied to suit the taste or necessities of the men who are to use it. The ropes are ordinary Manilla ropes, and the trolleys are of the simple and ordinary two-wheeled type. It is only necessary to see this neat and simple contrivance at work to be convinced of its great usefulness for the purpose for which it was invented. Logs are snaked out of mud holes, ravines and gulches where no horse could ever be driven, raised into the air, run along through the woods at a good round rate and piled 20 feet high, with a rapidity and ease that would surprise any man accustomed only to the slower methods heretofore in use, for which ordinary working 30,000 feet have been taken from the woods where the trees were felled and loaded on the cars in the space of two hours, and with a service of only 13 men; and these same cars were unloaded at the railway by a somewhat similar device in three minutes. And so strong and serviceable is the whole mechanism that with a single line of 500

feet in length at least 50 acres may be cleared by running the hoisting rope out on each side and beyond its limits, and when all the timber within its reach has been removed, the whole is taken down packed on a car and set up in another locality where the same process is repeated.

It is such improvements as this that will give our lumbermen their precedence, and unless some unlikely and disastrous legislation is effected so that our industries are crippled at a blow, we need have no fear but that means will be found to overcome all the difficulties that may be in the path that is to be followed and we will still continue to lead the world in the cheapness with which we do our work and the excellence of the article produced.—*Lumberman's Gazette*.

## BUSINESS IMPROVING.

The sales of wool this week have been very large, amounting, during the five business days, to over four million pounds. Only twice previously this year have the sales been so large, and for the previous five weeks they have not amounted to half so much. The improvement, therefore, is marked. It shows that manufacturers need supplies, and, satisfied that present prices will be sustained in the future, have bought freely. The tone of the market has been much strengthened by this large business.

In other lines of trade there has also been an improvement. More movement has been reported in our market columns in leather, both sole and upper, with cautious buying by manufacturers; tanners have bought hides in large quantities the past ten days; cotton goods have been more active, and commission houses have made immense sales to jobbers; some advances in prices have been made in brown and bleached cottons; print cloths, from being a drug, have become active, and prices have advanced nearly a quarter of a cent a yard; cotton has advanced from 2½ cents only a short time ago to 10 7-16 cents, and the export demand has been large. The export movement in bread stuffs and provisions has also greatly increased, and the freight room in steamers has been engaged ahead almost until next year. Packages of provisions in this vicinity have more orders from abroad than they can fill, and the daily receipt of cables is almost unprecedented. Even in what might be termed the small article of apples, the export movement is immense; the shipments last week were 59,389 barrels, making a total for the season thus far of 391,356 barrels. The mild weather has caused late building operations, with a larger employment of mechanics, and increased consumption of lumber. The "necessaries of life" are lower than a year ago, while wages have been but slightly reduced. There are now in Boston over fifty representatives of the boot and shoe jobbers in the different sections of the country, and they are placing orders with even more confidence than a week ago.

From all these indications, it appears that the business outlook is brightening, and it may be hoped that the improvement in trade, so long looked for, has at last begun.—*Boston Advertiser*.

## WOOD TRADE STATISTICS.

The following is a list of the principal shippers of timber and lumber from Quebec to the European markets, together with the value of their respective exports during the season now closed: R. R. Dobell & Co., \$2,625,000; J. Burstall & Co., \$914,464; W. & J. Sharples, \$621,978; Smith, Wade & Co., \$473,520; Bryant, Powis & Bryant, \$306,165; McArthur Bros., \$289,673; Ross & Co., \$125,000; Wilson & Co., \$72,810; Henry Fry & Co., \$63,422; J. Lyon & Son, \$60,140; Price Bros. & Co., \$40,000; D. D. Calvin & Co., \$25,400; sundry, \$75,000; making a total of \$5,692,578. These shipments only embrace the exports from Quebec on which harbor dues have been paid. Some small quantities have been loaded at Cap Rouge and adjacent loading berths, but they have been insignificant.

The following is a statement of the lumber cut between Grenville and Ottawa for the season:—Hamilton Bros., Hawkesbury, 35,000,000 feet; W. C. Edwards & Co., Rockland, 40,000,000 feet; J. McLaren & Co., Bucking-

ham, 17,000,000 feet; Ross Bros., Buckingham, 15,000,000 feet; Hillman's Mill, Rockcliffe, 3,500,000 feet; Gilmour & Co., Gatineau, 40,000,000 feet; J. McLaren & Co., Ottawa, 25,000,000 feet; W. McClymont & Co., New Edinburgh, 22,000,000 feet; Bronson & Weston, Ottawa, 60,000,000 feet; Parley & Pattee, Ottawa, 50,000,000 feet; Sherman, Lord & Hurdman, Hull, 40,000,000 feet; J. R. Booth, Ottawa 60,000,000 feet; estate of Levi Young 18,000,000 feet; E. B. Eddy, Hull and Nepeau, 70,000,000 feet. Total, 495,500,600 feet.

## USES OF YELLOW PINE.

In the Southern States yellow pine has been extensively used. All primitive constructions exhibit the wood, from fences up to residences, and it has entered largely into naval architecture. The keel, beams, side planks and decks of ships are often made of this wood. It has been shipped in large quantities to the ship yards of Maine for this purpose. The value of the tree in the construction of ships does not exist exclusively in the wood, as the tree supplies nearly all the resinous matter used in the United States in ship-building.

Large quantities of resin are also exported. Some portions of the forest have been impaired by tapping for resin. The best wood comes from the untapped trees, and timber merchants of New York pay especial attention to this matter; so that all timber or lumber from trees which have been impaired in that way cannot be rated as first class material. Very large quantities of pine have been consumed by railroads in the construction of buildings and cars.

The demand for yellow pine, both for domestic use and export, is rapidly on the increase, and it is not easy to foresee how great the future demands may be.—*Saw Mill Gazette*.

## Timber Area.

In a recent address on the subject of tree culture, Prof. Rothrock, of the the University of Pennsylvania, points out that only 10½ per cent. of the area of the United States is woodland owned by private parties, whereas 28 per cent. of the area of Europe is in forest, and no European country with less than 15 per cent. of woodland area produces enough lumber for its own use. This estimate does not include the large tracts of public lands in our country which are of a forest character, but those are being rapidly denuded; and with their supply counted, it is plain to see that unless we soon take measures to preserve and increase our timber resources, we shall have to be sending abroad for lumber.—*Lumber Trade Journal*.

## "As Good as New."

are the words used by a lady, who was at one time given up by the most eminent physicians, and left to die. Reduced to a mere skeleton, pale and haggard, not able to leave her bed, from all these distressing diseases peculiar to suffering females, such as displacement, leucorrhoea, inflammation, etc., etc. She began taking Dr. Pierce's Favorite Prescription, and also using the local treatments recommended by him, and is now, she says, "as good as new." Price reduced to 41¢. By druggists.

## Catarrh—A New Treatment.

Perhaps the most extraordinary success that has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefited, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 305 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—*Montreal Star*. 1y122.

**Chips.**

B. L. Scott's mill, at Bad Axe, Mich., was destroyed by fire. Loss, \$3,000 to \$4,000; no insurance.

O. WITTING & SONS consume 300 cords of birch wood yearly in their brush factory at Buckfield, Me.

HEMLOCK bark at Saginaw, Mich., has dropped in price from \$3 a cord last year to \$1.50 this season.

THE salt manufacturers of Saginaw valley consume from 12,000,000 to 15,000,000 of hoops annually, a large proportion of which are made in the valley towns.

I. A. HANE, the lumberman of Chase, Mich., is shipping maple logs in the rough to Glasgow, Scotland, to be used as rollers in the extensive paper mills of that city.

A FIRE in Faine & Co.'s lumber yard, at Northern Pacific Junction, 25 miles west of Duluth, Minn., November 8th, destroyed 9,000,000 feet of lumber. Loss, \$75,000; insurance, \$25,000.

THE sale of 3,000,000 feet of shipping box lumber in one lot, in the Albany, N. Y., market some time since, is said by the papers of that city to have increased the price \$1 per thousand feet.

THE boiler of Noah Chrisler's barrel factory at Hudson, Mich., exploded Nov. 13. The boiler and engine were hurled into an adjoining dwelling and slightly injured a woman. Ben Chrisler was badly scalded.

THE boiler in Noah Chrisler's barrel factory at Hudson, Mich., exploded November 13, throwing itself and the engine across the street and into the side of a house. The engineer was slightly scalded.

THE route between St. Paul and Montreal by the Minneapolis, Sault Ste. Marie & Atlantic connecting with the Canadian Pacific at the Sault, will be 200 miles shorter than the present route by Chicago.

THE bark Saturnus, bound for Montevideo, with deals, has been frozen in at Grand Bay Saguenay. A tug made an unsuccessful attempt to tow her out of the ice November 21st, and narrowly escaped being frozen in also.

EXTENSIVE forest fires were prevailing in Mitchell county, N. C., about November 20th. Great quantities of timber and fencing were destroyed. A number of houses were swept away. No rain had fallen for many weeks.

A FIRE at Garfield, Saginaw county, Michigan, November 11th, destroyed a steam salt block and 2,530,000 feet of lumber, chiefly oak and ash, belonging to Mason, Allen & Co., and Joseph Barber. Loss, \$33,000; insurance, \$28,000.

COOK & HOWARD's milling property, at Saginaw City, Mich., consisting of a shingle mill and salt block, was recently sold at auction to satisfy a mortgage. Frank Ganshow bid in the property, at \$2,861.57, the amount secured by the mortgage.

THE steamer Ancon lately took to Alaska from Victoria, B. C., the machinery for a large saw mill to be erected by the Paris Lode Company, a gold mining concern. The mill plant will be an extensive one. The Paris Lode operations are on Douglas island.

THERE are heavy stocks of lumber in nearly every market, says the *Northwestern Lumberman*, yet at nearly every point there is a scarcity of certain grades. This shows that as much of a study as the producers make of the requirements, their calculations have not become a science.

EIGHT dwellings have been contracted for by the Rainy Lake Lumber Company, at Rat Portage, Ont., to be built for the use of the company's employes. The company is about to build a planing mill on the north side of Laurenson's creek, at that place. The building will be 48x85 feet to be finished before spring.

We learn, says the *Northwestern Lumberman*, that the "paper lumber" floor recently laid in a skating rink, in Indianapolis, Ind., proved unsatisfactory, and has been replaced with hardwood. Manufacturers of "paper lumber" and "straw lumber" have been very active in crowding their products into uses for which they are not at all adapted.

**FOR SALE!**  
**Steam Saw Mill,**

complete with shingle and planing machines, all in first-class working order, will cut 50,000 feet a day. Engines are large and almost new. Will be sold cheap. For further particulars apply to

**Colquhoun, Drummond & Co.**  
45 Common Street, MONTREAL,  
Dealers in new and second-hand Boilers, Engines and machinery.  
N. B.—All boilers tested to full Government Test.



**Notice to Contractors.**

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Timber," will be received at this office until Monday, the 17th day of November, next, inclusively, for the supply of timber required in connection with the dredging plant of the Department, according to a specification to be seen at the Department of Public Works, Ottawa, where printed forms of tender may be seen.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honorable the Minister of Public Works, for the sum of \$160, (one hundred and sixty dollars), which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,  
**F. H. ENNIS,** Secretary.  
Department of Public Works,  
Ottawa, 28th Oct., 1884. 34108Seed122



**NORMAN'S**  
**Electric Belt Institution,**  
(ESTABLISHED 1874),  
4 QUEEN STREET EAST, TORONTO.

Nervous Debility, Rheumatism, Lame Back, Neuralgia, Paralysis and all Liver and Chest Complaints immediately relieved and permanently cured by using these BELTS, BANDS, AND INSOLAS.  
Circulars and Consultation FREE.

A FEW SIMPLE TESTIMONIALS THAT SPEAK FOR THEMSELVES.

OTTAWA, September 3rd, 1883.  
A NORMAN, Esq.—Dear Sir,—I have experienced considerable benefit from your appliances. I feel stronger and better every day.  
Yours truly,  
R. E. HALIBURTON.

PETERBOROUGH, October 15, 1883.  
A NORMAN.—Dear Sir,—Soon after I commenced to use your Electric Appliances, they opened my bowels, cured my cough and cold, relieved my head and considerably relieved my catarrh in consequence. The discharge from my head and chest are now easy, and I feel altogether better. My digestion has improved, my stomach less sour and windy, and I am less troubled with lascivious and vivid dreams. I had previously tried almost all the advertised patent medicines without deriving any good.  
Yours truly,  
J. GREEN.

CURATIVE BATHS, Electric, Vapor, Sulphur and hot and cold Baths. Baths have been admitted in all ages by every school of medicine, to be one of the best means of curing ailments, maladies and diseases. The Electric Bath is the latest and best discovery in this line. Come and try them, at  
4 Queen St. East Toronto.  
A. NORMAN, Proprietor.

**GOLD** for the working class. Send 10 cents for postage, and we will mail you free, a royal, valuable box of temple goods that will put you in the way of making more money in a few days than you ever thought possible at any business. Capital not required. We will start you. You can work all the time or in spare time only. The work is universally adapted to both sexes, young and old. You can easily earn from 50 cents to \$7 every evening. That all who want work may test the business, we make this unparalleled offer; to all who are not well satisfied we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Fortunes will be made by those who give their whole time to the work. Great success absolutely sure. Don't delay. Start now. Address **STANSON & Co., Augusta, Maine.**

**National Manufacturing Co.**

160 Sparks Street,  
**OTTAWA, ONT.**

**STILL RETAINS THE LEAD**

Have been awarded every Medal ever offered at Exhibitions in Canada for our Lines of Goods, notwithstanding the misleading advertisements of unscrupulous firms claiming awards, medals, &c., which they have never received. See letter from H. J. HILL, Esq., Secretary Toronto Industrial Exhibition Association, below. This year at Toronto, Montreal and Ottawa Exhibitions, we have been awarded

**10—MEDALS—10**

—FOR—

**TENTS, MARQUEES,**

*And CAMP FURNITURE.*



**Lumbermen, Contractors and Surveyors**

*And other large buyers, offered Special Inducements.*

New Illustrated and Descriptive Catalogue mailed on application.



OUR LINES OF  
Tents, Flags, Tarpaulins and  
Camp Furniture, Shanty and  
Horse Blankets

Are without Doubt the BEST and  
CHEAPEST in the Market.

**National Manufacturing Co. 160 Sparks St. Ottawa**  
**P. O. BOX 345.**

OFFICE OF THE INDUSTRIAL EXHIBITION ASSOCIATION,  
TORONTO, MARCH 10, 1884.

The National Manufacturing Co's, Ottawa:  
GENTLEMEN,—In reply to your enquiry, I beg to say that the highest awards made at the Industrial Exhibition for the years 1881, 1882, and 1883, for Tents, Marquees and Flags, were to your Company, being a Silver Medal for each year. Last year, 1883, was the first in which a medal was specially offered for Camp Furniture and Equipages, and it was awarded to the National Manufacturing Co's, of Ottawa.

I am, your respectfully,  
**H. J. HILL, Manager and Secretary,**

Market Reports.

TORONTO.

From Our Own Correspondent.

Dec. 9.—The retail trade is extremely quiet at present, and will no doubt remain so during the winter months, although the building season has been prolonged much later than could be reasonably expected.

The stocks on hand at the yards are fully up to those of last year, although it is difficult to furnish any large bills of dimension stuff. Nearly all mills are shut down and no snow as yet for log hauling, so that holders of small lots of scantling and joisting, more especially 18 feet and over, hold prices stiff, indeed most of the wholesalers feel that there is no necessity for making any sacrifices.

In my next letter with which I close my years correspondence, I will endeavor to give you the returns of the entire year's receipts, as near at least as it is possible to get them.

Table listing lumber prices for various items like Mill cull boards, Shipping cull boards, Scantling and joist, etc., with prices per 1000.

MONTREAL.

From Our Own Correspondent.

Dec. 9.—The season for the demand for lumber may be said to have closed till after the New Year, and merchants are engaged in taking stock and figuring up the result of the year's business, which, as far as building is concerned,

is much below the preceding year. We hear it stated from many quarters that lumbering operations at the shanties will not be so large as last winter, as lumbermen are holding aloof until trade with the United States is in a more prosperous condition, and having the experience that for some years past there has been too much lumber manufactured in this country, which has kept prices down and left very little margin to the manufacturer.

Table listing lumber prices for various items like Pine, 1st quality, Spruce, Ash, Oak, Walnut, etc., with prices per 1000.

SHIPMENTS.

In last report we gave a summary of the total shipments of lumber to South America with comparative figures for previous years, we are now enabled to give the total shipments to the United Kingdom with some comparative figures. We are indebted to Messrs. Anderson, McKenzie & Co., of this city for the following figures: The total shipments of lumber from Montreal to the United Kingdom during the season of 1884 were 191,226,212 Quebec standards, equal to 52,587,205 feet board measure, being an increase of 2,072,827 feet over 1883; 7,619,080 feet over 1882; 37,047,918 feet over 1881; and 32,802,320 feet over 1880.

WINNIPEG.

The Commercial of Dec. 2nd says:—This trade is dead or asleep for the present, and need not be expected to awaken before spring. Nearly all manufacturers have sent their gangs of men out to the logging camps.

CHICAGO.

AT THE DOCKS.

The Northwestern Lumberman of Dec. 6th says:—The market season is over. On Wednesday there were no arrivals, and on Thursday the steam barge M. F. Butters put in an appearance with a cargo of timber specials that were to be delivered on order. Yet within the week ended to-day 80 loads of lumber have arrived in port, but only a small number have been offered on the market.

No vessels are now going out for lumber—or next to none—though the weather this week thus far has been fine for navigation. Everybody connected with the lake transportation of lumber appears to have abandoned the business for the season.

On account of the limited number of offerings and sales on the market the past week, and the fact that there will be no further business of importance at the docks this year, we have dropped cargo quotations and the usual schedule of lake freights.

The commission men are getting their breath after the season's scramble, and appear to feel much relief. They seem to be satisfied with the amount of lumber handled, but complain

slightly of the prices realized. For four months the white wings of peace will hover over the rotting wharf at the market, the pop-corn man will be out of business, the market peeler will have an easy job, and those reports will be absent from our columns. In the meantime the autumn bulls will be developed into spring bears, and the commission men will be converting beefsteak into muscle and nerve that shall enable them to grapple with yard men in the spring.

AT THE YARDS.

Since the restoration of the 10-cent rate to southwestern Missouri river points, there has been a marked falling off in orders. Certain yards are still sending out occasional long trains—but the majority of yards are having a quiet time. Dealers appear to have settled down to the conclusion that the demand throughout the winter until February is to be moderate. Conditions prevail which preclude the possibility of there being a brisk shipping demand for lumber during December, January and the first half of February.

The late settlement of the western passenger rate war will involve a re-adjustment of freight rates. It is announced that the re-adjustment of the lumber rates to Missouri river points has been postponed until December 17.

It is also stated that the trade of this city is to be discriminated against by eastern rates. The summer rates from Grand Rapids, Saginaw and Detroit to New York and Boston are to be retained while the winter rates from Chicago are to prevail. This would give the Michigan shippers a great advantage throughout the winter.

Receipts of lumber, shingles, etc., from Jan. 1st to Dec. 4th as reported from the Lumberman's Exchange:—

Table showing receipts of lumber and shingles for 1884 and 1883, with totals for Lake Receipts from Jan. 1 to Dec. 4.

Table showing stock on hand for Nov. 1, 1884, 1883, and 1882, categorized by lumber and timber, shingles, etc.

Table showing freight rates to eastern points for Chicago to New York, Albany, Boston, Philadelphia, Baltimore, Washington, Buffalo and Pittsburgh, Erie, Pa., and Dunkirk, N. Y.

Table showing cargo lots—Michigan inspection for Three uppers, Common, and Culls.

Table showing cargo lots—Michigan inspection for Three uppers, Common, and Culls.

The Journal of Commerce of Dec. 6th says: The open season so far has helped out some kinds of trade considerably, and there is a moderate call for the supply of current and near wants. Spruce is in rather improved demand, as many of the mills are shut down and

the yards are stocking up for winter. Dry white pine of the better grades is quite firm and in pretty good demand. Yellow pine continues very quiet, even the call for flooring being cut into by maple and birch. For hardwoods there is a moderate inquiry, at about previous prices.

Table listing prices for select, dressed, shelling, dressed, 1st, 2nd, dressed shippers, dressed box, and sheathing, 1st quality, 2nd.

ALBANY.

Quotations at the yards are as follows:—

Large table listing various lumber products and their prices, including Pine, Spruce, Hemlock, Black walnut, etc.

OSWEGO, N.Y.

From Our Own Correspondent

Table showing receipts of lumber and shingles for 1884 and 1883, with totals for Lake Receipts from Jan. 1 to Dec. 4.

Table showing stock on hand for Nov. 1, 1884, 1883, and 1882, categorized by lumber and timber, shingles, etc.

Table showing freight rates to eastern points for Chicago to New York, Albany, Boston, Philadelphia, Baltimore, Washington, Buffalo and Pittsburgh, Erie, Pa., and Dunkirk, N. Y.

Table showing cargo lots—Michigan inspection for Three uppers, Common, and Culls.

Table showing cargo lots—Michigan inspection for Three uppers, Common, and Culls.

The Timber Trades Journal says:—The list of arrivals are this week very much in excess of any previous week for some time past. The overdue fleet will now all, or nearly all, have arrived, and what may now come to hand will be of very small extent and importance. The total amount of imports for the season, as will be seen on reference to the returns of last week are a very long way behind the corresponding period of last year, about 40,000 loads short. These figures, combined with the almost alarming amount of decrease in the returns of the North-Eastern Railway Company for the past few months, are a fair evidence of the paralysis of trade in this district during 1884. So far there are little or no signs of improvement, although a better tone and prospect appear to animate most people engaged in the shipbuilding trade. In housebuilding operations are over for the season, and a large number of hands are out of



work. The quantity of unemployed men on the river is very large, and although large amounts are being subscribed, and great efforts made to cope with the distress, the amount of poverty and consequent suffering, more especially among women and children, is still very great.

LONDON.

The *Timber Trades Journal* of Nov. 29th says:—There was a good muster of the trade in the saleroom on Wednesday, and the well-filled benches did not convey the impression that business was flat. Messrs. Churchill & Sim seem to retain the ability to bring big gatherings to their sales, and most of the representatives of those firms that make the public sales their chief medium of supply were present. That prices were any better than on previous occasions, it would be difficult to decide, but as far as we could discern from the result we should pronounce things about stationary.

The pine lots submitted ex Lillie Souillard undoubtedly sold well, not so much in respect to the broad stuff as with the oddments; these latter, 3x7 to 10, with a big proportion of the batten sizes at £21 to £22 5s. were not so very cheap to the purchaser. The broads naturally fetched the top figures, but £27 10s. for a little lot of 66 pieces was decidedly cheap.

The scarcity of Quebec 1st bright boards ensures the few parcels that are now and again come in the sales plenty of competition, with a satisfactory result to the seller. In this instance, however, the price realized reads low, but we understand the goods did not represent the leading shipments.

AUSTRALIA.

Messrs. Lord & Hughes' monthly circular, dated at Melbourne on Oct 22nd, says:

Since our last on 20th ult., we have to report the usual public sales which have resulted in a small decline on Baltic flooring, while Baltic deals have maintained about the same rates as in our last advice.

In consequence of the demoralized state of the Adelaide market, nearly all cargoes destined for that port are being sent here for sale, and this has had an unfortunate effect on our market.

Oregon lumber has advanced, and the cargo of the *Hesper* sold yesterday at auction averaged about £7, the trade being bare of stock. The Republic has just arrived. American shelving and clear pine fully maintain late rates.

Trade from the yards continues active, and sales large, with no prospect at present of falling off, the demand for building being still as large as ever.

**RED DEALS.**—Imports: 1,271 standard from the Baltic, and 8,292 pieces. The arrivals have been—Glencairn, from Sundswall; Forto, from Gefse; Carl Pihl, from Christiansand; Adelaide, Claud Hamilton and Victorian, from Adelaide. On 10th inst. the cargo ex Forto was sold at auction, N A S, 11x4, realizing 5½d., 11x3, 5 13-16d. and 5½d.; 9x4, 5½d., 9x3, 5½d. to 4½d. \* \* \* 11x3, 3 13-16d. to 3½d., 9x3, 3½d. to 3½d.; and yesterday the cargo ex Glencairn was offered, when about 10,000 pieces were sold, S Crown B, 11x4, realizing 6 5-16d., 9x3, 5 5-16d. to 5 1-16d., 11x3, 5½d., 9x3, 5½d. to 5 1-16d., S A B, 9x4, 3½d., 11x3, 4d., 9x3 4½d. to 3 1-16d. Other sales have been ex steamers from Adelaide, a great portion of which has been on account and risk of former purchasers.

**SPRUCE DEALS.**—Imports: Nil. There have been no sales by auction since our last report.

**OREGON TIMBER.**—Imports: 1,571,005 feet super. The arrivals have been *Hesper* and Republic, from Puget Sound. The cargo ex *Hesper* was sold by auction yesterday, at prices ranging from £7 7s. 6d. to £6 15s.

**LUMBER.**—Imports: Clear pine, 61,024 feet super; white pine shelving, 131,375 feet super; T. and G. ceiling, 27,754 feet super. These lines arrived per *Oncida*, from New York, and have not yet been advertised for sale. Public sales have been made ex Furness Abbey, Sarnar, and Ferdinand; shelving maintaining last month's rates, and clear pine showing an advance.

**REDWOOD.**—Imports: 100,000 feet super. This parcel arrived per steamer from Adelaide. There have been no sales at auction of this

timber, which is but seldom inquired for. **FLOORING AND WEATHERBOARDS.**—Imports: 2,682,774 feet lineal. The arrivals have been Magne, from Frederickstadt; A. T. Stallknecht, from Montrose; North American, Harbinger, Loch Rannock, and Loch Etive, from Great Britain; and Adelaide, from Adelaide. Sales by auction have been heavy and prices lower, being cargoes ex Bygde, Lotos, Winefred. Stallknecht, portion ex City of Agra, balances ex Leviathan, Hertha, and Hans Gade, and small parcels ex North American, at following prices, viz.:—Red, 6x1½, 10s. 6d. to 9s.; 6x¾, 7s. 9d. to 7s.; 6x¾, 6s. 3d. to 5s.; 6x¾, 4s. 7d. to 4s.; 4-out weatherboards, 6s. to 5s. 6d. White, 6x1½, 8s. 3d. to 8s.; 6x¾, 7s. 3d. to 7s.; 6x¾, 5s. 3d. to 5s.; 6x¾, 4s. 5d. to 4s. 2d.; 4-out weatherboards, 5s. 9d. to 5s. 6d.

**KAURI PINE.**—Imports: 805,005 feet super. The arrivals have been—Nora and Grassmere, from Kaipara, and Laira, from Hokiang. Both these cargoes have been sold by auction, in addition to that ex Sarah Ann, which arrived last month, hewn logs realizing 16s. 6d. to 14s. 3d.

**CEDAR.**—Imports: 189,332 feet super. The arrivals have been—May Newton, from Ballina, and usual coasting steamers. Sales have been made at auction in most cases almost as soon as landed.

**DOORS.**—Imports: Nil. The only sales by auction have been of 2 ft. 8 in. x 6 ft. 8 in., d. m., clear pine doors (Colonial), at 17s. 6d. each.

**LATHS AND PICKETS.**—Imports: Laths, 7-140 bundles; pickets, 5,716 bundles. A great portion of these arrived to the order of the trade. Prices realized at auction show a decline on previous sales.

**SLATES.**—Imports: 281,991. The arrivals have been—Houghton Tower, from Liverpool; and *Oncida*, from New York. There have been no public transactions during the past four weeks.

**PLASTER.**—Imports: Nil. No business has been done at auction since our last advice.

**CEMENT.**—Imports: 4,840 barrels. Though a fair demand continues, yet, in consequence of continued heavy arrivals, along with full stocks at present held, there is no improvement to report, and sales cannot be made at last month's prices. Prices for best brands range from 13s. to 12s. 6d.

**GALVANIZED IRON.**—Imports: 1,197 tons. There is but little change to be noted since our last report. Prices range from £21 to £19 for best brands.

**EXPLANATION.**—Red deals and spruce deals are sold at per foot of 9x3; T. and G. flooring at per 100 feet running; Oregon timber, redwood, clear pine, shelving, ceiling, per 1,000 feet super; kauri pine and cedar logs at per 100 feet super; laths, pickets, and slates at per 1,000 pieces.

Death of a Lumber King.

The following despatch was received on Dec. 9th from Detroit:—Thompson Smith, owner of all the property at Duncan City, died to-day at Cheboygan. He was owner of immense tracts of land, much vessel property, some of the most extensive saw mills in the State, and was in fact one of the lumber kings of Michigan. He also had lumber yards at Albany, N. Y., and Toronto, Ont. His wealth is estimated between \$3,000,000 and \$4,000,000. He leaves a son and a daughter.

It's no nostrum. We speak of Dr. Pierce's Extract of Smart-Weed, composed of best French Brandy, Smart-Weed, Jamaica Ginger and Camphor Water. It cures cholera morbus, colic or cramps in the stomach, diarrhoea, dysentery or blood flux, and breaks up colds, fevers and inflammatory attacks.

THE **Cooks' Favorite** BAKING POWDER.

DOMINION SILVER MEDAL At Ottawa Exhibition, 1884. It is the most economic and the best in use. Perfectly Pure. 120-17

# MONTREAL SAW WORKS

CHAS. M. WHELLAW, *Manager.* MONTREAL A. I.

OFFICE: 452 St. Paul Street. P. O. Box, 1167.

—MANUFACTURERS OF—

CIRCULAR, GANG, SHINGLE, CONCAVE GROOVING,

TOP, DRAG, CROSS-CUT AND BILLET WEB, PIT,

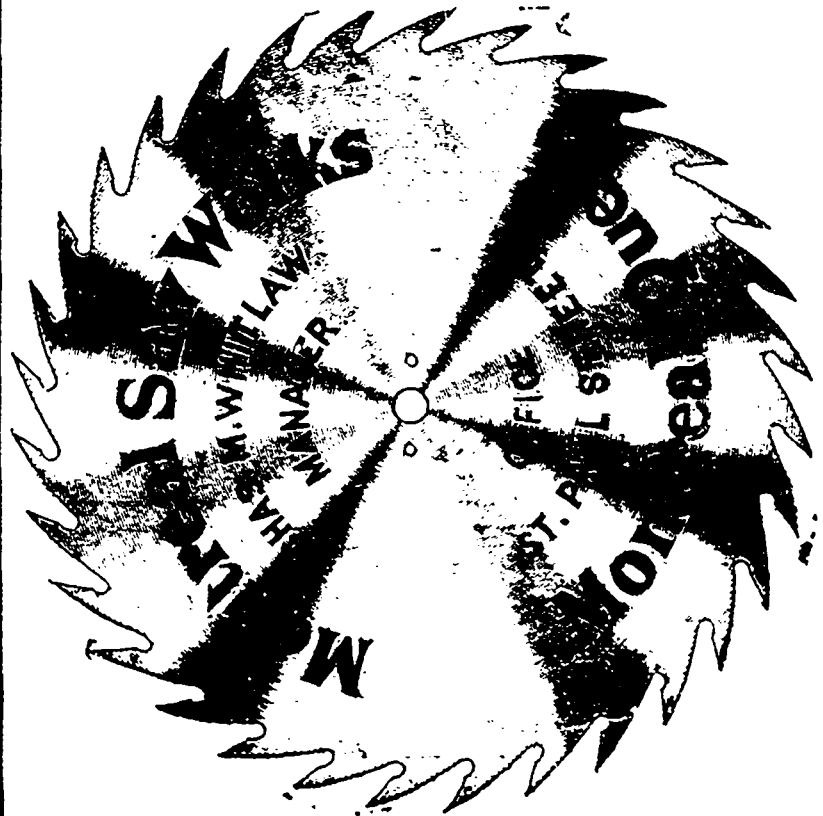
ICE, AND ONE MAN CROSS-CUT SAWS,

—AND DEALERS IN—

BAND SAWS, BARREL AND HEADING SAWS, EMERY

WHEELS, GUMMERS AND CUTTERS FILES,

RUBBER & LEATHER BELTING, SWAGES, SAW SETS.



Catalogues and Price Lists furnished on application.



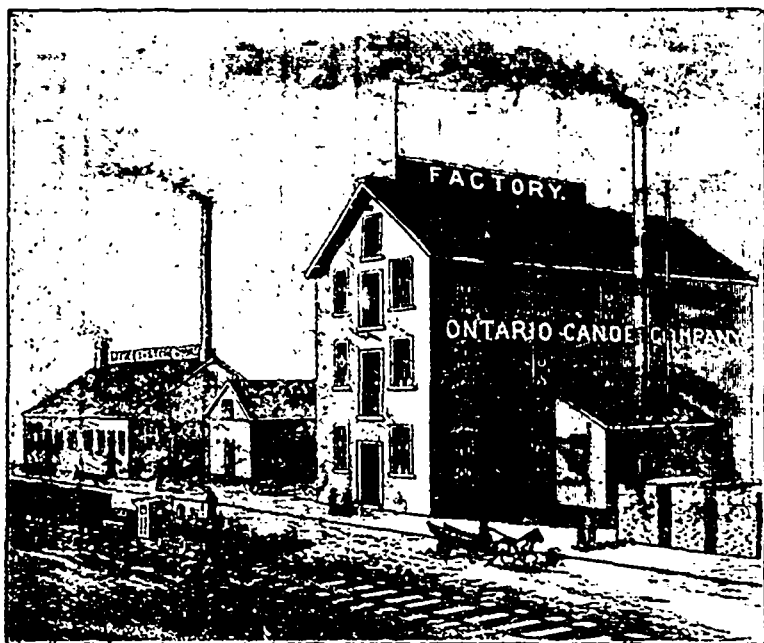
# The Ontario Canoe Co., Limited

PETERBOROUGH, ONTARIO,

Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

## CANOEES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Basswood Canoes, Folding Canoes, Paddles, Oars, Tents, and all Canoe Fittings.



Gold Medal, London Fisheries Exhibition, 1883.

J. Z. ROGERS,

Send 3 cent Stamp for Illustrated Catalogue. President and Managing Director  
Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

A GOLD MEDAL awarded at the Ottawa Exhibition, 1884, for Fine Display

—OF—  
**LEATHER Belting.**



SILVER MEDAL at Montreal, 1884

SILVER MEDAL at St. John, N.B., 1883.

Silver Medal, Montreal, 1882.

Factory and Warerooms:—2518, 2520 and 2522, Notre Dame Street.

**MONTREAL, QUE.**

**H. WILLIAMS,**

**SLATE & GRAVEL ROOFER**

MANUFACTURER OF AND DEALER IN

Tarred Felt, Roofing Pitch, Sheathing and Building Papers, Carpet and Rosined Waterproof Paper, Ready Roofing, &c. All orders promptly attended to at LOW PRICES.

H. WILLIAMS,

4 Adelaide Street East, Toronto

# THE INTERNATIONAL TENT & AWNING CO.

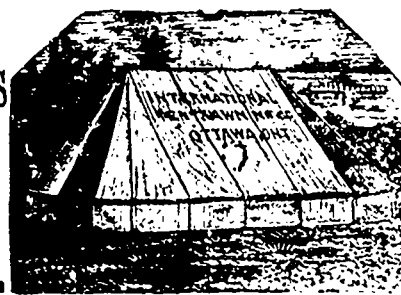
184 Sparks Street, Ottawa.

MANUFACTURERS OF

## LUMBERMEN'S TENTS

The Cheapest and Best in the Market!

32  
First Prizes  
AND  
6  
MEDALS.



AT  
**HALIFAX**  
AND  
**TORONTO,**  
1883.

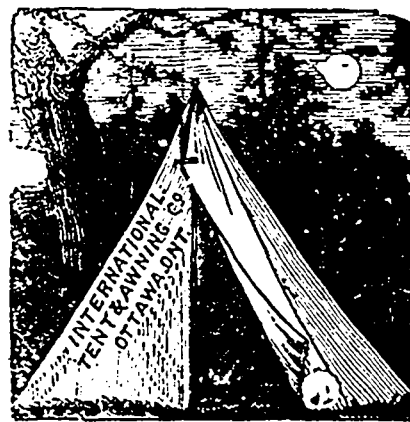
Tents, Flags, Tarpaulins, Waterproof Goods, Camp Furniture, etc., etc.

Estimates for Circus Tents, Range Marquees, Hand-made Sails, etc., furnished on application. Liberal Discount to Large Buyers.

## PORTABLE CANVAS BOATS MADE TO ORDER

Send for CATALOGUE

AND  
PRICE LIST.



Camp Furniture!

SEE OUR NOVELTIES

At Toronto, Ont., and St. John, N.B., we made the best Display of Tents ever shown in Canada—and we never substitute an article inferior to sample in filling orders.

We control "THE LATOUR PAT." for Camp Furniture, the best on earth. The only Gold Medal ever given for this class of goods was awarded to the Latour Camp Furniture at Toronto in 1882.

## SAIL-MAKING.

We have secured the services of the best practical sail-maker in Canada. Orders in this line will receive prompt and satisfactory attention, as is usual with all orders entrusted to us.

Agency for the WILDERMUTH BED SPRING, the best in the Market.

A. G. FORGIE, MANAGER,

**International Tent & Awning Co.,**

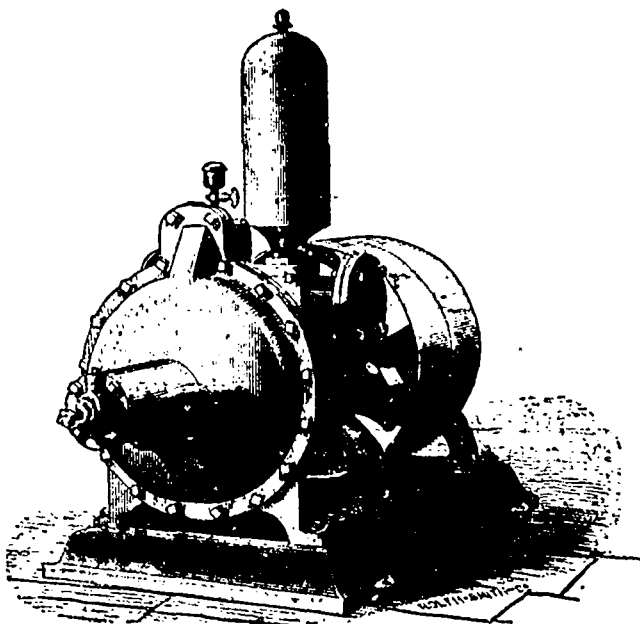
184 SPARKS STREET, OTTAWA.

# Central Iron Works

SIMCOE STREET

PETERBOROUGH, Ontario.

WM. H. LAW, PROP'R.



## PROTECTION FROM FIRE

An Improved Rotary Piston Force Pump.

No.	Diameter of Pipes.		No. of Revolutions.	Capacity per minute at table speed.	Price.
	Suction.	Discharge.			
2	2½ in.	2 inch.	250	125	\$1.00
3	4 "	3 "	250	250	150
4	5 "	4 "	250	400	225

SEND FOR CIRCULAR.

MANUFACTURER OF

Engines, Boilers, Pumps, Saw Mill Machinery

STEAMBOAT PROPELLERS AND ENGINES.

# CASTINGS

For Architectural Works &c.

# IRON ROOFING AND BRIDGES,

AND ENGINEERING WORK IN GENERAL.



Something New in Leather Belting

To Mill Owners, Lumbermen, Manufacturers

USE ONLY

## Dixon's Patent Lap Joint Star Rivet Leather Belting

To be had only from

F. E. DIXON & Co., 70 King Street East, Toronto

Send for Circulars and Price Lists.



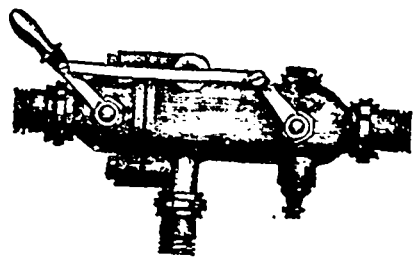
## ROBERT MITCHELL & CO.

Montreal Brass Works,

St. Peter and Craig Streets, Montreal.

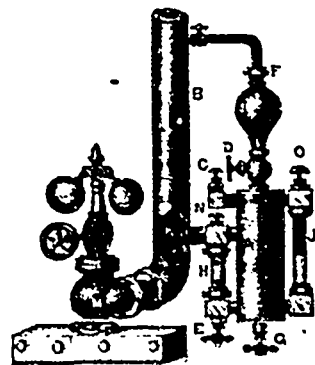
### THE KORTING INJECTOR

Acknowledged to be the Best Boiler Feeder in the World.



Will fit 20 feet, and take water at 150 degrees. Only one handle to start and stop. No valve to regulate. CHEAPER than any other injector in the market. Also, PATENT EJECTORS for conveying Water or Liquids. CIRCULARS ON APPLICATION

The Continuous Feed Lubricator Saves 50 per Cent in Oil.



# The TRADE

Will always find a Large Stock of

All Canadian Woollen and Cotton Goods,

## SHANTY BLANKETS

—AND—

## HORSE BLANKETS

At LOWEST MILL PRICE, at

# JNO. MACDONALD & CO'S

## TORONTO.

Send Sample Order our LINED SHAPED HORSE RUG, a Specialty, highly recommended for wear and warmth.

# NORTHEY & CO'S STEAM PUMPS, TORONTO, ONT

*Pumps for Fire Protection a Specialty.*

## — SAVE INSURANCE. —

*Our Combined Boiler Feed and Fire Pumps are a NECESSITY IN EVERY WELL ORDERED STEAM MILL or FACTORY.*

### Cheap.

*Cheaper than any Pump built.*

*Our Independent AIR PUMPS and Condensers will effect a saving of 30 to 50 per cent. when applied to high pressure Engines.*

### Simple.

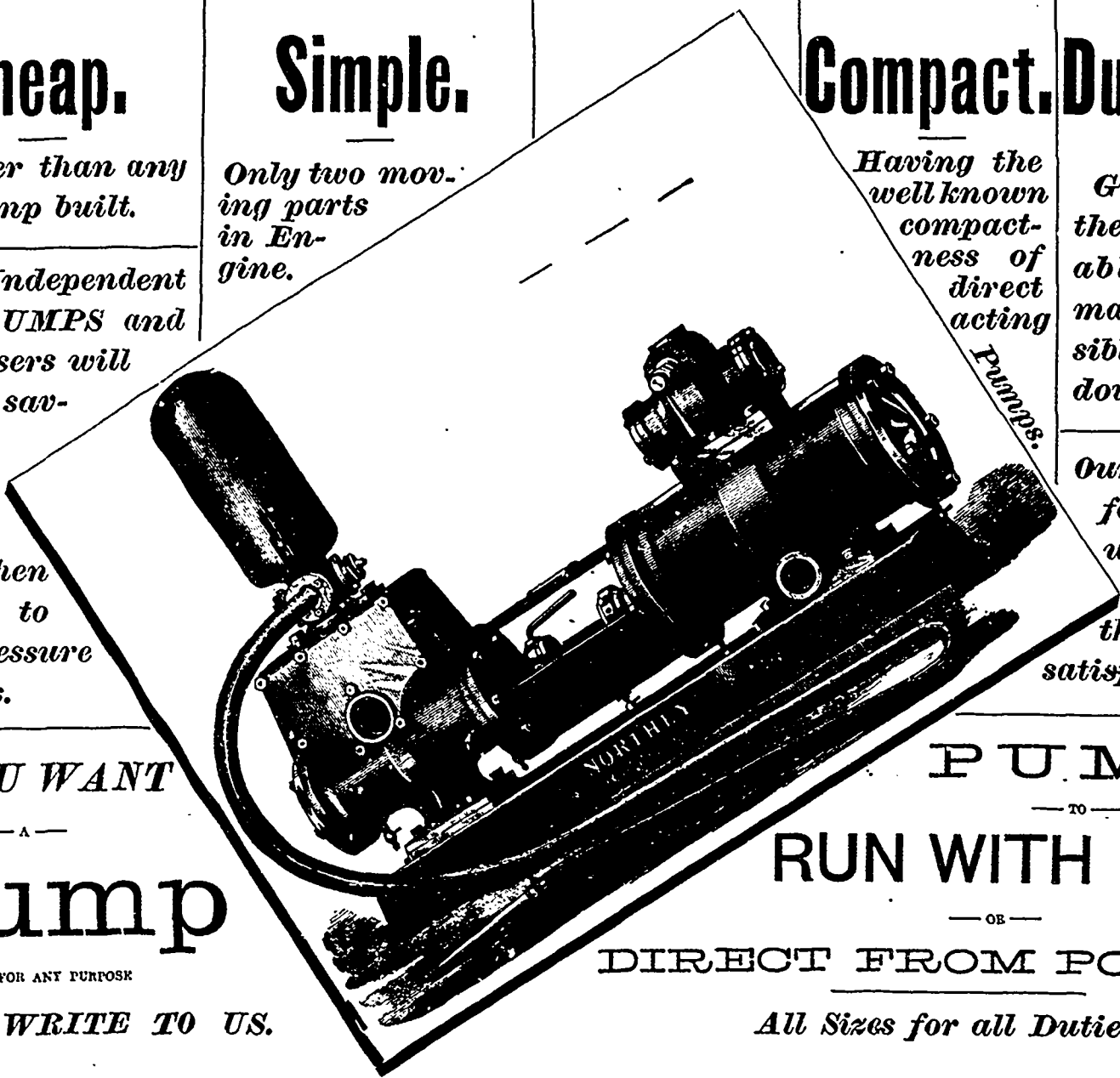
*Only two moving parts in Engine.*

### Compact. Durable.

*Having the well known compactness of direct acting Pumps.*

*Guaranteed the most durable Pump made; impossible to break down.*

*Our PUMPS for general water supply give the greatest satisfaction.*



IF YOU WANT

**Pump**

FOR ANY PURPOSE

WRITE TO US.

PUMPS

— TO —

RUN WITH BELT

— OR —

DIRECT FROM POWER

*All Sizes for all Duties.*

*Our make of Pump is specially adapted to Mills in out of the way places, as they can be absolutely relied on, and occasion no vexatious stoppages for repairs.*

WE INVITE CORRESPONDENCE ON ANY POINT CONNECTED WITH PUMPS.

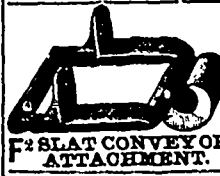
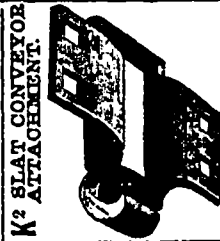
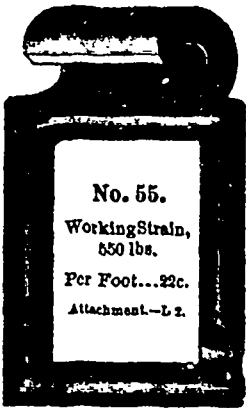
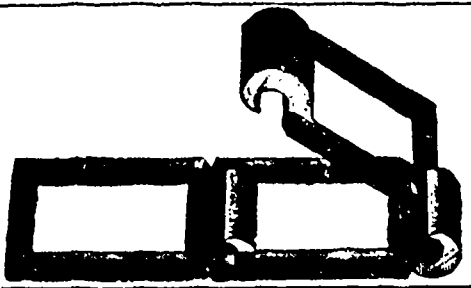
SEND FOR CIRCULAR AND STATE YOUR REQUIREMENTS.

# NORTHEY & COMPANY,

Corner FRONT & PARLIAMENT STS.,

TORONTO, ONT.

**EWART'S PATENT LINK BELTING** For CONVEYING, ELEVATING, and TRANSFERRING every Product of a Saw Mill, into, through and out of the mill.



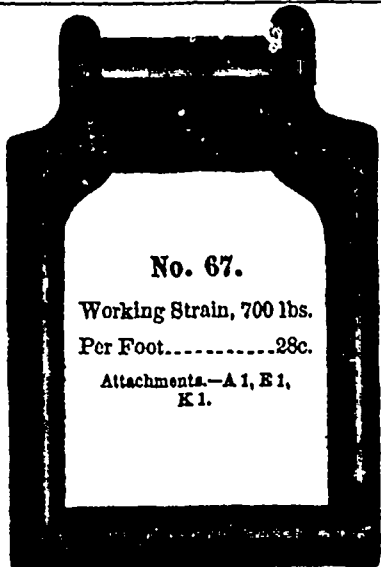
No. 55.

Working Strain, 650 lbs.  
Per Foot... 22c.  
Attachment—L 2.

K<sup>2</sup> SLAT CONVEYOR ATTACHMENT.

F<sup>2</sup> SLAT CONVEYOR ATTACHMENT.

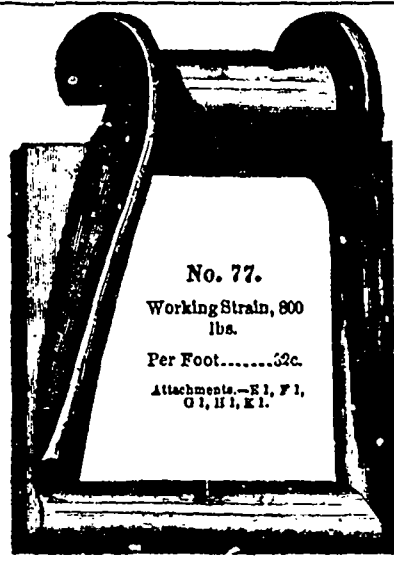
No. 45—16 cents per foot and 55 used for light Sawdust Conveyors.



No. 67.

Working Strain, 700 lbs.  
Per Foot.....28c.  
Attachments.—A 1, E 1, K 1.

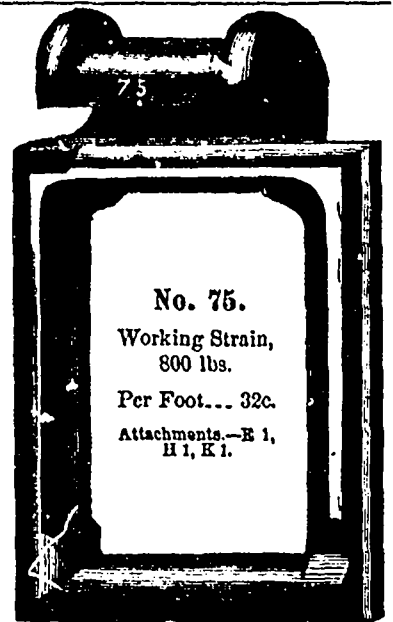
No. 67—MEDIUM SAWDUST CONVEYOR CHAIN.



No. 77.

Working Strain, 800 lbs.  
Per Foot.....22c.  
Attachments.—E 1, F 1, G 1, H 1, K 1.

No. 77—CONVEYOR AND LIVE ROLL CHAIN.



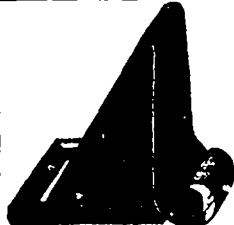
No. 75.

Working Strain, 800 lbs.  
Per Foot... 32c.  
Attachments.—E 1, H 1, K 1.

No. 75—LIVE ROLL AND DOUBLE STRAND ELEVATORS.

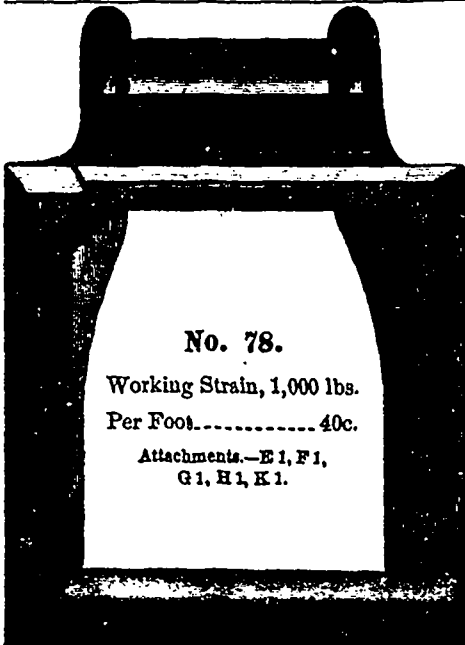


H<sup>1</sup> TRANSFER ATTACHMENT.



H<sup>4</sup> TIE & POLE LOADING ATTACHMENT.

**GIANT CHAIN** for Log Haulups  
And Main Refuse Conveyors for Large Mills.

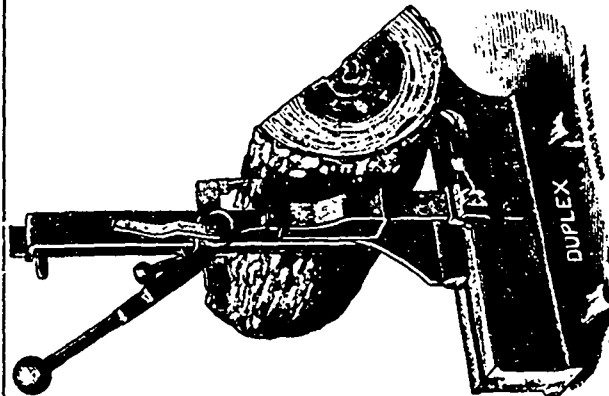


No. 78.

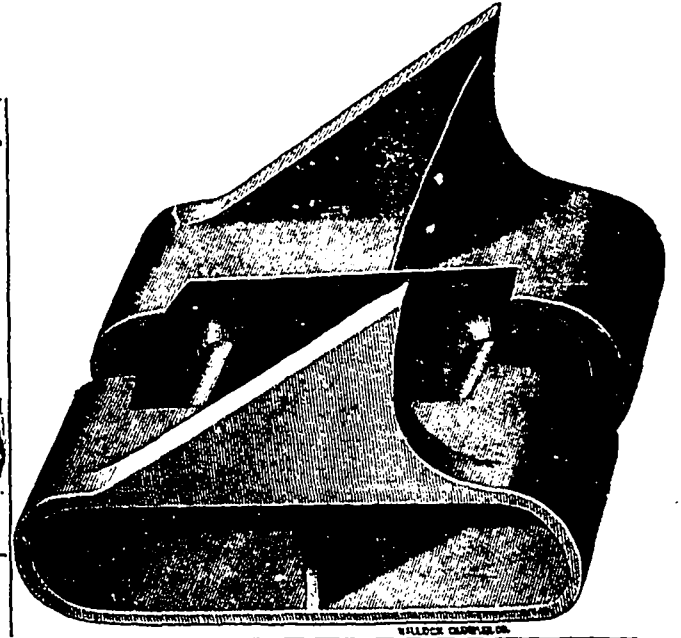
Working Strain, 1,000 lbs.  
Per Foot..... 40c.  
Attachments.—E 1, F 1, G 1, H 1, K 1.

No. 78 & 88—HEAVY TRANSFER AND LIVE ROLL CHAIN.

**KNIGHT'S PATENT SAW MILL DOG.**

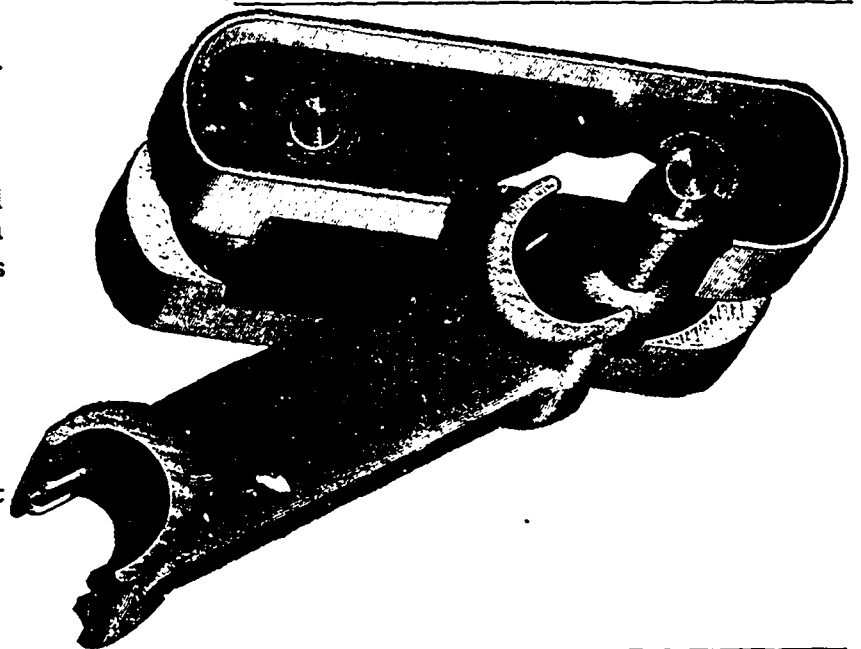


One of the Best Log and Board Dogs made.



**LOG TOOTH.**

No strain or wear on Rivets. Easily Repaired if broken all links being Inter-change-able. Special Prices for Giant Chain during next 60 Days.



**EWART'S PATENT DRIVE CHAIN.**

For Conveying and Elevating, Combines all the advantages of Bolting and Gearing. Using Sprocket Wheels for ordinary uses, and Friction Wheels for Fast Speed. Specially adapted to a hundred uses in Saw Mills, Tanneries, Chemical Works, Paper Mills, &c., &c.

Number 85 is Conveyor for sawdust for Mills cutting 25 to 50,000 per day, heavy work; also for Tan Bark and Refuse Carriers. Price, 50 cents per foot, including special links every fifteen to eighteen inches. Wheels, Shafts, &c., extra.

Number 103 is a shorter, heavier link used in the same manner for Sawdust, Refuse, Edgings, Slash Tables and all heavy work about a sawmill. **EWART'S CHAIN** makes the Cheapest and Best Conveyor in the World.

Send for Illustrated Circular, address

**THE WATEROUS ENGINE WORKS CO., BRANTFORD, CANADA,**  
Sole Manufacturers and Proprietors of Canadian Patent.

**Waterous Engine Works Co'y,**  
**BRANTFORD, CANADA.** Send for Catalogue.

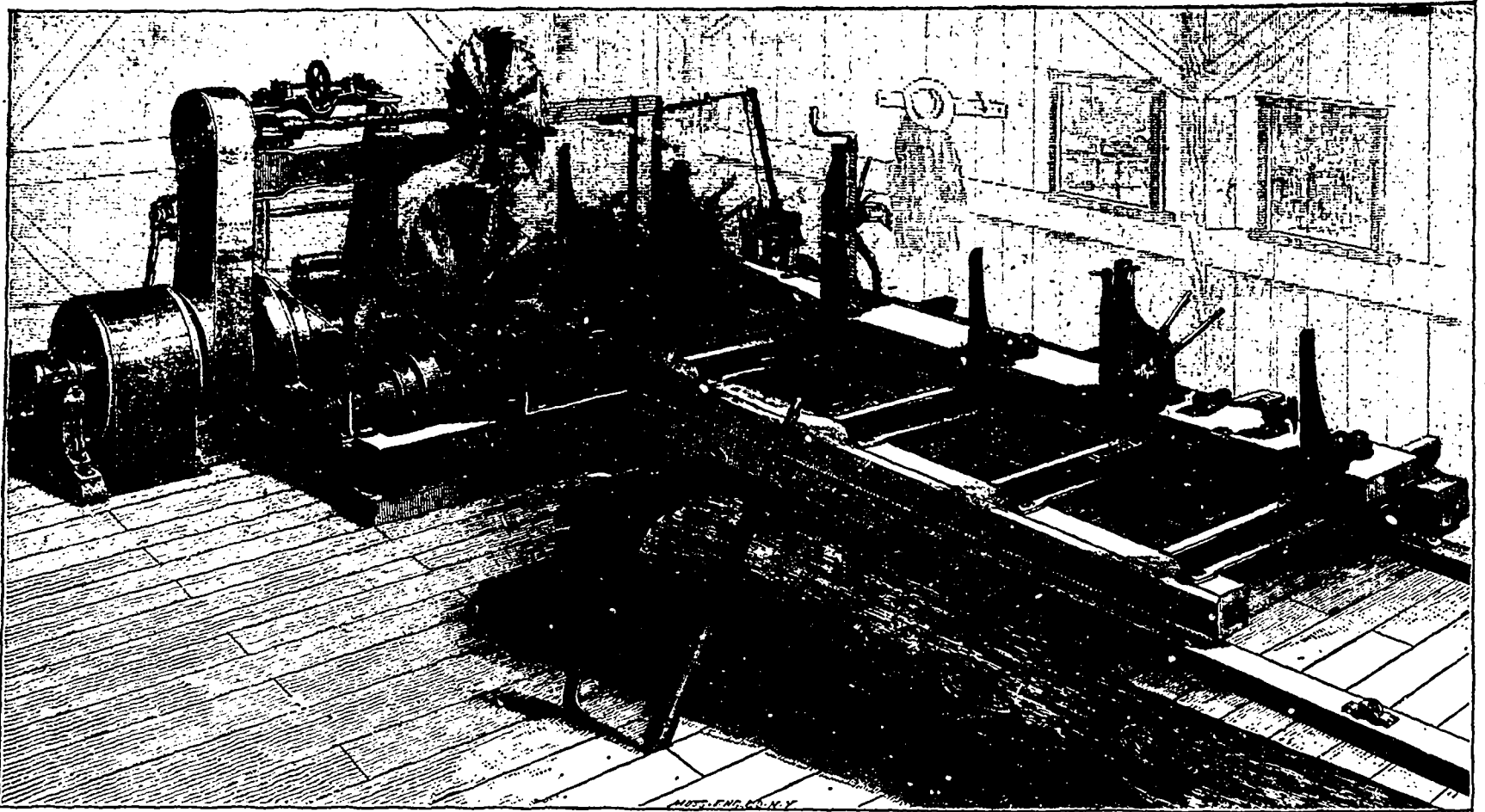


# **THE LANE MANUFACTURING COMPANY!**

**MONTPELIER, VERMONT,**

MANUFACTURERS OF LANE'S CELEBRATED

## **CIRCULAR - SAW - MILLS**



**Circular Saw Mills,  
Saw Mill Set Works,  
Double and Single Traveling Bed  
Planers, Shingle Bolters,  
Bed Timber Planers,**

**Clapboard Machines,  
Clapboard Planers,  
Stationery Bed or Roll Feed  
Planers,  
Drag Saw Rigs,**

**Shingle Machines,  
Lath Machines,  
Double and Single Power Feed  
Edgers,  
Mill Supplies, Etc., Etc.**

FOR DESCRIPTIVE CIRCULARS AND PRICE LISTS, ADDRESS:

**LANE MANUFACTURING CO'Y, MONTPELIER, VT.**