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THE CANADIAN LUMBERMAN



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The Hon. J. G. Joly has a large plantation of young walnut trees at Lotbiniere, Que., and he has sent to Sarnia for more walnuts to plant. His example is a good one.

SIR A. J. SMITH'S mill, on the Petite-die River, was burned on Friday night, 20th of September. The origin of the fire is unknown. The mill was shut down that afternoon at three o'clock. Mr. Early Kay, the manager, left the mill premises at 5 p.m., at which time all was straight, and there was no sign of any fire in the vicinity then. Besides the destruction of the mill, valued at over \$2,000, there were over 300,000 feet of sawed lumber burned; also a portion of a bridge across the stream near the mill. The loss is estimated at \$3,000. Insurance, about \$1,000. Mr. Kay has taken steps towards rebuilding the mill at once.

The *Timber Trades Journal*, of Sept. 17, says:—Liverpool was as remarkable for its bare supplies of timber during the first week of this month as London for its superabundance. Only 24 ships with wood were reported in the former, and of these 15 were steamers, mostly with only part cargoes, and some with a very small part, too, such as 3,000 staves, or 400 or 500 planks (30 or 40 loads, perhaps). On the other hand London imported 94 complete cargoes by sailers, besides 42 by steamships, some of them full cargoes from the Baltic. Yet prices at Liverpool are not improving, and the stock is heavier than it was at this time last week, while that of London is only about three-fifths of what it was then.

A. C. Danner & Co., Mobile, Ala., shipped by *Lady Dufferin* for Liverpool, a while since, a cargo, consisting of 1,250,000 feet of lumber, deals and hewed timber. The first direct shipment to Europe from this port was made several years ago by H. C. Vaughan, at present the superintendent of the mill of the firm named above, and consisted of hewed timber. This firm averages a cut of 800,000 feet monthly, and ships about 600,000 feet. The timber is brought to their mills from a radius of nearly 120 miles, and floated down the Dog and Pascagoula rivers, Mississippi, and several creeks. As it has to be brought many miles above the reach of the water, considerable difficulty is anticipated in the future floating of rafts, which even now can only be done in a certain season of the year. As the timber men go more inland to cut, the work of bringing the logs to the rivers and creeks becomes more arduous and expensive. Tramways are much needed which would carry the logs to tidewater, and thus afford a continuous and uninterrupted supply of material to the mills. There are at present ten mills in operation on the Dog and Pascagoula rivers. The timber is of fine quality and commands the highest price in the European markets.

SOME IRISH SAW MILLS.

Having a few hours' time to kill, while waiting for the homeward bound steamer at Londonderry, Ireland, the writer thought he could not employ them better than in a run through the saw mills, etc., which he noticed along the coast, as he passed up them on the deck of the steamer, which had brought him thither from Glasgow. Although a very different thing from those of Canada, the saw mills to be seen at Londonderry are neither few nor without interest to a Canadian. They are, in fact, mills which take up the lumber, as turned out of our eastern mills, and fit it for actual use.

Londonderry is the chief point of supply for the North-Western district of Ireland, and imports each season about ten cargoes of deals from St. John, N.B.; three or four from other parts of N.B., and about three from Quebec, besides two or three cargoes of pitch pine. For the conversion of this and such timber as the neighbourhood produces into sizes and thicknesses suitable for the local trade, five saw mills, etc., are employed. We say "etc." because all of these mills do more or less of other wood work in addition to sawing.

While in Canada the first object is to save labour, in Londonderry the first object is to save the precious wood, and that they understand how to do this will be conceded when we state that we saw in the mills of Mr. Balantine a three inch deal cut into six boards, with the loss of only one quarter of an inch of the wood for the five saws which had passed through it,—that is just one-twentieth of an inch for each passage of the saw. In many respects the gates in which the saws are fixed for cutting deals are not unlike one of the ordinary gang gates to be found in any Canadian mill. They are, of course, all driven by steam, and work up and down in a gate, and the saws can be set to any thickness desired, in much the same way as our own. The frames in which they stand are, however, of massive iron, and are all set on the ground with a pit underneath, from whence the sawdust can be easily removed. Most of these gates are made for sawing two pieces of deals, or other small timber, at one time. In the mill of Messrs. Cook & Co. (you see they have "cooks" in the lumber business there as well as in Canada) they have a gate which cuts four pieces at once, for which the "carver" claimed great superiority over all others in use in the district, and which, like all the rest of the machinery in these mills, had been brought across the Channel,—this particular one coming from the establishment of Thos. H. Allen, Jefferstone, near Glasgow, while the others came from the works of T. Robinson & Son, Rochdale. Besides these "gates," all these mills had one or more ordinary circulars, for cutting up our square timber and the wood brought in from the surrounding country. It is a pity one half of the people of Canada cannot

see for themselves the kind of Irish timber the writer saw in these mill yards, and in the course of manufacture. Nine-tenths of our people would consider it almost valueless for fuel, to say nothing of making use of it for manufacturing purposes, and yet here they were twisting and turning it about, and cutting it in this and then in that direction, until the refuse was almost reduced to nil. Seeing, they say, is believing, and one certainly requires to see for themselves the ingenuity displayed in the Old Country in making the most of a piece of the roughest wood, to appreciate in any degree the immense value which even our most inferior wood possesses under proper manipulation. As in too many other cases, it is to be feared our people will only appreciate the value of our forests when they are gone.

In addition to the sawing appliances found at the Messrs. McClelland's establishment, they were just getting into order, having been burnt out about two months before, an extensive shop for the manufacture of doors, sash, and wood-work generally. Already they had a few machines in operation, among them being what seemed to our unpractised eyes a very superior turning machine. Certainly no machine could do the work allotted to it more expeditiously or more neatly than this one did. They also had a new planing machine, which worked everything perfectly true (at right angles) from an inch up to 18 inches square. These machines, like all the others we saw (with the single exception already noted) were from the establishment of Messrs. Robinson, Rochdale, and were built, if not regardless of cost, certainly regardless of the quantity of iron put into them. In fact, as remarked to us, these machines were built to, and never did, wear out.

Mr. Balantine's is also a large establishment, with several ingenious machines for making mouldings, turning, etc., and the building trade must certainly be, as they said, fairly active in the North-west of Ireland, to give the full employment, which it seemed to be doing, to the establishments of Messrs. McClelland, Balantine and McAlwee. At Mr. Balantine's we came across an old friend from Deseronto, in the shape of some doors from the establishment of H. B. Roth and Son. Mr. Balantine says these doors give entire satisfaction, and that although there is a good deal of prejudice against them, yet they are destined to run the home-made article out of the market if the quality is kept up, and they can continue to be sold at present prices. Upon this latter point, however, he seemed to be rather skeptical, and at the conclusion of a somewhat long conversation as to their merits, he said the only suggestion which he could make for their improvement would be that the panel should not be fitted so tight as it was, as the wood sometimes swelled after they came to hand to such an extent as to make the panel bulge. He attributed the

swelling to their damper climate, and suggested that instead of being fitted tight up in the joints a vacancy of say an eighth of an inch should be left, so as to leave room for swelling. Doubtless the attention of Messrs. Rathbun only requires to be called to this point to ensure a remedy being applied, while we are sure every one will be rejoiced to learn from such a source of the success attending the enterprise of Messrs. Rathbun in sending this class of manufactures across the Atlantic.

THE FUTURE LUMBER SUPPLY.

The *Ottawa Free Press* says that regrets have often been expressed at the wholesale destruction of our pine forests by the lumbermen, but of late years the destruction of vast tracts of valuable timber by fire has led to the belief that it is better the timber should be cut than that it should be worse than wasted by annual conflagrations. In a former article we gave an estimate of the rate at which the forests are disappearing before the woodman's axe to supply the demands of the market, wherein it was shown that ten years was the limit at which the supply in the lumber regions of the North-Western States could be relied upon, while that of Canada could not be expected to last longer.

Should this forecast turn out correct, where are we to look for the future lumber supply of the world? An answer to this question is given in the accounts which reach us from the far west. From the mouth of the Columbia river extending north into British Columbia there are forests capable of supplying the prairies east of the Rocky Mountains with lumber for a great many years to come, and we fancy it is not improbable that, so soon as railway facilities are obtained from the Western Slope to the North-West territories, a great trade will arise. The lumber, coal, fish, etc., of the Pacific coast find it profitable to exchange for the grain and meat of the territories.

The forests of British Columbia have a world wide fame. The timber consists chiefly of pine, with considerable quantities of fir, spruce, cedar, hemlock, and a small supply of white oak, hemlock and maple. The trees of this region show luxuriant growth. The yellow fir frequently attains a height of 250 feet, pine 125 to 160 feet, silver fir, 150 feet; white cedar, 100 feet; white oak, 70 feet; black spruce, 60 feet. Cedars have been found to measure 63 feet in girth, with a height of 120 feet. The pine trees are known to the lumbermen as of two varieties—"sap" and "overgrown." The "sap" trees yield 6,000 to 8,000 feet of lumber, and the "overgrown" 10,000 to 15,000 feet. Of this timber is made all grades of lumber ship timbers, fencing, pickets, railroad ties, barrel staves and headstaves, household furniture, etc.—and the product is shipped in large quantities to the Pacific coast of South America, while trade is done with Australia, France and England,

OUR QUEBEC LETTER.

SCARCITY OF PINE IN THE MARKET—FRW TRANSACTIONS—THE ENQUIRY FOR OAK AND STAVES—THE SHIPMENT OF SQUARE TIMBER BY RAIL—LATEST QUOTATIONS—MINING NOTES.

From Our Own Correspondent.

QUEBEC, Oct. 6.—The past month has been a very uneventful one in the Quebec timber market. There have been but few transactions worthy of reporting, and not much change of prices, though in recent sales the prices of contracts, made a month or six weeks ago, have not been nearly touched.

WHITE PINE.

There is now remaining in first hands but a few small lots of white pine, and these are held by not more than two or three parties. There is still a moderate enquiry, but holders, of course, seek to improve the opportunity, and refuse to sell except at very high prices. Two or three weeks since a raft of white pine in shipping order, with some hardwood, changed hands at 20½ cents, while about the same time red pine of 44 feet, or thereabouts, was sold at 22½ cents. Last week the sales were as follows:—A raft of white pine, one of the choicest of the season, consisting of three-fourths square, 62 feet average, and one-fourth waxy board, 22 inch average, at 37 cents all round; another of 55 feet average, 28 cents. Square white pine, 45 feet average, fair quality, was sold last week for 28 cents. Within the last few days a raft of fair quality, about 52 feet average, has been sold at 26 cents, with half red pine, 38 feet average, at 17½ cents. A raft of white pine, 45 feet average, changed hands this week at 20½ cents.

RED PINE.

Red pines, as may be judged from the prices quoted above for mixed rafts, is not in much demand. Primo wood of large average would, however, command a fair sale. On the other hand a very large raft of poor quality has just been sold at 11 cents.

OAK.

Oak is still held firm with a fair enquiry. Prices have not materially changed since last quotations. Two or three sales have been made for early delivery by first rafts of next season. The figure is said to be about 49 cents.

STAVES.

Staves of all kinds are exceedingly scarce. No change in price is reported.

DEALS.

Deals are scarce and in demand, particularly spruce, which are much wanted. There is said to be little or no change since last sales, which were quoted some time since for spruce at 36, 28 and 22c. for large lots, and 40c., 26c. and 22c. for a small quantity.

FREIGHTS AND SHIPPING.

A few weeks will now end the shipping season here, and then we shall have the annual returns of stocks to winter here, which are certain, however, to be very light. The total number of vessels of all kinds in port to-day is but 35, and there are only a few more to arrive. Transactions in freights during the present week have been as follows:—London, timber 24s.; deals, 62s. 6d. Dublin, timber, 24s. (Grangemouth, timber, 24s. Grimaby, deals, 65s.; timber, 35s.; deals, 80s.

COMPARATIVE STATEMENT.

The following comparative statement of timber, &c., measured and culled at Quebec, up to Oct. 7th, has been received from the Supervisor of Cullers' Office to-day.

	1877.	1882.	1887.
Waxy White Pine.....	1,301,005	2,004,803	2,421,407
White Pine.....	2,503,375	3,874,801	5,455,785
Red Pine.....	741,492	954,831	1,572,004
Oak.....	703,693	1,419,190	2,534,831
Elm.....	318,074	922,530	1,009,410
Ash.....	47,101	236,072	394,039
Basswood.....	280	503	3,570
Butternut.....	70	645	3,001
Tamarac.....	6,601	22,458	24,410
Birch and Maple.....	121,224	661,815	151,742
Masts and Bowsprits... 50 pcs	4 pcs	25 pcs	
Spars.....	26 pcs	27 pcs	
Std. Staves.....	70,900 S	17,400 G	308,720 P
W. I. Staves.....	127,300 I	292,612	335,420 P

SHIPMENT BY RAIL.

The shipment by the C. M. O. & O. Railway, from above Ottawa, of Allan Grant's square timber, is progressing rapidly. Some 600 cars have already arrived, and 500 more are expected. The timber arrives in primo order, and is im-

mediately dumped into a pond alongside the railway track, and there rafted and towed to the coast.

THE APPOINTMENT OF A SUPERVISOR.

The whole trade is very much excited about the vacancy in the Supervisor's Office, and the apparent determination of some few public men to pitchfork into the office some political favorite or hanger on, without the slightest knowledge of the requirements of the trade. Numerous representations, which it is to be hoped may not be overlooked, have been unanimously made by the whole trade to the Government, setting forth the importance and necessity of having a properly qualified Supervisor.

MINING NOTES.

A French engineer, sent out by Parisian capitalists, has just arrived here to investigate the mining value of the gold lands at Beauce, in the possession of the Quebec Mining Co. Should his report prove favorable, the necessary capital will at once be forthcoming. News from Buckingham is to the effect that operations upon the phosphate lands owned by the French Syndicate are to be at once pushed forward with vigor.

Effect of Removing Mountain Forests.

Attention has long been given to devising means to limit the ravages of these torrents, which ruin the land, threaten estates, destroy roads, and sometimes even compromise the existence of villages. Walls have been built along the banks to protect them, or across the streams to allay the force of these waters. The most efficacious means, however, as yet discovered, has been to maintain the woods on the slopes of the mountain. The effect of cutting away the trees in promoting the formation of torrents has not been doubted by the inhabitants of mountainous regions, and is clearly set forth by M. Surrall, who says:—"When we examine the tracts in the midst of which torrents of recent origin have been formed, we perceive that they have in all cases been despoiled of their trees and bushes. If, on the other hand, we examine hills whose sides have been recently stripped of wood, we observe that they are cut up by numerous torrents, which have evidently been formed very lately. Here is a remarkable double fact: wherever there are recent torrents there are no longer forests, and wherever the ground is cleared these torrents are formed; and the same eyes that see the woods fall on the declivity of a mountain, may see appear there immediately a multitude of torrents."

The disastrous consequences of removing the woods from the Alps began to attract attention in the last century, and have since been discussed in many publications and official reports. In 1833 the prefect of the department of the Lower Alps said in a report to the Minister:—"If prompt and energetic measures are not taken, it will be almost impossible to designate the precise moment when the French Alps will become a desert. The period from 1851 to 1853 will produce a new diminution in the number of the population. In 1862 the Minister will remark a continuous and progressive reduction in the number of hectares devoted to agriculture; each year will aggravate the evil, and in a half century France will count more ruins and one department less." The departments of the Upper and Lower Alps actually lost thirty thousand inhabitants, or one-ninth of their population, between 1851 and 1876. A law for recovering the mountains with wood, which had been prepared by M. Forecade de Rouguot, director-general of the administration of the forests, was adopted by the legislative bodies in 1860, and was put in operation shortly afterwards.—*Mr. M. J. Cleve, in the Popular Science Monthly.*

THE *Newcastle Chronicle* says a cargo of square timber chocks has been brought to the Tyne, via Hamburg, direct from Prince Bismarck's estate. The merchant who has received them says the wood is as hard and square as the owner of the estate himself.

Bogus Certificates.

It is no vile drugged stuff, pretending to be made of wonderful foreign roots, barks, &c., and puffed up by long bogus certificates of pretended miraculous cures, but a simple, pure, effective medicine, made of well known valuable remedies, that furnishes its own certificates by its cures. We refer to Hop Bitters, the purest and best of medicines.—*Republican.*

PEGS.

The *New York Mail* says:—It was the privilege of the writer to visit the picturesque little town of Arlington, Vt., which at the time boasted a population of 2,500, three churches, five stores, two hotels, an extensive car works, sash and blind, and chair factory; also a "peg factory," which, by the courtesy of the foreman, Mr. L. E. White (who had been employed there twenty-nine years), he was shown through and received valuable information. The timber used is black and yellow birch, which is cut into pieces four feet in length, varying in diameter from eight to fourteen inches. These logs are placed in a building in winter and the frost extracted by steam. They are then run in on a tram railway to the circular saw department, and cut into slices or blanks of the thickness desired for the length of the pegs. These are sorted and the knots cut out, and are then passed on to a long bench which contains six machines composed of fluted rollers. The blanks are then run between these rollers, which cross both sides. They are then run through again to cross-crease, or mark out the exact sizes of the pegs. Then they go to the splitting machines, which are set with double knives, and cut the blanks into pegs. As they pass the last machine they are sorted, and all knots and discoloured ones removed as they are brushed off into large baskets. These machines are under the care of young women, who appeared much more happy and useful than do many of those who, thumping at their piano, would consider such employment menial. The next process is bleaching, which is accomplished by the fumes of brimstone, which is unhealthy, (those who labor here shorten their lives). They are then placed in large cylinders, which hold seven barrels, and have six hundred steam pipes running through them, and revolve one and one-half times to the minute, drying two charges per day to each cylinder. They are then passed into large wooden casks, or cylinders, which revolve rapidly, polish them by the friction, the refuse falling through wire sieves or screen openings, after which they are again passed into a sifter, which separates all the single pegs and drops them into tubs, or boxes, leaving those which have not been separated in the machine. They are then put in barrels ready for market. The factory running on full time turns out 150 bushels, or fifty barrels, per day. The sizes go from eight up to sixteen to an inch. The lengths go by eighths, two and one-half to twelve. Twenty-six hands are employed, half of them being women. The products of this factory are mostly shipped to Germany and France, and enter largely into the manufacture of toys and fancy goods, as well as into the shoe manufactory. Thus the "genii of mechanism" converts, as by magic, the trees from the Vermont mountains into articles of use, which, floating off through the channels of commerce to far away lands, anon return to sparkle the eyes of happy children in toys, in which these pegs have become important factors.

How to Come It Over Hornets.

Mr. James T. Bell's account, in the *Canadian Entomologist* of the easy capture of hornets may possibly serve as a useful hint to some agricultural reader in an emergency. The nest was unexpectedly found in a stump during a walk in the Belleville forests: "A few days after, taking advantage of a cool morning, I sent my two boys to the woods with a small bottle of chloroform and a hard rubber syringe. According to directions, they injected about a drachm of the liquid into the hole, and threw a handkerchief over the entrance. In about five minutes they opened up the nest, when they found the inmates in a perfect state of slumber, and transferred them without trouble to their cyanide bottles. In about an hour they returned, bringing me forty-eight specimens of the insect."

ARE YOU?—Are you a Dyspeptic? Have you indigestion? Is your liver sluggish? Does your food trouble you? Does sleep fail to refresh you? Is your appetite and energy gone? Zoposa (from Brazil) will cure you, tone you up, and invigorate your whole system. It is a gentle purgative, acts as a wonder upon, and gives strength and energy to the Digestive apparatus. It is strongly anti-bilious, carries off all surplus bile, tones the liver, gives sound Digestion and speedy health to the Dyspeptic and the Bilious. Try a 10 cent sample at least.

Indian Forestry.

A correspondent of the *New York Tribune* in a lengthy article in which he gives a brief history of some of the forest fires that have visited this and other countries, sets forth some facts that are of peculiar interest in connection with the recent terrible conflagration that has visited our own state. He states that the Indians, as he found while living among them, made a practice of burning over the ground of their forests once a year, as regularly as the farmer plows his land. He claims that the heat from these annual burnings is not great enough to injure, much less consume the trees, but the fires clean the ground of dead leaves and rubbish, destroying bugs and worms and killing the germs of malaria. The accumulation of dry leaves, twigs, mosses and fallen timber, he thinks, is the cause of the great forest fires, such as those which have ravaged whole counties in this state and destroyed hundreds of human lives. If the woods were systematically burned every year in this Indian fashion, there could be no possibility of an accidental fire gathering headway enough to become a destructive conflagration. Some year of drouth, he fears, will see the Alleghenies and other timber strongholds swept as bare as the Tyrian rock. "Then the rainfall will cease, then the nation. History testifies that nations have perished from the earth when their forests perished." One remedy which occurs to this correspondent for the destruction of forests by fire and by the rapacity of lumbermen who cut down the trees but plant none in their stead to supply the coming generation, is the appointment of a national commissioner of forestry, "a man who knows and loves the life-giving wood, and who would travel from state to state, section to section, and forest to forest, protecting the timber lands of the country."—*Lumberman's Gazette.*

A Big Fire at Chandos.

A correspondent writes to the *Mail* as follows:—At dark on the evening of the 20th ult., the large lumber shanty in the north-east corner of Chandos caught from a forest fire, and was totally destroyed, also the stable, blacksmith shop, meat house, and granary. The office was saved by a sudden change of wind. The buildings were very extensive, the stable being 120 feet long, and the shanty (which last winter accommodated over 100 men) was 80 feet in length. And all very substantially built last fall by Mr. John Gault, an energetic foreman in the employ of Messrs. Gilmour & Co., Trenton, who expected to use the shanty for lumbering another winter or two. A near settler (with his wife and family of small children) occupied the premises as caretaker for the summer, and had his little summer's grain stored in the stable, and all burnt. He had done but little else for a month previously but watch, carry water, and fight fires in the woods around, and was beginning to hope the worst danger was past. But a strong northerly wind seemed sent on purpose to consume everything in its track, and earlier in the day reached and destroyed his own private dwelling, about forty rods from the lumber shanty. Himself and a few neighbours fought the fire so long at the big stable, and the shanty caught fire so soon afterwards, that a very few of the caretaker's household effects could be saved. To make matters more serious, his wife had given birth to a child the same day, and had to leave her bed and walk barefooted to the nearest house (nearly half a mile), supported by a neighbour and his wife.

Birch Bark Rubber.

It is said that a dense black gum may be obtained from the outer layers of the birch tree bark by distillation, which possesses all the ordinary properties of gutta percha, and has the additional merit of resisting the deteriorating influence of air and the corrosive action of acids. This advantage makes it useful as an ingredient of India-rubber and gutta percha, which it renders much more durable. Whether these statements are true remains to be proved.

Are You Going to Travel?

Don't forget a supply of that Dr. Fowler's Extract of Wild Strawberry. It is a superior remedy for sea sickness, and a positive cure for all bowel complaints induced by bad water, change of diet, or of climate. Whether at home or abroad, it should be kept at hand in case of emergency.

VENOR ON DECK.

Since Venor's prediction of cold for this week has proved true his credit is up again in the eyes of the credulous. Therefore his predictions for the months to come are of interest. Paste them in the inner recesses of your hat:—
A warm wave is likely to occur over a large portion of North America during the month of November, 1881, and again during January and February, 1882.

A frigid wave may be expected towards the close of November and entry of December, 1881.

The winds and storms of March will probably arrive ahead of time, and render the closing days of February exceedingly disagreeable.

The latter part of April and entry of May, 1882, will remind one of winter again, and the spring is likely to be cold and backward generally.

The winter of 1882 is not likely to be characterized by heavy snow falls on this side of the Atlantic.

In Western Canada, and sections south of the lakes, navigation may remain open all the year, or close but for a very brief period.

December, 1881, will be a month of storms in the Lake Region.

The summer of 1882 will be generally unfavorable to agriculture, owing to cold and wet weather.

Western sections will probably suffer more from rains and floods than from thunder storms or cyclones during the summer of 1882.

There will be brief periods of severe cold during the winter of 1882, and longer ones of warmth.

Destructive Fire.

NEW YORK, Oct. 10.—The Fourth avenue horse car stables, owned by W. H. Vanderbilt, and occupying a block, were burned this evening. Most of the horses were taken out, but it is thought at least thirty perished. Some say two hundred were burned. The loss is estimated at \$200,000. The flames spread to Morrell's large furniture storage building, across the street, which was destroyed. Some of the finest furniture in the city was stored there, including \$50,000 worth of painting, the property of Vanderbilt, all which were burned. The loss is estimated at \$2,000,000.

A VERY USEFUL KIND OF VARNISH is made known by Leon Vidal, which is excellent for producing imitation of ground glass, and will doubtless be found available for other purposes. The formula is: Sandarac, 13 parts; mastic, 4 parts; ether, 200 parts; benzol, 80 to 100 parts.

SEE TO IT? Zepesa, (from Brazil) will cure the worst case of Dyspepsia. A single dose will relieve in a degree that shows its wonderful curative powers, and its peculiar action upon the Stomach and Digestive Organs. It is a positive and absolute cure for Constipation and Constipation, acting in a remarkable way upon the system, carrying off impurities. As a Liver regulator its actions are most remarkable. It tones and stimulates the Liver to action, it corrects the acids and regulates the bowels. A few doses will surprise you. Sample bottle 10 cts.

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"I was troubled for many years with Kidney Complaint, Gravel, etc.; my blood became thin; I was dull and inactive; could hardly crawl about; was an old worn out man all over; could get nothing to help me until I got Hop Bitters, and now I am a boy again. My blood and kidneys are all right, and I am as active as a man of 30, although I am 72, and I have no doubt it will do as well for others of my age. It is worth a trial.—(Father).—Sunday Mercury.

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EXTRACT OF WILD
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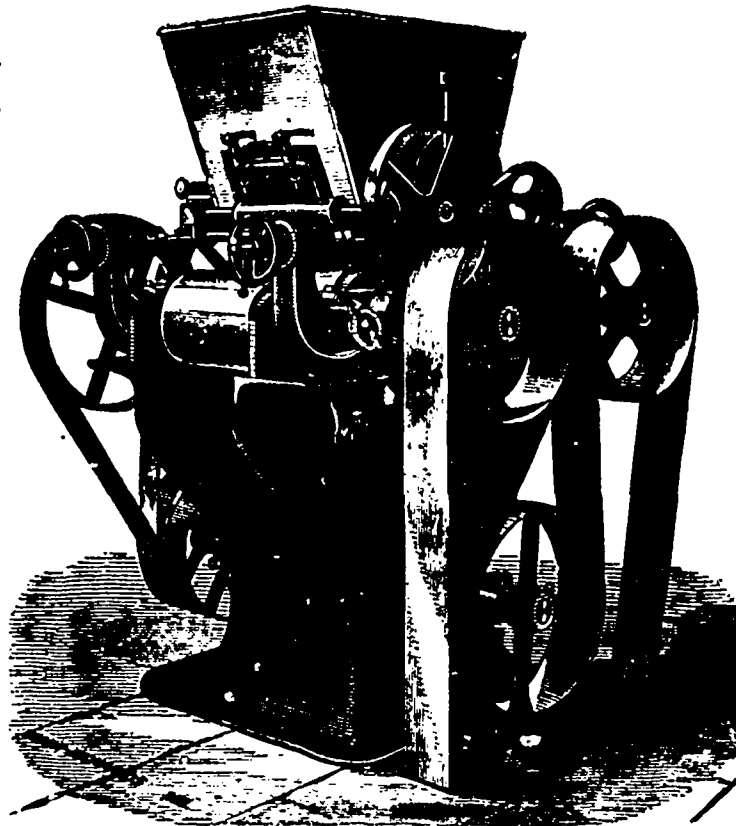
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INFLUENCE OF FORESTS ON WATER-COURSES.

We take the following from a paper read by Mr. David D. Thompson, of Cincinnati, before the American Association for the Advancement of Science, at that city, last month. The rapid destruction of our forests has at last begun to attract public attention, and the efforts of those who are endeavoring to awaken interest in the preservation of the standing trees, and to promote their cultivation where none exist, are bearing fruit, especially in the prairie states of the West and Northwest. The arguments used are usually such as may be embraced in the question: What shall we do for fuel, for fences, for ships, for building material, for railroad ties, and for the innumerable industries of which wood forms a part, when our forests have entirely disappeared? For all these purposes it is probable that some substitute may be found. But there are other uses for our forest trees, and for which nothing else can take their place. Important, possibly most important, among these is the influence, and the effect of their removal, upon water-courses, such as lakes, rivers, creeks and brooks, and also upon springs and wells.

Trees during a rain storm retain a vast quantity of water. In a tract four miles in length, and covered with forest, receiving the average of the whole rainfall, the trees hold in suspension four-tenths of the water which falls. This quantity will vary, depending upon the character of the foliage and the amount of water to each other.

Besides, what is retained by the twigs and leaves, the roots, by penetrating the soil around them loosen, induce the ready absorption of the larger part of the rain water which washes the ground, and much of which, but for the trees and their effect upon the soil, would immediately flow away. The foliage of the trees by partially or wholly excluding the sun's rays, prevents, in a large degree, the evaporation of the water in the soil, which, in a barren region soon renders the ground as destitute of moisture as though no rain had fallen.

By the absorption of the rain water, the flooding of the streams is largely prevented; and by retaining it to flow off gradually, the streams are supplied with water continuously. It can safely be said that no stream having its source near a tract of forest has ever run dry.

In the early history of the eastern and middle states, a farm was regarded as lacking in an essential feature if there was no spring upon it, and the farmer's wife would as much expect to do without milk pails as to do without a spring-house. But now a spring-house is a rare sight. When the pioneers settled these lands, they were covered with forests, and the first and most important work of the new settler was to cut away the timber, in order to get land upon which to raise food for himself and family. For many years there was, of course, no apparent effect upon the water courses; but as the number of settlers increased, and the amount of forest land decreased, the springs began to dry up, and with them the brooks, creeks and smaller rivers.

It is not unusual to find many localities the beds of what were formerly important mill streams waterless, except when filled by sudden freshets; and in this state certain streams emptying into the lake which were once declared navigable, will not now float a canoe. Previous to 1832 a Captain Delorme, of Hamilton, Ohio, annually sent a fleet of flat boats down the Big Miami river, and the risk; but with the destruction of the forests along that river, the risk became so uncertain that the enterprise was of necessity abandoned. Professor N. Aberry, in his travels of Ohio, states that the Ohio river had been getting lower and lower, in dry seasons, for many years. About 1871-72 the Ohio sank lower than had been known before, and at Smith's Ferry, where the Pennsylvania line crosses, a ledge of rocks was laid bare that had not been seen or heard of by any one living in that vicinity.

Latham says that, "such have been the changes in the flow of the Milwaukee river, even while the area from which it receives its supply; but partially cleared, that the proprietors of most of the mill and factories have found

it necessary to resort to the use of steam, at a largely increased yearly cost, to supply the deficiency of water power in dry seasons of the year. The floods of spring are increased until they are sufficient to carry away bridges and dams, before deemed secure against their ravages. What has happened to the Milwaukee river has happened to all other water-courses in the state from whose banks the forests have been removed, and many farmers who selected land upon which there was a living brook of clear, pure water, now find that the brooks dry up during a considerable portion of the year."

Even in the state of Tennessee, where comparatively but little of the original timber has been cut, the same results are manifest. Hon. J. B. Killbrow, late commissioner of agriculture of that state, relates that, upon visiting the home of his childhood, a short time ago, he was surprised to what at the time he left his childhood's home, thirty years previously, was a considerable stream flowing through his father's farm, had entirely disappeared, and its former bed had been ploughed up. The reason for it he found in the removal of the forests along both its banks. A striking illustration of the total disappearance of a running stream is found here in Cincinnati. Deer Creek, in the boyhood of residents of this city, now of middle age, flowed with a stream of sufficient volume to turn a mill. The despoiling of the hillside, and the consequent exposure of the entire surface to the rays of the sun, have dried up the springs which formerly fed it, and no water now flows in its former bed.

The mountains are but a forest of trees, and up to a certain elevation would be perpetually covered with trees. To settlers living at the base of mountains, the forest trees are of incalculable value, for by excluding the sun they prolong the melting of the snow, absorb a large percentage of the heat which has melted, prevent its flowing in a flood, and carrying death and destruction to all that may lie in its track. And the fallen twigs and branches, the undergrowth, the mosses and other herbage among the decaying leaves, and the millions of leaves which break the force of the falling rains, which come quietly to the earth, and sink into the soil until they reach internal caverns, or local strata, from which they are gradually distilled through perennial springs, that keep up a constant and regular supply for the streams.

Wood for Fuel.

The United States Census Bureau has been gathering some facts upon the consumption of wood for fuel. After taking the figures in our last annual for the coal output, the superintendent says: "Even with the large increase in the coal production during the last half century, wood still keeps in the van as fuel, the consumption in this country being in favor of wood against coal in the proportion of four to one. In Maine, New Hampshire, and Vermont, wood is almost the only fuel. In many counties of Massachusetts coal is ahead of wood, while in the States generally, as well as Canada, the percentage is about equal. Thickly populated cities, like New York, and Hudson and Essex counties, New Jersey, containing the cities of Jersey City and Newark, are not doing as entirely coal. In Pennsylvania, the great coal state, there are many entirely coal counties, while in others, as Crayford, in the western part of the state, not over 3 per cent. of coal is used. The same difference holds good in different parts of New York."

A Good Deal of It.

At the late bankers' convention at Niagara Falls, N.Y., the future utility of the water power of the falls was discussed, and the statement made that the conversion of the 60,000,000 cubic feet of water hourly passing down the river into horse power under a fall of 200 feet, would yield an aggregate of 3,000,000 horse power. A full utilization of this enormous force would serve the present needs of a population four times that of the United States to-day. Doubtless the time is not far distant when it will be partly utilized, and it must be a sort of relief to the economist to know that such a wonderful natural reserve force is at hand, if the need for it should ever arise.

A WESTERN LUMBER KING.

Hon. Philletus Sawyer, one of the senators from Wisconsin and a heavy lumberman, has lately been written up on the political side by a correspondent of the Chicago Times, who introduces into his article the following, which will be interesting to his fellow lumbermen:—

Mr. Sawyer's home has been in Oshkosh for 31 years, and everybody, irrespective of party, not only in the city but in this entire section, is his friend. He owns two or three counties in the piney portion of the state, half a dozen swamps, a bank, a large share of a railway, and a goodly bundle of Government bonds. He is a thorough business man in the best sense of the term, and numerous good stories illustrative of his shrewdness are told by his admiring neighbors. A great many years ago, knowing that a very large tract of pine land, located in northern Wisconsin, was to be sold at auction in New York, he started out alone, and made careful minutes of the location and extent of the most valuable sections of the tract. When the sale began he was on hand, and began bidding on the parcels which he wished to purchase. Some wealthy New Yorkers, knowing that he had been on the ground and had spied out the best lands, watched his course, and always outbid him. He went to the auctioneer and induced him to postpone further sales till the next day. Over night he employed an agent, and giving him a memorandum of the sections he wished to buy, went back prepared for another encounter with his eastern competitors. The sale went along very smoothly. Whenever Mr. Sawyer bid on a parcel of land the New Yorkers raised him out. While Mr. Sawyer's agent bought his lots without opposition.

Shortly afterward the New Yorkers, who felt that they had done a cunning thing, came out to Oshkosh to inspect their purchases. They visited Philletus at his pleasant home, and entertained them well. They apologized for outbidding him, but said they had no alternative in his judgment that they knew they must make money on the lands. He assured them that he had no hard feelings toward them, and hoped they would be pleased with their purchase. Just as they were starting out to go with a merry twinkle in their eyes, he said, "I would advise you if you want to get any lumber out of this ground, to get it with long logs or to get it with short logs."

After a while the wise men from the east came on toward, after discovering that they had bought a quarter interest in a tract and bottomless marsh, while Mr. Sawyer owned all the good pine land in the tract. They did not stop at Oshkosh on their return trip, and never registered their apologies for having outbid the prospective senator.

Mr. Sawyer's word is considered as good as a government bond of the registered variety by all who know him.

A fortnight ago a wealthy mill owner of Fond du Lac went over to Oshkosh, and meeting Mr. Sawyer at the depot, said, "Sawyer, I want to buy your logs."

"I'll sell them," was the reply.
"How many have you got?"
"About five million feet."
"Are they as good as last year?"
"Yes, just as the same."
"What'll you take for them?"
"Fourteen dollars."
"All right. I'll take them, and send you a check for \$70,000 in the morning."

This conversation is a fair sample of the senator's way of doing business.

A good many people throughout the state maintain that Mr. Sawyer is a dangerous power in politics, but they fail to show wherein he has as yet done anything amiss. Few of them have as large interests at stake in the state, or can as well afford to be honest in their private or public relations. Surely it ought to be considered a credit rather than a reproach to Mr. Sawyer that he possesses the energy and ability to make his way from poverty to wealth, from an humble saw mill on the banks of the Fox river to the senate of the United States, retaining throughout his whole career the confidence and esteem of the people among whom he lived, and who have known him best.

THE WORTH OF TIMBER.

The following letter appears in the London Timber Trades Journal:—

Sir,—I have read with much interest the account given in your last number, at page 135, of the increasing value of timber in the North American territories, which the writer traces to its wholesale destruction by the original settlers, who did not then know the value of what they were destroying by every means in their power, which, he says, "from the standpoint of the present time may be characterized as simply atrocious." Notwithstanding which, he goes on to account for it in a very natural way, and we learn from it that, so far from there being any atrocity in it, the first settlers had no other option but to destroy the timber which cluttered their ground or starve. An emigrant who becomes owner of a tract of land in a new country has first to consider how, with the means at his disposal, he can make it support himself and family with the least possible outlay of money, which probably is a scarce article with him. If he finds his land covered with timber of the most useful description to distant civilization, it is to him not only a superfluity, but a mortal enemy to be grappled with and overcome before he can turn the ground on which it grows to any useful purpose—that is to grow corn and edibles, or green herbs for the service of man. If he could only wait till civilization came a little nearer to him, or till a tolerable road was made for him to the nearest navigable river—which may be done ten years hence—he might make something of his timber; but he must get it out of his way at once, or as much of it as will enable him to sow a piece of land sufficient for him to raise food on when the next season comes round, by which time the resources he has been able to bring with him into the wilderness will probably have given out. His strong arms and his trusty axe, with such help as his family can give, are all he has to depend on, and the prospect is gloomy enough; and, if he calls in fire to his aid, it is because there is nothing else to befriend him. He finds himself in precisely the same position as the poor cock on the dunghill; he wanted a barley-corn, instead of which he scratched up a precious stone, which was no sort of use to him. Not only "fifteen, nay ten years ago," was it the custom to leave only the best trees, destroying all under 12 or 14 in., but even at this day (and for ages to come) in Canada there will be new settlers, in the remote forests, to whom the timber around them is the basis of their lives, who would welcome a gang of lumbermen willing to chop down the trees, though they were all of black walnut, and clear them away for nothing, as if they were good angels from heaven.

Sir, we have now great facilities for the transportation of wood, in the application of steam and the use of railroads, which were unknown to our grandfathers, but even now the prices of imported timber for building purposes do not always represent the cost of getting it to market, even if the trees, as they stood before the axe was laid to the root, were made a present free gratis to the lumbermen who undertook the work. In your number for August 27th, p. 142, there is a report of the sale of a parcel of 4th Richibucto spruce deals lying at Barrow. They were of good mercantile lengths, 3-9 to 20 in wide, and the best sizes only fetched £5 per Petersburg standard. Now as £3, in round numbers, goes for freight alone across the Atlantic, only £2 would be left to pay for 165 cubic feet of sawn merchantable spruce delivered on board ship in the port of Richibucto.

Query, after paying for cutting, squaring, hauling to riverside, launching, rafting, and floating down to port, then sawing, sorting, and shipping, what would be left to pay for this valuable wood as it stood in the forest? What- ever has been inevitably or even wantonly destroyed does not appear to render American building timber much more costly at the present day than the value of the labor bestowed on it to get it to market.—I am, sir, your constant reader,

Liverpool, Sept. 7th, 1881. LAND'S END.
DR. FOWLER'S EXTRACT OF WILD STRAWBERRY cures summer complaints, diarrhoea, dysentery, cholera morbus, cholera infantum, sour stomach, colic, nausea, vomiting, canker, piles and all manner of fluxes.

THE EVIL OF SHOING HORSES.

For some time past an active controversy has been going on in England between those who adhere to the usual style of shoing horses and a few innovators who contend that the old method is the cause of more than half the diseases to which horseflesh is heir.

The subject is treated very fully in a series of papers, which appeared originally in the *Farm Journal*. The writer, who goes under the nom de plume of "Free Lance," has recently published these productions in book form, and it is on the opinions advanced therein that the following remarks are founded—altogether "without prejudice," as the lawyers say. "Free Lance" tells us that during his working days the horse suffers perfect martyrdom owing to the interference with nature which results from shoing. The animal is forced to adopt an artificial gait which sends aches and pains through all the nerves, tendons, and muscles of his legs; he strains himself severely by slipping on greasy roadways; he is worn out unnecessarily by being deprived of his natural grip of the ground; and frequently suffers mutilation or injury through inability to keep his feet. But not only are shoes responsible, it is said, for a great deal of unnecessary pain and inconvenience to the horse while at work; they are the fruitful source, according to the same authority, of numerous diseases of the feet and legs which render him prematurely unfit for use. Shod horses, according to "Free Lance," are constantly afflicted with corns, side-bones, sand crack, greasy heels, sea-sore, dropsicle, ring-bone, thrush, quittor, ossin, cartilages, spevins, curbs, splints, windgalls, navicular disease and other maladies; while those who go without shoes enjoy almost total immunity from these ailments. If this is true, it is evident that the money loss involved in the maintenance of the present system must be enormous. Several eminent veterinary surgeons maintain that a horse, and most other animals, should live five times as long as it takes to reach maturity. Horses do not usually reach the full perfection of their powers until seven years old, and consequently ought to live until they are thirty or thirty-five years old. Under existing circumstances, however, they are termed old at ten and very old at twenty years of age, while fully three-fourths either die or are destroyed before they reach the age of twelve. It is horses beginning to work at three are worn out before they reach twelve years old, then it is evident that the working life of the animal is shorter by fourteen years than nature intended it should be. In other words, three horses, are used up in doing what ought to be the work of one, and this extravagance in the United Kingdom necessitates an expenditure within a given time of about £200,000,000 instead of £68,000,000. The causes of this unnecessary mortality, according to "Free Lance," are: The absence of springs and brakes from the vehicle horses are compelled to draw. The use of dangerous nostrums, together with hoof ointments, stoppings, &c., by prejudiced farriers and ignorant grooms. Last, but not least, the use of shoes and the method of applying them. Horses are of comparatively modern origin. Xenophon, who wrote the most complete work on horsemanship of his day, makes no mention of horseshoes; while, on the other hand, he is particularly explicit as to the means to be taken to harden and toughen horse hoofs. He recommends specially for this purpose bare stony pavement, which, he says, "will cool, harden, and improve a horse's feet merely by his standing upon it, while the same benefit will result to his hoofs as if he were made to travel on stoney roads every day." Another writer, Vegetius, says:—"The floor of the stable should not be made of soft wool, but of solid hard oak, which will make the horse's feet as hard as rock." It will be observed that these writers, so far from considering that a horse's hoofs should be spared because they are unprotected, insist that constant contact with hard and rough surfaces is essential to their preservation. They probably are induced from observation the principle which has been thus formulated by Mr. Miles—"It is an invariable law of animal economy not to continue to unemployed structures the same measure of efficient reparation that is extended to parts constantly engaged in performing their allotted tasks." If the horse's hoof is

intended by nature to bear rough travelling without injury, it stands to reason that constant subjection to the conditions it is designed to meet can alone maintain it in a thoroughly efficient state. "The constant use of litter (in stables) makes the feet tender, and causes swelled legs; moreover, it renders the animal delicate. Swelled legs may be frequently reduced to their natural size by taking away the litter only. Let any proprietor go to his stable, upon returning on a Sunday from morning church service, when the horses will perhaps have been left to themselves for three hours, and he will find that his horses have been trying to get rid of it by scraping holes in it, in which to stand at ease and comfort on the bare floor, having pushed as much as they can into the gangway. It is probable, also, that instinct takes part in their dislike to it, on the score of its being unhealthy as well as uncomfortable to them.

"Even at the present time in many parts of the continent of Europe, and in a considerable portion of the rest of the globe, horses run about over rocks, through ravines, and up precipitous ridges, unshod; yet all this is done without difficulty, and to the evident advantage of their hoofs, for these animals never suffer from contracted feet, or from corns, sand cracks, &c., until they become civilized and have been shod." Again: "During the mutiny in India many of our cavalry horses went unshod, because they could not get shod, and they never went better in all their lives." The special military correspondent of the *Morning Advertiser* and recently of the irregular cavalry employed in the Zulu war:—"Few of the men have their horses shod in front, some do not shod at all." On one excursion he made in company with this cavalry, they had to go over "sheets of polished, wet and slippery stone in the torrent beds, making one wonder how our unshod horses could keep their feet. All through the reports on the war, not a complaint was made as to these horses falling lame. Surely there must be something in this. Sheets of wet, slippery rock, and rolling stones in river beds, would be calculated to try the hoofs to the utmost, yet in the pursuit of the Zulus, when they fled at Ulundi, these 'ponies' (from 143 hours downward) were able, we are told, to follow miles farther than the shod horses. In North, Central, and South American countries, where, outside the pastures, hard, rough, stony ground largely predominates, horses and mules do very heavy work without any protection to their feet. In some parts of these countries," says our author, "it rains every day in the year, and in other parts they get dry roads during six months and wet ones during the other six. The horses have to travel over either, and over naked sheets of rock, as they in turn present themselves, and, as Mr. Douglas says, 'without difficulty, and to the evident advantage of their hoofs, for they never suffer from contracted feet, or from corns, sand cracks, &c.' Yet their work is of the hardest. Many of them bring down from the interior (some hundreds of miles) two bales of cotton, which weigh, with pack-saddle, &c., over 300 cwt., and in fording rivers have to carry across the driver also. This is the way in which all the commerce of the country is carried on. There is not a horseshoe or a nail to be obtained over the whole route, and on some roads at crop times, nearly 2,000 pass daily, some ascending to the coast, and others returning inland. In Ireland 'donkeys are worked unshod in draught and over macadamised roads, even over loose broken stones, and not only are their hoofs uninjured by such treatment, but they actually outgrow the wear and tear of work, becoming turned up at the toes if not periodically rasped."

July.

During this month summer complaints connected with their rages. To be forwarded to be forwarded. Dr. Fowler's Extract of Wild Strawberry is the best preventative and cure for all forms of bowel complaints and sickness incident to the summer season.

August.

The summer season now reaches its climax, and is prolific in developing bowel complaints. Over-indulgence in fruit, immoderate drinking of iced water, and summer beverages a few hours produce fatal ravages among children, an adult. Dr. Fowler's Extract of Wild Strawberry is the most reliable remedy for all forms of summer complaints. Safe, pleasant, and prompt in its effects. All dealers keep it.

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fast 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 mala-
dies are floating around us ready to attack wherever
there is a weak point. We may escape many a fatal
shalt by keeping ourselves well fortified with pure
food and a properly nourished frame.—*Civil Service*
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JAMES EPPS & CO., Homoeopathic Chemists,
London, England. L19-1y

HAYARDS
PECTORAL
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Has no equal for the permanent cure of
Coughs, Colds, Sore Throat, Asthma, Croup,
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Every bottle guaranteed to give satisfaction.
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Manufacturers of Marine and Hori-
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Engines, Boilers

Grain Elevators & Steam Hoists,

Saw and Flour Mill Machinery.

With Latest Improvements A SPECIALTY.

The ABEL EDWARDS CENTENNIAL
TURBINE WATER WHEEL.

RODEBAUGH'S SAW FRAME, MILL
DOGS and SAW GUIDES.

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The Canada Lumberman

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY
TOKER & Co. PETERBOROUGH.

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All communications, orders and remittances should be addressed and made payable to TOKER & Co., 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.

PETERBOROUGH, Ont. OCT. 15, 1881.

HUGH SUTHERLAND & Bro. have bought out Towless' lumber limits on Rainy Lake, comprising 100 square miles, his mill at Fort Francis, his lumber on hand and logs, his farm, and his buildings. It is their intention to dispose of their retail business and go into the manufacturing and wholesale business exclusively. They will enlarge the present mill at Fort Francis to a capacity of 20,000,000 feet per annum. There are 300,000,000 feet on the limits. The saw yard will be at Rat Portage and the head offices at Winnipeg.

THE *Timber Trades Journal* says the introduction of steamers into the timber trade has had one good effect which must not be ignored—we mean the increased speed with which cargoes of wood goods are discharged. Some of the recorded feats in this line would have been thought impossible a few years ago. One of the latest instances that have come under our notice is the screw steamer *Nelle*, belonging to Messrs. Pyman & Co., which arrived at West Hartlepool from Soderhamn, on the 16th inst., with 210 standards of deals and boards for Messrs. Harrison & Singleton. The vessel was berthed in the Hart Dock at 9 a.m., the cargo was all discharged by eleven o'clock the following morning and the vessel proceeded to sea the same night with a cargo of coals.

THE *Timber Trades Journal* says Sweden derides American competition in the wood trade, as the difference of expense in getting to market here under our free trade system is glaringly against our colonies. This may be seen at a glance, requiring no elaborate argument to prove it. 60s. was quoted in our last impression as the freight of deals, from Quebec to London, which is below the average, and only a lower port rate. 45s. in the same paper is stated as the freight from Sundswall to London, which is above the average. So that we may assume the minimum difference to the advantage of Sweden is 15s. per standard. This is just the same as if, being equidistant, Canada goods were subject to a duty of 15s. per standard, equal to about 10 per cent. on the f. o. b. price of high-class deals, and 15 to 20 per cent. on inferior qualities. This is a barrier which, like a Lupinike gate, there is no evading. Under a system of duties Canada was put formerly on a more level footing, but free trade leaves our colonies to shift for themselves against the natural advantages of other countries.

SPAKING of the forests of Russia, *L'Echo Forester* says:—On the estate of Lenine, belonging to Prince Wittgenstein, there are 60,883 hectares of woodland covered with trees of the greatest commercial value. The oak appears to be the favorite, and there are no less than half a million monarchs of the forest upon the estate, valued at over four and a half million francs. There are also 450,000 pines, valued at ten francs each, or 4,500,000 francs. The entire value of the wood on the property is estimated at over a million pounds sterling.

THE Port Blakely, Wash. T., Mill Co. are enjoying a large lumber order from Shanghai, the filling of which will require five vessels, the aggregate cargoes amounting to 3,000,000 feet or more. Three vessels are there now for loads, namely, the *Earl of Elgin*, the *Hollander*, and the *Marsha*, all barques, and two more are expected soon to arrive. The lumber goes in large pieces—square timber—which are again cut on arrival at the other end of the broad Pacific into dimensions to suit; not that they can be better or more cheaply cut there, but that by some custom regulation a light tariff is imposed on the importation of manufactured timber. This order is, perhaps, the heaviest one that ever came to a Puget Sound mill from China.

THE *Montreal Gazette*, in an article on forest fires, writes as follows:—We want more bush than we have. We want not only protection for what is left, but a system by which tree planting may be regularly prosecuted wherever it is needed. We want, in fact, what almost every State in Europe has long found the necessity of, a complete scheme of forest management, including schools of forestry, where young men may be trained for that purpose. These should be established at once. There is no lack of experience on the subject to our hands. Why should we wait until some sudden wave of destruction sweeps all before it, and leaves us nothing but helpless regret? With a regular system of educated forest officers and police, adapted both for preservation and creation, we could in a few years do much to atone for past neglect; otherwise, we may some day be reduced to the position of Madeira, which received its name from its magnificent and varied wealth of forest, but which has long been dependent on foreign supplies for even the materials of native construction.

A CORRESPONDENT of the *Buffalo Lumber World* says the Saco is the most wonderful river with its tributaries for growing pine lumber of any place in all New England. Although cutting pine has been going on for one hundred years, yet it appears to be inexhaustible. It comes up everywhere, and it appears that it makes no difference what kind of growth is cut off, it comes up to pine, and mostly white pine. About forty millions of all kinds of pine, spruce and hemlock are floated down the Saco every year, yet the supply appears to be abundant. Only about sixty miles of this river is capable of log driving, as above that the stream is too rapid and rough to admit of it. It is calculated that the town of Frysburg has now eighty million of pine timber, and it grows at the rate of five millions a year, or 16 per cent. There are no square edged pine shipping boards sawed on Saco river now. The small and roughest logs are sawn into 8 in. box-board rough edged, and sell for from eight to ten dollars per thousand. The largest and best are put into sugar box shooks for the West Indies market. The price for the last two years has been very low, about 50 cents apiece. It takes three thousand feet to make one hundred boxes. The other logs are sawn into 1 1/2 in. boards for heading, and of these there are a large amount made on this river. They sell for 18 to 25 cents per pair, according to size. It takes one thousand feet to make sixty pair on an average. A large part of heading lumber is sawn from hard pine, as it grows in abundance on the plains. Hemlock boards now sell for \$12, spruce \$14 to \$16 per thousand. There are not so many mills now as formerly, but what they are make up in speed and despatch what the lack in number.

"NEXT DAY it's the nicest thing I ever used for the teeth and breath," says everyone having tried "Tea-berry," the new toilet gem. Get a 6 cent sample.

WESTERN LUMBER TRADE.

At the monthly meeting of the Chicago lumber dealers to fix the October price list, the directors recommended that no changes should be made except in shingles, in which item of the list they recommended a decline of five cents per thousand on clear, and twenty cents per thousand on extra A and standard A. This recommendation was at once adopted by the meeting, but on a motion for reconsidering this action a few further changes in the list were thought judicious, and on motion an advance of \$1 was ordered on the items of first and second clear, two-inch; A and B selects, two-inch; one and one-fourth inch third clear, and one and one-fourth inch A and B selects. With these changes the former list was re-affirmed as the October list, and will so stand unless circumstances shall dictate the necessity of an amended list during the coming month.

The *Lumberman* says that the accumulation of stocks at Chicago is not at all in proportion to the increase in the volume of trade, and this fact was officially recognized by the following resolution, which was recommended by the board of directors, and passed at the above meeting:—

Resolved,—That in the light of the experience of the season of 1880, and thus far during the season of 1881, the past, present, and prospective increase in the consumptive demand for lumber throughout the West imperatively requires of the Chicago lumber dealers the holding of a stock in their yards on January next amounting to not less than 650,000,000 feet, in order that the requirements of their customers, both as to quantity and shipping condition, may be fairly met; and we, as a board of directors, would point to the fact that but two months of navigation remain, during which time an increase of 75,000,000 feet must be obtained during each month in order to meet what we firmly believe to be the requirements of a healthy winter and spring business, and that, in our opinion, the present prospect and rate of increase do not warrant the belief that the necessary quantity is likely to be realized by a large difference.

The secretary presented an estimate, based upon his daily reports of the present stocks on hand, placing that of lumber at 511,964,279 feet, and of shingles at 200,600,000, on September 25, an increase, as compared with the yard reports of October 1, 1880, of 47,916,234 feet of lumber, and 66,355,000 shingles.

C. P. B. LAND DEPARTMENT.

Early in May the Company, having taken into consideration the organization of a land department to deal with the vast acreage to be awarded as the line progresses, decided to establish the head office in Winnipeg, and appointed Mr. J. H. McTavish, Chief Factor of the Hudson Bay Co. here, as Land Commissioner. Mr. C. F. Kindred, formerly chief clerk of the Northern Pacific Land Department in St. Paul, was subsequently appointed Assistant Commissioner, and the organization of the department has been rapidly completed by Mr. McTavish, who secured the premises formerly occupied by the Bank of Montreal here for offices. Land examiners have been in the field for some time past, and the office staff have been busily engaged recording and classifying the applications that have been made to purchase lands. Over 1,500 applications have already been received, the amount of land represented by them amounting to about 750,000 acres. On Monday, the 26th, the Department will commence to deal with these applications, and will on and after that date be prepared to sell land. In all cases in which persons have settled on railroad lands in good faith and made reasonable improvements, their claims will be respected, and they will be allowed to purchase the land on the Company's advertised terms.

The Company has decided to sell only to actual settlers or to persons who agree to cultivate and otherwise improve, and the pernicious evil of speculators buying large tracts and locking them up will be thus avoided. The price of lands will be \$2.50 per acre, one-sixth in cash and the balance in five equal annual instalments. The form of contract which has been prepared provides that until the final payments are com-

pleted, all improvements placed on the premises shall remain; that the purchaser will regularly pay all taxes, and that he will cut no wood or timber upon the land except for fuel and fencing and the erection of buildings thereon. It is provided that the purchaser shall, within four years after the date of the agreement, bring under cultivation, and sow and reap a crop on three-fourths of the land, but if he shall erect buildings thereon, satisfactory to the Company, and shall reside thereon continuously for three years at least of the four years, then at least one-half of the land shall be by him so cultivated and cropped within four years. It is further provided that the purchaser will be allowed a credit of \$1.25 per acre for each acre cultivated and cropped during the four years, or if he erect buildings and reside on the land continuously, then the period during which breaking may be made and allowed for will be extended. On the completion of the payments and the performance of the terms of the agreement, the Company will give a deed conveying the land in fee simple, reserving, however, a strip or strips 200 feet wide to be used by the Company for right of way or other railway purposes, wherever the line of the C. P. R. or any branch thereof is or shall be hereafter located over the land. If the purchaser fails to carry out the terms of his agreement, all his rights, etc., in the land will cease, and it will revert to the Company, but the Company may, in its discretion, revalue the land and make a new sale of it to the purchaser at the revaluation.—*Winnipeg Free Press.*

A Large Walnut Tree.

Malachi White, of Middleton, has sold to Watson & Buckman, lumber dealers, of Newtown, Pa., the large walnut tree which has stood in the door-yard for at least 150 years past, and from which the farm derived the name of "Walnut Green." From the best information that can now be obtained, it is supposed the tree was planted by John Woolston, the owner of the farm, about the year 1728. The tree was twenty feet in circumference, nineteen feet to the limbs, and as straight as an arrow. Some of the limbs are about three feet in diameter and thirty feet long, making good sized saw logs. The tree was a great bearer, and it is said that as many as sixty bushels of walnuts have grown on it in a single year. The cutting and hauling of such a tree is no inconsiderable task, and it had to be chopped for a considerable distance before the eight-foot cross-cut saw could be worked to advantage. After cutting the tree down the log was cut off nineteen feet long, and loaded on a log carriage and taken to Newton, where it will remain about a year, or until the sap becomes colored, before it will be sawed.



Department of Crown Lands,

TORONTO, 6TH OCTOBER, 1881.

NOTICE IS HEREBY GIVEN THAT, UNDER AN ORDER IN COUNCIL,

TIMBER BERTHS

In the undermentioned Townships in the

MUSKOKA and PARRY SOUND DISTRICTS,

Will be offered for Sale by Public Auction at the Department of Crown Lands at twelve o'clock noon,

On TUESDAY, the 6th day of December next,

viz.:—Townships of Mowat, Blair, McConkey, Hardy, Patterson, Mills, Sinclair, Bethune, Proudfoot, Gurd, Macfar, Strong, Joly, Laurier, Pringle, Lount, Nipisling and Hlinaworth.

The area to be disposed of in the above Townships as Timber Berths is upwards of 1,400 square miles, and to suit all classes of purchasers each Township will, as nearly as practicable, be divided into four berths.

Shoals containing conditions and terms of Sale, with information as to Area and Lots and Concessions comprised in each Berth, will be furnished on application personally or by letter, to the woods and forests branch of the Department, or to the Crown Timber Offices at Ottawa, Belleville and Quebec, and the Office of T. E. Johnston, Esq., Parry Sound.

T. B. PARDEE,
COMMISSIONER

Drake Brothers' Box Mill,

Provost Street Extension, New Glasgow, Pictou County, N. S.

SPRUCE, PINE AND HEMLOCK SHINGLES

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D. McLACHLAN & SONS,

Manufacturers of all Descriptions of

STEAM BOILERS.

SHIPS' WATER-TANKS. Repairing Punctually Attended to.

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Alexandria Saw Works
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Nos. 115, 117, 119, 121, King St. ast, Toronto.

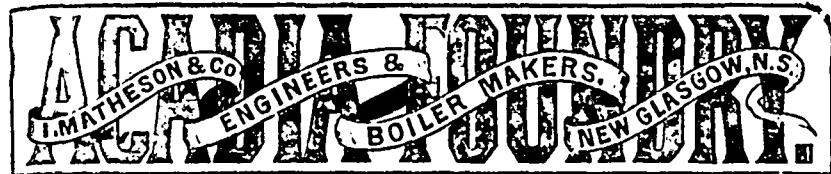
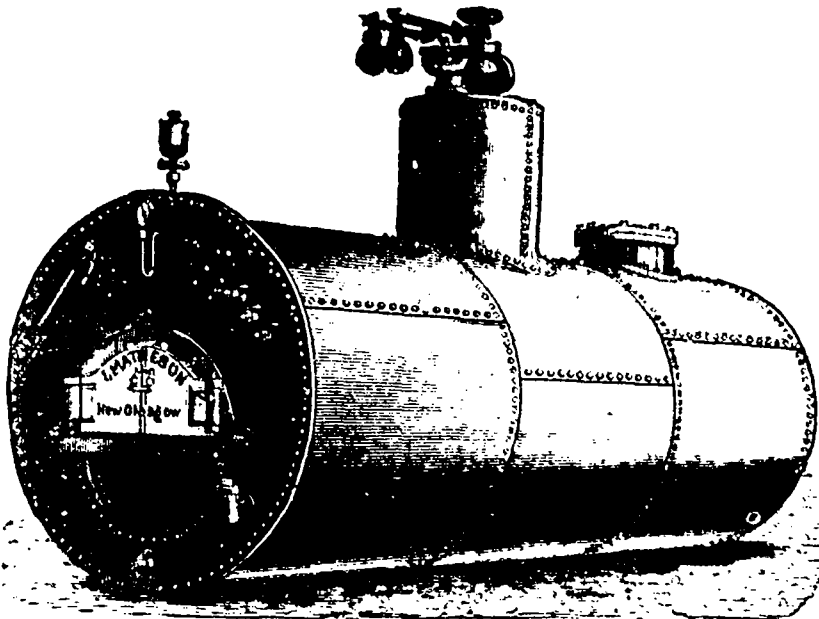
We are the most Extensive CLOTHIERS in Canada.
 We carry a STOCK of FIFTY THOUSAND DOLLARS to choose from.
 We watch the Interest of our Customers. Our stock is FULL of the very best goods in Scotch, English and Canadian Tweeds.
 We BUY and SELL for Cash, therefore It enables us to do business on very SMALL PROFITS.

NOTE THE PRICES.

We give a Good Tweed Suit for.....\$6 00
 We give a Good Tweed Pants for..... 1 50
 We give a Good Overalls for 0 35

LUMBERMEN!

When you visit Toronto, come direct to OAK HALL, and fit yourselves out with a Good Suit. Remember the address:—OAK HALL, the Great One Price Clothing House, Toronto, opposite St. James' Cathedral. 1y13



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121-1y

144 Upper Water Street, HALIFAX, N.S.

WILLIAM CAMPBELL

(Late CAMPBELL & FOWLER.)

MANUFACTURER OF

Edge Tools, Axles, Springs, &c., OF EVERY DESCRIPTION.

Robertson Place, Smythe Street - ST. JOHN, N.B. 124-1y

THE NEW DOCKS AT LIVERPOOL.

The Timber Trades Journal says that the reception accorded to the Prince and Princess of Wales at Liverpool on Thursday week was of the most gratifying character. The Prince performed the ceremony of opening the great dock gates, and the Princess the interesting duty of "christening" one of the docks, the Alexandra. At a banquet following the ceremony the Prince of Wales, in reply to the toast of his health, alluded to this important addition to the dock system of Liverpool in these words:—"We are not likely to forget the reception we have met to-day at Liverpool; and although it is by no means the first time that we have visited this great and important city, still the special occasion which brought us here to-day is one which is not likely to be forgotten by us. We have not only visited your great and important city, but we have taken part in a great and interesting work, one which, I trust and feel convinced, cannot fail to improve, if possible, even still more the great commerce of this city, and at the same time evince the great modern engineering skill of the present day. Everybody knows that Liverpool, after London, is the second largest city in the United Kingdom but there are a few statistics connected with the docks of this great city which I perhaps may mention on this occasion. At the commencement of the century dues were paid on 450,000 tons, and in the present time they amount to 7,800,000—very nearly 7,900,000—tons. In the year 1864, when my late lamented father visited your town and opened the dock which is now called after his name, the docks and basins amounted to only 27, whilst now they amount to 53. Again, in that year the length of the quays was nine and a half miles, and it now amounts to forty miles. At that time the water space occupied by the docks was 122 acres; it is now 543 acres, and whilst the extent of the dock estate was then only 500 acres, it now amounts to 1,545. These figures show clearly the great prosperity of this city, and they also show, under the able chairmanship and able management of the chairman of the Dock Board, how flourishing everything in connection with these great docks is. I must not forget to allude to the name of one who, though he is taken from you, must ever remain in your memories, the name of the late Mr. Jesse Hartley. It was he who first founded the modern system of docks. After his death his son succeeded him, but only for a short time, and then the mantle of Mr. Hartley descended on the shoulders of Mr. Lyster, the present engineer."

We abstract the following description of the new docks from the Daily News—

"The river front of the Dock Estate at Liverpool and Birkenhead is about eight and a half miles. It covers more than 1,500 acres, has a water area, including the new docks, of 543 acres, and forty miles of quays. Eighty years ago the vessels entering the docks and paying dues fell far short of half a million; now it is nearly eight millions—figures which show the rapid growth of the latter in size. The new docks are calculated to accommodate the largest ships now in use, and were commenced eight years ago. A sea wall, crowned by a magnificent promenade, extends northward for 6,000 ft. across the front of the new docks to the Seaforth Battery, whence another sea-wall returns, almost at right angles with the first-named, towards the shore. The area thus enclosed is about 310 acres."

In reference to the Canada Dock, the writer says:—"The Canada Basin and its pier, constructed some years ago, have been in a great measure rebuilt and remodelled. Large timber jetties have been added outside the pier-heads, for the purpose of sheltering the entrance and facilitating the egress of ships. To all who know the Mersey this care to prevent accident will not appear superfluous under certain conditions of wind and tide. The basin has also been enlarged, and an elaborate system of sluices constructed within it and carried along the jetties to the outer heads."

In the "Alexandra" Dock the main body of the dock is an irregular rectangle, 1,600 ft. long by 500 ft. in width, enclosing some seventeen acres of water; the total water area is 44½ acres, with 11,814 feet of quays. The water area of the

whole group of new docks is 81 acres, with more than four miles of quays and 25 acres of new sheds."

OTTAWA SQUARE TIMBER TRADE.—1901.

From Our Own Correspondent.

OTTAWA, Sept. 26.—The following is a detailed statement of the number of cribs of timber brought down from the Upper Ottawa during the present season:—

Table listing timber traders and their crib counts: J. R. Booth (629), Caldwell & Son (329), A. & P. White (311), R. H. Klock (179), Wm Mackey (321), Thistle & Carswell (143), J B Dickson (102), Octave Latour (163), R. Campbell & Son (540), A. McLean (244), Hilliard & Dickson (100), Fraser & Curry (114), John Fraser (112), J. Francis & Co. (243), Bell & Hickey (119), Fraser & McCoheon (331), J. & S. Bryson (189), Thistle & Eagan (179), R. & W. Conroy (170), David Moore (185), B. & J. White (99), Alex. Fraser (144), J. & D. Giler (108), Barnett & McKay (909), McLachlin Bros (271), Robert Grant (56), J. & G. Healy (34), W. Croft (34), Boyd Caldwell (88), McCool & Sunstrum (87), Gillies Bros (88), Bills Bros (53), Wm. Mason (63), J. Pomphrey (18), Levi Young (93), Chas. & Wm. Mohr (81), O. A. Orier (13), R. Nagle (94), Young & Bromson (89), James Findlay (12).

This gives a total of 5,749 cribs; but, in addition to the above, there was a small raft brought down for James Findlay by rail, while all the timber of the British Canadian Company is coming down the same way. The timber by rail would be equal to 600 cribs, so that the grand total of timber reaching market will be 6,349 cribs. To this must still be added 750 cribs in the four rafts of O. Latour; the three of David Moore, and one of R. and J. White, which stuck in the Upper Ottawa, in order to get at the season's output of square timber.

An Architect on the Situation.

An architect, who has done a good deal of work for speculative builders this season, is inclined to think that the marked activity seen in the last six months, will decline gradually for the next six months.

"What about prices?" asked a representative of the Real Estate Record, of New York.

"My opinion is that the price of labour and material will fall to their normal condition, and then people will think about building again. You know that from 1865 to 1873, the market was in a sea saw condition. A year of activity was followed by a year of dullness. Of course, when the panic came, everything came to a standstill for several years. It is only within the last two years that the building trade has regained its wonted buoyancy."

Don't you think there are too many high-priced houses in the market to-day?

"I have no doubt of it. As soon as prices become settled, builders will start now enterprises, and as a natural consequence will be able to place houses in the market next year at a figure lower than those who have built this year possibly can."

Somebody will lose money then?

"Yes, but the few will suffer for the good of the many. Rotten concerns will be pushed to the wall, and safer business must inevitably follow."

Nature Makes no Mistakes.

Nature's own remedy for bowel complaints, cholera morbus, cholera, cramps, vomiting, sea sickness, cholera infantum, diarrhoea, dysentery, and all diseases of a like nature belonging to the summer season, is Dr. Fowler's Extract of Wild Strawberry, which can be obtained of all dealers in Medicines.

A WAVE OF IMPORTATION.

The Timber Trades Journal, of Sept. 17, says:—"Not only in London but all along the west coast there is an unusually large supply of wood goods reported in our last number, chiefly from Scandinavia and the Baltic, by reason of about a week of northeasterly winds blowing steadily on that side of the island of Great Britain, being really the first spell of that kind which we have had from that direction for some months past. The prevailing winds this summer were from the west and south-west, with an occasional slant from the eastward, scarcely enduring twenty-four hours, or a day or two at most, when they again reverted to the west as before. The consequence was that east country ships dropped in slowly, and the timber-carrying trade seemed to be about to be done chiefly by steamships, sailing vessels making so small a show up to the end of July in comparison of the anticipations of the trade."

We had ourselves warned importers that the summer months were likely to make up a good deal of the shortcomings of the spring, and we certainly had an impression that July and August would bear out the view we took; but when the returns for July showed a substantial deficiency, as compared with last year, our confidence in a plentiful supply somewhat abated, and it appeared likely that the trade would be in a position to make a good profit on the purchases they had made earlier in the year; also reports began to be circulated that demand was overtaking supply, inasmuch that those who had made contracts for their season's importation were regarded as on the lucky side, and those who had hung back in doubt during the previous months seemed then to be in some haste to secure a larger share of the stock still remaining for shipment abroad than they had previously intended to buy.

The returns for August again, though those of a good average month, were still moderate, and short of public expectation. This gave renewed briskness to speculation, and some considerable stocks abroad found buyers ready to deal for them offhand, as we intimated last week. The sudden change in the ratio of supply which we then had to record must, however, in some degree damp the ardour of buyers. People wondered what had become of all the sailing ships that were supposed to be in the trade, and those who had chartered and got their bills of lading long since began to fear the short days would be here before the cargoes on the way home. September has already materially abated their apprehensions, and the opinions of the trade in regard to the ultimate wind-up of the year will again vary.

The importation to the United Kingdom for the first week of this month averaged more than 110 timber ships per day, and if it continues at that rate to the end of the month, and assuming the average cargo to be only 150 standards, we should have imported nearly as much in excess of last year as we were at the end of August in arrears of it—viz., about 700,000 loads. But this, of course, is not altogether likely, though it is far from impossible that we shall tread very closely on the heels of last year, for if the North Sea were cleared of the bulk of the cargoes on it last week, the Atlantic, as shown by the returns from the west coast, was all the other way.

Liverpool, with heavy stocks, had very little added to them, and, though doing a fair trade, could not get any appreciable advance. The best sizes and qualities of St. John spruce, at the public sale, brought no more than £7 10s., and the average of the cargo not £7, and other spruce cargoes from the Gulf of St. Lawrence averaged about £6 10s. With these prices on a backward importation it can scarcely be expected that better terms will prevail later on. There were, however, two causes assigned for the disinclination of buyers to accede to an advance of price—one that "the lower port cargoes were somewhat discoloured," the other, that buyers were discouraged by the bad harvest prospects. For ourselves we do not attach importance to either in this case; most likely the plentifulness of the stock on hand and the knowledge that a good many spruce cargoes are on their way to Liverpool were the real checks to more liberal dealings. Waney board timber, of which the stock on hand is nearly double

what it was last year, found no buyers at the reserve on it—this, too, in the face of a rising market at Quebec. In contrast with the state of the importation for the same week in London, we may point to the fact that more firewood was imported there than the total bulk of wood into Liverpool, over thirty cargoes of firewood besides oddments arrived in the Thames during that week, bringing altogether more than 3,550 fathoms (above 23,070 loads). Possibly with the next strong puff from the westward the arrival of transatlantic timber ships in Liverpool will render the contrast less remarkable, but on the other hand, as the demand is already scarcely equal to the supply, which means that the commodity is too abundant to admit of much margin to the vendor, with large arrivals it will be still more difficult to obtain a profit. * * * We may therefore look forward to a rather full importation during the fall. Nor, after the bound forward which the trade has made in that department since the present month commenced, will anyone be surprised if the tot-up at the end of this year should find the United Kingdom quite as well supplied with foreign and colonial timber as it was at the termination of the last.

Swedish Enterprise

The Timber Trades Journal says:—"It is reported that, in view of the development which the trade in wood goods from the north of Sweden to Australia is taking, several of the Swedish shipbuilders, who have hitherto been occupied in building wooden ships, are preparing to lay down iron ships instead, the advantages of the latter class in carrying capacity, &c., more than making up for higher first cost. There is no doubt a considerable field of employment open to tonnage of this class, and which can be much easier worked than steam tonnage, from the north of Sweden; but it is, however, liable to be ousted out of the return freight and other goods from Australia by steam, however remote this contingency may appear at present. Iron shipbuilding at Gothenburg, Malmo, Oscarshamn, and Stockholm is active, and an increase in the size of the vessels is observable. Steamers of 3,000 tons burden are now being built at Malmo for Copenhagen firms, to run between that lively Danish town and the United States with emigrants and goods."

Boiler Explosions.

A Canadian mechanical engineer, named Arnoldi, has invented a device designed to give a partial security against boiler explosions. The invention consists of an electric adjustable attachment to the ordinary steam gauge now in use, to give an instant and continuous alarm, at any distance from the boilers or other pressure generators, of any excess of pressure over that at which the alarm has been set, and where there is more than one generator in operation, an ordinary "tell tale" can be attached to signify which generator is at fault. The invention possesses a great many valuable features, prominent among which may be noticed that it is extremely simple and inexpensive, and can be attached to existing arrangements at no expense beyond that of the alarm itself, and without in any way affecting the present adjustment of the gauge.

Fire Proof Shingle Roofs.

Spon, for this purpose, recommends a wash composed of lime, salt and fine sand or wood ashes, to be applied as in putting on a coat of whitewash. This coating, he adds, will render an ordinary shingle roof fifty-fold more safe against fire from falling cinders in case of a neighboring fire, than one without it. He adds, also, that it will have a preservative effect on the shingles, protecting them against rotting from exposure to the weather, and against warping, and states that the older and more weather-beaten the shingles are the more benefit they will derive from this application. He recommends, finally, that a small quantity of lampblack be mixed with the wash, to give the coating a darker color, thus avoiding the offensive glare of a white-washed roof.

The ancient orders of architecture are the Tuscan, Doric, Ionic, Corinthian and Composite. The five leading pens of Esterbrook's make are the Falcon, Bank, Engrossing, Extra Fine and School.

Chips.

The Chippewa, Wis., Lumber & Boom Co.'s mill, in two days last week, sawed 856,000 feet of lumber, in an actual running time of twenty-two hours.

The Empire Lumber Company, of Winona, will erect a new mill that "will occasion the expenditure of about \$100,000 in the further development of the manufacturing interests of Winona."

The state of New York has not escaped devastation by forest fires. A tract twenty miles in diameter near Carthage was burned over, the estimated loss of timber lands being three hundred thousand dollars.

The Orillia Packet says:—On account of the lowness of the water the Severn mills have been cutting rather below the average. Should we not get very heavy rains soon the probabilities are the mill will be stopped.

The building trade is showing signs of activity in Bristol and the West of England. Masons and carpenters are more busy than they have been for the past two years, and there is a decided improvement in the demand for timber.

The St. Croix, Wis., boom has been closed for the season. A little over 200,000,000 feet of logs have passed through since navigation opened. The Stillwater Gazette says the total amount got out this season exceeds that of any year in the history of the boom.

SANDS & MAXWELL, of Pontwater, Mich., have shipped to C. C. Thompson & Co., of Chicago, a clear pine plank, sixteen feet long, forty inches wide and four inches thick. The same firm has also shipped one of the same size and grade to the St. Nicholas Toy Company.

From a tabular statement in L'Echo Forestier we gather that fifty-four vessels entered the port of Dieppe, France, during the month of August, with timber cargoes, the greater number arriving from Hornosand and Sundawall (Sweden), Riga and Kotka (Russia).

At the French seaport town of Honfleur they cannot be said to be protectants in the timber sawing business. Instead of only raw wood being sent them as formerly, to be worked up, a great deal of timber is now brought already worked, to the detriment of many Honfleur saw mills.

C. L. STINE, Bucyrus, Ohio, who has a mill four miles west of that town, has sawed 1,600,000 feet of hardwood this season, and expects to add 1,000,000 to it by shutting down time. Walnut is worth \$45 in that locality; oak \$20; ash \$21—all right from the saw. The market is active, and the timber supply limited.

The Chippewa, Wis., Herald says the Chippewa Lumber and Boom Company's mill has cut thus far this season, 41,000,000 feet of lumber; 12,500,000 lath; 200,000 pickets, and 9,250,000 shingles. It is estimated the mill will cut by the 10th of next month 50,000,000 feet. This is about 15,000,000 more than it has cut in any previous season.

SAMUEL JELLYSON, of Belfast, and the spool factory company of Searsport, Me., have recently purchased a township, known as No. 4, in range 8, in the north part of Penobscot county. The township contains 33,000 acres. The east branch of the Penobscot river, and a tributary, run through the township, affording excellent opportunities for logging. The forests are largely white birch, which is the material used in the manufacture of spools. A large gang of workmen are now on the grounds getting out spool stock.

WHEN the Stillwater, Minn., boom was shut down on account of the recent high water, over 220,000,000 feet of logs had passed through during the season thus far. The total amount got out this season exceeds that of any year in the history of the boom, the largest run heretofore, which occurred about five years ago, having been 204,000,000 feet. At a meeting of the Lumbermen's Board of Trade held recently, it was decided to send a crew of men, under charge of James Rooney, to Taylor Falls, with instructions to bring down every log between that point and Stillwater. This, it is said, will make the cleanest sweep ever known.

FIVE ACRES OF LUMBER BUANT.

The Oswego Palladium gives the following graphic account of the appearance of the recent conflagration in that city:—"We are sure that none who saw this picture when the fire was at its height ever saw a grander or more impressive of the kind. About five acres of lumber all in a blaze, fanned by a gale of twenty miles an hour, makes an elemental combustion seldom seen. Seizing on a lumber pile the fire would wrap it in an instant and pour from every interstice from top to bottom a devilish looking blue flame, which streamed from the cracks in a sheet resembling molten metal forced to a high pressure. There were, as said, about five acres of these mighty forges, all flaming at once, and when they lost their individual forms and settled down into less shapely heaps they glowed and fused like ores. Apart from the source of danger and damage going on, it was a stupendous spectacle. The reflection of the fire lighted the cloudy sky with a sickening glare which had an awful look, and for miles around the country was lighted up almost as by the sun at noon. Through it the towns of Oswego and Scriba the people were awakened by the unearthly light, and looking toward the city believed it to be all on fire. Many hitched up their teams and drove to town, and several carriages came down from Fulton, where the fire looked as if the whole city were involved."

New Forests Pay in Scotland.

A writer in an English journal says that there have been forests in the neighbourhood of Darnaway for many centuries. The oak forest of Darnaway, which, by the way, is the seat of the Earls of Moray, is acknowledged to be the finest in Scotland, and there are few which can compare with it anywhere in the British Isles. For over a century the oak produced from this forest, which is over 3,000 acres in extent, has attracted attention all over the north of Scotland, and ship-builders and wheelwrights from all parts annually attend the sales. As early as the latter years of the last century the thinnings brought \$5,000 per annum, and between 1830 and 1840 the sale of timber and bark ranged from \$20,000 to \$25,000 yearly. Owing to the low price of both wood and bark, not so much has been cut lately as in former years, but notwithstanding the way it has been reserved, it is said that after paying every expense during the growth of the timber, the revenue of the forest per acre has been double that of the finest available land in the country. Some idea of the extent of the forest, including the oak and pine woods, may be gathered from the fact that in order to make a tour through them a walk of twenty-six miles has to be engaged in.

THE Menominee, Mich., Herald, in mentioning the slabs and edgings that are being shipped from Saginaw to Chicago, says that the amount of this kind of material destroyed in the burners at Menominee daily would supply a large city with wood steadily. Thousands of cords of edgings are consumed, with other refuse, every season, which if it could be "dropped" in a city like Chicago, would keep thousands of families in fuel the year round. It seems unnecessary to waste so much wood in order to get rid of it, and that, where mills are situated on navigable water, this waste might be profitably shipped for fuel.

Messrs. GEMMELL, TUCKETT & Co., in their monthly timber report, dated Melbourne, August 1st, state:—"The amount of business carried through during the month has been fully up to the average, and prices have been sustained."

AMERICAN LUMBER.—Market quite bare of w. p. t. and g. ceiling and shelving, and stocks of clear pine are lower than for years past. The only sales were ex Harvard, 43,510 ft. wide w. p. shelving, £11 10s. to £11 5s. per M super; 4,819 ft. 5 1/2 x 1 1/2, 6 x 1 1/2, t. and g. pitch pine (including tongue), 11s. 3d. per 100 ft. lineal.

ZEPER.—A healthy man never thinks of his stomach. The dyspeptic thinks of nothing else. Indigestion is a constant reminder. The wise man who finds himself suffering will spend a few cents for a bottle of Zepes, from Brazil, the new and remarkable compound for cleansing and toning the system, for assisting the Digestive apparatus and the Liver to properly perform their duties in assimilating food. Get a 10 cent sample of Zepes, the new remedy, of your druggist. A few doses will surprise you.

The Ottawa River.

An exceptional, not to say extraordinary, lowness of water in the Ottawa River at the present season affords a good opportunity for examining the bed of the stream, and becoming acquainted with hitherto hidden dangers to navigation. All along the river between the Chaudiere and Grenville, rocks and reefs, whose very existence was unknown, have appeared above the surface of the water. Opposite Ottawa three new islands are laid bare, and further down a most dangerous sharp pointed rock has appeared in McLaren's Bay. At various parts on the shores similar obstructions are now conspicuous.

These facts, we should think, ought to induce the Government to take steps for clearing the river of the worst, at least, of these rocks and reefs. A proposition, noted in these columns the other day, has been made to erect a dam at Grenville, and we hope it will receive favorable consideration by the Department of Public Works. But it is equally important to remove obstructions as it is to keep up the level of the water, and, as the season offers exceptional advantages, no time should be lost. A very small outlay, comparatively speaking, at the present time would be of the greatest advantage, and, perhaps, save both life and property hereafter. —Free Press.

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9 TORONTO STREET, TORONTO.
WHOLESALE DEALER IN
Clear, Pickings, Common and Hardwood
Lumber, Lath, Shingles, &c.
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Shingles and Dressed Stuff.
Foxmead, P. O., County of Simcoe, Ont.
Two Planers for sale or exchange for a Boiler. 120

S. S. MUTTON & Co.,
Wholesale Lumber Dealers
TORONTO.
We have for Sale a large quantity of PINE, OAK, WHITEWOOD, ASH, CHESTNUT, CHERRY, BUTTERNUT, BASSWOOD, &c.
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A. L. UNDERWOOD
WHOLESALE DEALER IN
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82 King Street East,
TORONTO, ONT. 121-10

WISDOM & FISH
IMPORTERS AND DEALERS IN
Rubber and Leather Belting
RUBBER HOSE, STEAM PACKING,
LUBRICATING OILS, COTTON WASTE
Wrought Iron Pipe and Fittings, &
And all Articles used in the Application of Steam to Machinery.
No. 41 Dock Street, St. John, N. B.
(SMALL'S BLOCK.)
N.B.—Estimates for Steam and Hot Water Heating Apparatus furnished on application. All work Warranted. 120

Flexible Board Rules,
With Steel Head, either Cleveland or London make, at \$1.75 Each.
GEORGE STETHEM,
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J. G. EDWARDS
HARDWARE MERCHANT,
LINDSAY.
BELTING, FILES, BARBIT METAL,
CHAINS, ROPE, and 117
LUMBERING SUPPLIES.

WANTED.
Cherry, White Ash, Black Ash, and Dry White Pine Lumber.
Quote Price delivered, and Carefully Describe:—Quality, Widths, Length, Thickness, and how long Sawed.
ROBERT C. LOWRY,
Wholesale Lumber,
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SAMUEL WINDRIM,
MANUFACTURER OF
Agricultural Implements, Etc
MILLBROOK, ONTARIO.
HAVING DISPENSED WITH THE SERVICES OF AGENTS, I take this opportunity to bring to the notice of intending purchasers of Reaping Machines, that I have now on hand a quantity of the Celebrated
HANLAN REAPER,
which has NEVER BEEN BEATEN YET, and am prepared to allow the Agents commission—FIFTEEN PER CENT—on all purchases. 117-12

Penetanguishene Foundry
AND
MACHINE SHOP
CRAIG & CAMERON, Proprietors.
The undersigned beg to announce to the public that they are prepared to make all kinds of Mill and Steamboat Brass and Iron Castings. All kinds of FLOW CASTINGS kept on hand. Plow Points and Landslides a specialty. We have first-class machinery and are prepared to do all kinds of TURNING or PLANING on short notice. We hope by strict attention to business and moderate charges, to merit a share of the public patronage. All work guaranteed.
O. A. CRAIG,
C. CAMERON
121-17

FOR SALE.
The Dexter & Whitwam Manufacturing Company, offer for Sale the Entire
Real Estate Plant and Machinery
OF THEIR EXTENSIVE
BENDING & TURNING FACTORY
Situating in the City of St. Thomas, in the County of Elgin, Ontario. For full particulars apply to H. BROWN, Manager, or E. MOORE, President. 120-12

J. T. LAMBERT,
Lumber and Commission Agent.
FOR SALE.
150 Mils. White Pine, 1 x 10 Stock.
175 " " do 1 x 12 " "
11 " " do 2 x 10 " "
20 " " do 2 x 12 " "
140 " " do 1 inch Sliding.
20 " " do 1 1/2 " "
40 " " do 2 x 10 Joists.
10 " Cedar, 3 x 0 " "
19 " Basswood, 1 1/2 inch.
APPLY AT THE OFFICE, 120
WELLINGTON STREET, OTTAWA.

Market Reports.

MONTREAL.

From Our Own Correspondent

SEPTEMBER 26.—Since the date of our last report the shipping of lumber has almost ceased. The shipment to South America was only one cargo to Buenos Ayres, consisting of 635,669 ft; to Cardiff, 9,007 pieces; to Cardiff, 129,000 feet. Lumber stocks here of all kinds are very low, both of sawn lumber and round logs; as a consequence prices are very stiff, and, water being so low, higher prices are expected very soon, at all events as soon as navigation closes. We do not at present alter our quotations, but outside figures for the most part rule. We still quote as under:—

Table listing lumber prices for various types like Pine, Spruce, Hemlock, etc.

The total shipments since the opening of navigation to date were 7,848,475 feet, against 4,319,278 feet for the same period of last year, being an increase of 3,529,197 feet. Advices from Ottawa report that many of the mills in the Chaudiere, owing to want of logs, want of water preventing their getting the logs to the mills, have been obliged to shut down, so that everything here looks for considerably higher figures in the near future.

In cordwood there has been considerable activity, and holders are making strenuous attempts to enhance values, but in the meantime ready money makes a little difference in their views. We continue to quote as under, at which some pretty fair transactions are transpiring. We quote:—

Table listing cordwood prices for Red Tamarac, Hard Maple, etc.

LATER.

OCTOBER, 10th.—There is a general complaint among the lumber merchants here of the difficulty of getting down lumber, owing to the lowness of the water, and as a consequence prices are very firm; but as the demand for building lumber has not been very brisk, prices can hardly be said to be quotably higher. Shipments since the date of our last report have been very small, indeed they have almost ceased. To Cardiff \$5,140 ft. have been shipped; to Liverpool, 23,314 pieces of deal boards and ends, and 155 pieces of oak; to Buenos Ayres, 539,148 ft. The total shipments to the River Plate since the opening of navigation to date were \$3,887,623 ft., against 5,751,431 ft. for the same period of 1880, showing an increase of 2,636,189 ft. The quotations remain the same as in my last epistle.

Cordwood.—There have been some large contracts entered into for long maple, at \$7.50, delivered. The prices on the wharf, ex cartage, are long maple, \$7.00; short do., \$6.50; long birch, \$6.50; short do., \$6.00; long beech, \$6.00; short do., \$5.50; tamarac, \$4.50. The demand for cordwood is better, and prices are very firm.

TORONTO.

From Our Own Correspondent.

OCTOBER 8th.—The block in lumber at this port continues much the same as when I last wrote you. When passing over the dock yesterday the writer estimated that nearly 3,000,000 feet of lumber, including that standing on the cars, was awaiting shipment, and at the time of writing this there is not one foot of available space left on any of the docks belonging to the H. & N. W. Co., and at the present time only one small vessel loading at the wharf. Lumbermen have had a hard time of it this season; what with scarcity of cars, fighting bush fire, burning of mills, and difficulty experienced in getting the lumber away after its arrival here, their lot has not been a happy one, and the season being now so far advanced, the anxiety of shippers to forward their lumber to its destination is quite excusable.

During the last three weeks large quantities of cedar ties have arrived here for shipment. Messrs. Rathbun & Son have purchased largely in this line north of this city, and are now shipping them to the American market. Two years ago \$13.00 per hundred was the ruling price for ties loaded on the cars; \$18.00 per hundred is the price now being paid, so that owners of tracts of cedar are beginning to realize that they have quite a bonanza. The contractors for the cedar block pavement in this city have now had to suspend work until spring, on account of the scarcity of cedar suitable for their purpose.

The scarcity in bill lumber still continues, and builders have frequently to visit all the yards in the city before procuring sufficient to meet their wants, and in many cases have found it impossible to get their orders filled, and yet in the face of this famine for dimension stuff, prices still hang at the old figures, and lumbermen are missing a good chance to raise their tariff of prices, simply for the want of a mutual understanding with each other on this and other matters equally important to the trade.

The 20 per cent. advance on R.R. freights has now become an established fact, and it is announced that the Railway Company repudiate special arrangements made prior to the advance in rates, but, to say the least, it is questionable if railway corporations have the power in their hands to grant special rates to certain individuals. It certainly seems unreasonable that one man or firm should have their lumber brought from any given point for three or four dollars per car less than some other men or firms, doing business at the same place. Yet such is, no doubt, the fact, but it is done in this way, in order to make it colorable, all bills for freight from all stations are made out at the same figure, and the favored ones get a rebato by applying at headquarters. This enables such persons to undersell their neighbors fifty cents per M., or else make that much higher profit. A more unjust method of doing business it would be hard to name. In such cases the smaller fry are at the mercy of the larger fish, as fifty cents per M. in times of close competition, and in sales devoid of risks, would be a fair living profit, especially if the sales were made in large quantities.

Shingles are somewhat more plentiful, and remain at the same figure retail, but considerably lower wholesale on rail or vessel, \$2.40 to \$2.45 being the ruling figures for 16-in. XXX shingles, F. O. B. vessel here. Sawn lath are in good demand, and less plentiful than formerly, and as the season's work comes nearer to its close, lath will likely advance in prices. Butter-nut is in excellent demand, and a good article will bring a good figure, especially if cut into 2, 3 and 4 in. plank, or 6 x 6 and 8 x 8, and any party having dimension stuff, say 2 x 8, 2 x 10, 2 x 12 and 20 and 22 ft., will meet with ready sale, and at good prices, on this market, as nine-tenths of all shipments arriving here are comprised of mill cull, and shipping cull boards. Sound stock boards and good lumber find their way over the docks, leaving little but coarse boards for the local trade. Black ash lumber of good quality will command ready sale here at present. Many people are now only beginning to find out the value of this wood for finishing purposes, and yet hitherto a building could be finished with this wood at less cost than when finished with good pine, and its appearance, when oiled, is much preferable to pine when painted, and its lasting qualities, in dry situations, nearly equal.

Building continues as briskly as ever, and it may serve to convey some idea of the large amount of lumber being used in this city when I state that the firm of J. & F. N. Tennant alone are reported to have sold about 1,000,000 ft. on the local market during the past month, and this amount sold mainly to consumers, and this would certainly not be more than the one-tenth of all the lumber sold to consumers during that same period.

Table listing lumber prices for Mill cull boards and shantling, Shipping cull boards, etc.

Table listing lumber prices for Scantling and joist, up to 23 ft., Cutting up planks to dry boards, etc.

LONDON, ONT.

From Our Own Correspondent.

OCTOBER, 10th.—There is a general talk of dullness in the lumber market here. It was at one time thought there would be a good demand spring up in the Fall, wood merchant's generally were confident of this result, but has not yet been realized, and, since my last, business has fallen off instead of increasing, as expected; there is, however, no grumbling, as all dealers seem to have enough to do, and appear satisfied. Prices, however, remain unchanged, which is a healthy sign.

As the Fall comes upon us building in this city narrows down to small limits, and there is nothing particular to note in this direction.

The Messrs. Green, whose extensive premises were almost completely destroyed by fire some time ago, are rapidly rebuilding, and they will be in working order again in a very short time. These premises will be of a more modern construction than formerly, and built with a view to evade any sudden attack of fire.

Mr. G. C. Hargreaves has effected a compromise, and the estate is being wound up. Meanwhile Mr. Hargreaves himself is employed in this market by a large wholesale Toronto firm.

The lumber coming in here is principally by the G. W. R. There are great complaints of the G. T. R. not having sufficient car accommodation for the requirements of the trade.

I must report the lumber market dull in this city, but prices rule about the same as given in my last.

QUOTATIONS.

Table listing lumber prices for Mill cull boards and shantling, Shipping cull boards, etc.

ST. JOHN, N. B.

From Our Own Correspondent.

DEALS.

Reference was made in our last report to the efforts being made to complete the loading of ships then in port, by the 1st inst., to secure their deck cargoes. Those efforts were quite successful, the result being to greatly reduce the dimensions of our fleet, as well as to exhaust our stock of deals. Probably the stock of deals here is less than it has been for more than a quarter of a century, and as the country mills are mostly idle, the prospect is that the quantity wintered here will be scarcely worth counting.

FREIGHTS.

The freight market is remarkably quiet; scarcely any tonnage offering, and but little wanted. The only recent transaction reported is the Champion, 799 tons, for Liverpool or Bristol Channel, at 57s. 6d., which may be considered about the market rate. Owners are talking of 60s., but considering the great scarcity of deals, it is doubtful if this can be obtained at present.

VESSELS IN PORT.

The following is a list of the vessels in port, with their tonnage and destinations:— Anna P. Oddell, 579, Glasgow; W. D. Wallat, 1413, Melbourne.

Table listing ship arrivals from Malville, Stanley, C. E. Robinson, etc.

The shipments of deals and other sawn lumber are as follows:— For Europe, 18,693,000 Sup. feet. " United States, 3,106,000 " October 7th, 1881.

From Another Correspondent.

SHIPPING.

OCTOBER 8th.—The fleet has been considerably reduced since our last, as quite a number of vessels cleared on the 1st of October, in order to get away before the deck load law came into operation. Under this law no vessel clearing after the 1st of October can take more than three feet of a cargo on deck, which of course materially reduces the amount of freight. English freights are not materially changed. We hear of one charter at 65s. 6d. to the Bristol Channel. Of the two steamers in port, one is unchartered at present, and the other has been taken for U. K. at private terms, said to be 5s. Coastwise freights are about as before quoted, and \$2.25 can be readily obtained for Boston. We are aware of one charter for Boston of a load of sleepers, at 14¢ cents, which is really better than \$3.00 per M., but this is an exceptional case.

OUR LUMBER EXPORTS.

The following is a statement of the clearances of lumber at the port of St. John, N.B., for transatlantic ports for September, 1881. During the month 32 vessels, having a total of 22,573 tons, were loaded with:— Deals, battens and ends, 20,491,226 sup. feet; Boards and shantling, 697,971 " "

Pine timber, 37 tons. We also give the shipments of lumber at the port of St. John, N.B., for transatlantic ports, from 1st Jan. 1881, to Oct. 1st, 1881:— Deals, battens and deal ends, 154,485,379 sup. feet; Boards and shantling, 4,899,184 " "

Pallings, 284,065 pieces. Pine timber, 806 tons. Birch, 3,609 " "

Logs are scarce and holders are not desirous of selling. About 300,000 feet of unmarked superior logs were sold in the boom at \$3.00. The English market remains fairly satisfactory, and at the present time the stock in Liverpool is not excessive, so that dealers can command good prices.

The American market is also tolerably remunerative. In Boston we can quote \$13.00 to \$14.00 for good wide spruce boards; laths at \$1.75 to \$1.87½. In New York laths have in some cases reached \$2.00, but the majority of sales have been at \$1.90.

Oct. 8th, 1881.

ALBANY.

OCTOBER 4.—The Argus says the demand for the past week has been largely in excess of the preceding, and the attendance of buyers better. A sale of a million and three-quarters to a Brooklyn firm is among some of the purchases we hear of. The scarcity of certain pine grades specially sought after for manufacturing purposes is being felt, and it is apparent the "cry of wolf" is not without reason, as we hear of a prominent Michigan manufacturer shipping logs direct from the saws to vessel. The lower grades of pine lumber have been sold, no doubt, too low, considering the yearly decreasing percentage of the better grades, and we see lighter stock here to-day than for years past, which no doubt will produce an effect on prices during the short business season that remains. Vessels from Canadian ports are difficult to get, and the rates asked very high. The northern mills are working with a fair supply of water.

The receipts of lumber by lake at Buffalo for the week ending Oct. 3rd were 8,660,000 feet and by rail 80 cars. The receipts by lake at

Oswego for the week, as far as reported, were 6,266,480 feet.

The receipts by canal at Albany from the opening of navigation to the 1st Oct. were:—

Table with 4 columns: Bds. & Sctls., ft. Shingles, m. Timber, ft. Staves, lbs. 1881, 1880, 1880, 1880.

Freights from Bay City to Buffalo and Tonawanda, \$3.00 per M.; from Saginaw, \$3.25. From Tonawanda to Albany, \$2.65. From Oswego to Albany \$1.75. From Port Hope to Oswego, \$1.25. From Ottawa to Albany, by boats, \$3.00 per M. feet.

River freights are steady:—

Table listing river freight rates for various destinations like New York, Bridgeport, New Haven, etc.

Quotations at the yards are as follows:—

Large table of lumber prices for various types of wood like Pine, Spruce, Hemlock, etc., with prices per M.

CHICAGO.

OCTOBER 5.—The Northwestern Lumberman says the Franklin street market since the date of our last report has been a very dull one, the dullness by all odds of anything which has been seen this year at that place.

CARGO QUOTATIONS.

Table of cargo quotations for various types of lumber like Joist and scantling, Mill run, etc.

LAKE FREIGHTS.

Table of lake freight rates for destinations like Marquette, Muskegon, Ludington, etc.

Receipts and shipments of lumber and shingles for the week ending October 4:—

Table of receipts and shipments for October 4, with columns for Receipts and Shipments, and sub-columns for Lumber and Shingles.

Receipts and shipments of lumber and shingles from January 1 to, and including, October 4:—

Table of receipts and shipments for the year, with columns for Receipts and Shipments, and sub-columns for Lumber and Shingles.

STOCK ON HAND SEPTEMBER 1.

Table of stock on hand for September 1, with columns for 1881, 1880, and 1879, and sub-columns for Lumber and Shingles.

OSWEGO, N.Y.

There is no change in quotations. Prices are firm, and the demand good. All lumber arriving in good condition finds ready sale.

The receipts to date for the years named are as follows:—1880, 143,000,000 feet; 1881, 124,000,000 feet. Lake freights from Lake Ontario ports is \$1.25; canal freights to Albany is \$1.75, and to New York is \$2.35.

Table of quotations for various types of lumber like Three uppers, Pickings, Pine, Common, etc.

BOSTON.

OCTOBER 8.—The Journal of Commerce says advices from every hand show business to be fully up to expectations. For all classes of stock there is a good call, and values are very steady.

CANADA PINE.

Table of prices for Canada Pine, including Selects, Dressed, Shelving, etc.

TONAWANDA.

Table of cargo lots for Tonawanda, including Three uppers, Common, Culls.

LIVERPOOL.

The Timber Trades Journal, of Sept. 24, says:—The import still continues moderate, and, as there is a fair and steady demand, prices continue firm, although it must be confessed that it is only by dint of hard work that sales are effected at the present rates.

That this view is well developed was shown at Messrs. A. F. & D. Mackay's sale last Friday, where the attendance was limited in a marked degree and the competition tame and spiritless.

warrant the auctioneer in proceeding, and it has since been sold in one line by private treaty at a good price. Of one cargo of St. John, N.B., deals only about one-half was sold, the remainder being withdrawn, sellers being very firm, and no doubt being strengthened in their position by the fact that the prospect of anything beyond a very moderate import being available for this year is becoming more evident every day.

Birch timber appeared in fair demand, and all that was offered was readily purchased.

The supply of this timber is likely to be small, especially for the better qualities, and should any of this description come down to the shipping ports it will probably be eagerly sought after. The sales by auction were as follow:—

Spruce deals, St. John, N.B.—

Table of spruce deal prices for St. John, N.B., with columns for length and width.

Deal ends—

Table of deal end prices for St. Margaret's Bay, N.S.

Birch timber, St. Margaret's Bay, N.S.—

Table of birch timber prices for St. Margaret's Bay, N.S., with columns for length and width.

GLASGOW.

The Timber Trades Journal, of Sept. 24, says:—There has been a very light import during the past week. The arrivals at Glasgow include a cargo of pitch pine planks, which goes into consumers' hands direct, being forwarded from ship's side per rail.

On Tuesday, September 20th, a cargo of Tabasco mahogany was offered, the first direct import here since October last.

These sales were well attended and the bidding spirited. The Tabasco mahogany, a cargo of ordinary quality, was rapidly cleared off, the market evidently not fully supplied with mahogany.

On Sept. 21st, Messrs. Singleton, Punn & Co. held a public sale of deals, &c., prices as under-noted. There was a good attendance, but buyers were evidently disposed to purchase sparingly for immediate wants, the demand by consumers meantime being rather languid.

Only a portion of the catalogue was sold; prices, however, were fairly maintained. The birch and ash logs were withdrawn, offers not coming up to broker's views.

AUCTION SALES.

On Sept. 20th, at Glasgow, Messrs. Farnworth & Jardine, of Liverpool, brokers:—A cargo of Tabasco mahogany from Chiltepec and Santa Ana, consisting of 280 logs (96,000 sale feet), sold at 5d. to 10d. per foot, averaging 6d.

Messrs. W. Connal & Co. thereafter sold by auction a parcel of 155 planks of Italian walnut, at prices ranging from 4d. to 6d. per foot.

On Sept. 21st, at Glasgow, Messrs. Singleton, Dunn & Co. brokers:—

Table of auction sales for St. John, N.B. and Do. Spruce battens, with columns for length and width.

UNION FOUNDRY

Union Street, --- Carleton.

Warerooms, Water Street.

ST. JOHN, N. B.

Allan Brothers

(Late of Harris & Allen)

MANUFACTURERS OF ALL KINDS OF

Steam Engines

AND

MILL MACHINERY.

Ships Windlasses, Iron Capstans

and Ships CASTINGS of all kinds.

Ships Cambooses & Cabin Stoves

COOKING AND HEATING

STOVES,

Shop, Office and Parlor Stoves, and Franklins.

Agricultural Implements.

BRASS CASTINGS.

Tin, Sheet Iron and Copper Ware for SHIP and HOUSE use.

Advertisement for Lumbermen featuring an image of a watch and text: 'Special Offer to LUMBERMEN. To any person sending me this advertisement and \$25 within the next 60 days, I will send a Genuine WALTHAM, or ELGIN WATCH.'

A. NORMAN

ELECTRICIAN,

4 QUEEN STREET EAST, TORONTO, ONTARIO.

Trusses for HERNIA, Rupture,

The most Durable and Beneficial kind known to Medical Science always in Stock, and fitted to the Body at Reasonable Prices.

BATTERIES FOR BATHS,

Of Special Sizes, made to order, both for Public and Private Use; and FARADIC BATTERIES always on hand. PRICES LOW. 1917

ROBIN & SADLER

594, 596, 598, St. Joseph St.

MONTREAL

Manufacturers

of

LEATHER BELTING

Fire-Engine

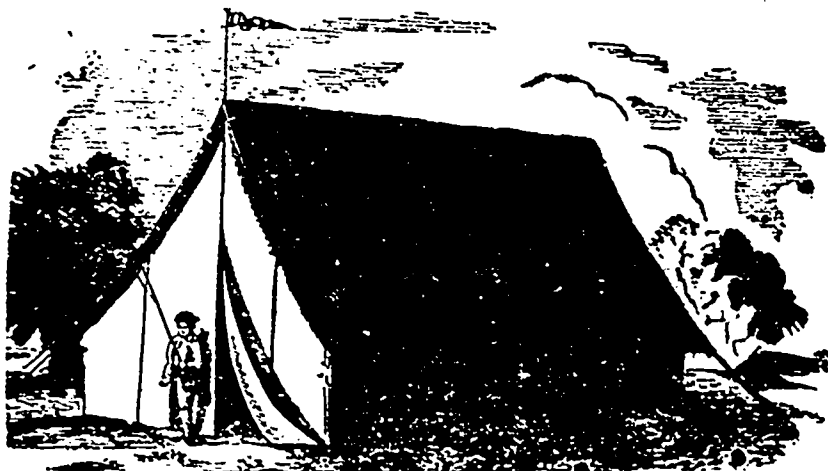
HOSE,

Lace Leather,

Mill Supplies, &c.

National Manufacturing Company

202 SPARKS STREET, OTTAWA.



Manufacturers of Tents for Lumbermen, Sportsmen, Camp Meetings, Photographers, Lawn and military Encampments, with or without extra roofs, all sizes and styles, white or fancy striped, mildew proof or plain. Prices from \$5, upwards. Flags of all descriptions, (regulation sizes) made of the best of silk-finish bunting. CAMP BEDS (Bradley's Patent) the best bed ever invented; size when folded 2 x 6 in.; 3 feet long, weighing only 11 pounds, but strong enough to bear the weight of any man. Waterproof wagon and horse-covers, tarpaulins sheets, coats and leggings of every description made to order on the premises. Special rates to Lumbermen. Send for catalogue and price list to

NATIONAL MANUFACTURING CO.,
202 Sparks Street, Ottawa.

The Best Axes in the World!

Single, Double and Triple Steel, 28 Patterns.



Warranted Good or Exchanged.



And Burrell's, Warnock's, and Dundas Axes, made specially for the Lumber Trade, repacked any weights without extra charge. Lindsay Pattern of Broad and Blocking Axes. LANCE TOOTH SAWS, warranted good. P. Jewell & Sons (Hartford, Conn.) LEATHER BELTING. 2d CUT FILES. LATH YARN. Mill and Shanty Hardware. No. 1 LARD OIL. Heavy HAMERS, BUCKLES and HARNESS TRIMMINGS. Ballard and other RIFLES, from \$10 each. Large assortment of CARTRIDGES.

GEORGE STETHEM, Peterborough, Ont.

Importer, Jobber and Retail Dealer in Hardware. 1217

Wrought Iron Shanty Cook Stoves

The Best Article ever offered to the Trade.

I have much pleasure in drawing attention to my WROUGHT IRON COOKING STOVE for Shanty, Hotel and Boarding House use. These Stoves are made of Heavy Sheet Iron, the top and lining of the fire-box being of Heavy Cast Metal and all the connecting parts of substantial Wrought Iron Work. The dimensions of these Stoves are as follows:—

SINGLE OVEN STOVE

Top surface contains six 10-inch holes, with ample room between, and one oven 16 x 24 x 26.

DOUBLE OVEN STOVE

The Double Oven has a top surface containing twelve 10-inch pot holes, with two ovens, each 16 x 24 x 26. One fire-box of suitable size for area to be heated. Below will be found Testimonials from some of the leading Lumbermen, who have used my Wrought Iron Cook Stoves since I commenced manufacturing them. They are the names of gentlemen who are well known and reliable, and will carry more weight than any recommendation of my own could do.

The Best Stove I have ever Used.

PETERBOROUGH, May 31, 1880.

ADAM HALL, Esq., Peterborough. Dear Sir,—I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

The Stove for Lumbermen.

PETERBOROUGH, June 1st, 1880.

ADAM HALL, Esq., Peterborough. My Dear Sir,—We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, IRWIN & BOYD.

Gives the Greatest Satisfaction.

PETERBOROUGH, June 3rd, 1880.

A. HALL, Peterborough. Dear Sir,—I have had the Wrought Iron Cook Stove, purchased from you, in constant use ever since last fall, and it gives the greatest satisfaction in every respect. I can recommend them highly to any one who is in the lumber business.

Very truly yours, GEO. HILLIARD, M.P.

EVERY STOVE GUARANTEED

All the necessary TINWARE and CUTLERY for Shanties supplied at the Lowest Prices.

ADAM HALL, Peterborough.

HART EMERY WHEEL COMPANY, Limited

HAMILTON, CANADA.

GILBERT HART, Detroit,
President.

JAMES T. BARNARD, Hamilton,
Secretary-Treasurer.

SAMUEL BRIGGS, Hamilton,
Superintendent.

MANUFACTURERS OF THE CELEBRATED

DETROIT

EMERY and CORUNDUM WHEELS

These Wheels are
Wire Strengthened



And Specially Adapted
For Saw Gumming

Neither Animal nor Vegetable Glue or Gum being used in their composition, they are NOT LIABLE TO HEAT, and give out no Odors, while

They Surpass All Other Wheels for Free Cutting and Durability.

We refer to the following well known Saw Manufacturers for Opinions as to the Quality of our Wheels:

Messrs. SHURLEY & DIETRICH,
GALT.

JAMES ROBERTSON, ESQ.,
MONTREAL.

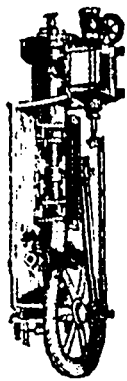
Messrs. R. H. SMITH & CO.,
ST. CATHARINES.

Messrs. JAMES ROBERTSON & CO.,
TORONTO.

WE ALSO REFER TO

WILLIAM HAMILTON, ESQ.,
PETERBOROUGH,
Manufacturer of the Coven Saw Sharpeners.

Messrs. H. B. RATHBUN & SON,
DESERONTO,
Lumber Merchants.



A. LEARMONTH & Co.

ENGINEERS AND FOUNDERS,

MANUFACTURER OF

Steam Engines, Rotary Pumps, of all sizes, for Paper and Pulp Mills, Steam Pumps, and a Variety of other Pumps, Propeller Engines for Yachts & Tow Boats.

Iron Railings, Hoisting Machines for Stores, Jack Screws, Park Mills, all kinds of Machinery for Mines, Saw Mills, Flour Mills.

St. Paul St.,

QUEBEC.

MILL SUPPLIES.

Extra Stretched and Patent Smooth Surface

RUBBER BELTING—in Stock, 2, 3, 4, 5, and 6 Plies.

HOYT'S CELEBRATED LEATHER BELTING.

COTTON BELTING, for Flour Mills. &c., Superior Quality.

DISSTON'S CELEBRATED MILL SAWS.

Steam Packing of all kinds, Rubber and Linen Hose, Silk Bolting Cloth, Emery Wheels, Lacing Leather (Page's Genuine), Lard, Seal, Cylinder, Spindle, West Virginia and Wool Oils. Our Stock includes Mill Supplies and Rubber Goods of all kinds. Quotations furnished for any part of Canada.

ESTEY, ALLWOOD & CO., SAINT JOHN, NEW BRUNSWICK.

ROBERT W. LOWE,

AUCTIONEER AND COMMISSION MERCHANT,

81 SANDS BUILDING, PRINCE WILLIAM STREET.

Cash advanced on Goods put in for sale. No Storage charged. All kinds of Merchandise Bought and Sold. New and Second-hand Furniture always on hand. Agent for Hazellhurst & Co's WINTHROP COOKING RANGES, WATERLOO WOOD STOVES, FRANKLIN, &c., &c., &c.

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SAINT JOHN, NEW BRUNSWICK.

ABRAMS & KERR.

MANUFACTURERS OF

Steam Engines, Mill Gearing, Rotary Mills, Shafting, Planers, Hangers, Pulleys, Variety Moulders.

SPECIAL MACHINERY MADE TO ORDER

Latest Improved Spool and Bobbin Machinery.

Every Variety of Heavy and Light Casting.

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Foundry and Machine Shop on City Road,

ST. JOHN, NEW BRUNSWICK.

Northey's Steam Pump Works

BOILER FEED PUMPS,	MINING PUMPS,
AIR AND CIRCULATING PUMPS,	PUMPS SPECIALLY ADAPTED for
STEAM FIRE PUMPS, and	OIL PIPE LINES,
WRECKING PUMPS.	And CITY WATER WORKS.

No. 47 King William Street.

HAMILTON, ONTARIO.

SEND FOR CIRCULAR.

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LUMBERMEN'S STATIONERY.

We will supply anything in the line of BLANKS or STATIONERY for Lumber Shanties and Offices at City prices.

All Printing done in the Highest Style of the Art, and at Lowest Living Prices.

Book-Binding of every Description got up in a very Neat and Superior manner.

Account Books Ruled and Bound to any desired Pattern.

For Schedule of Prices address, describing the kind and quality of work desired,

TOKER & CO.,

"THE CANADA LUMBERMAN,"

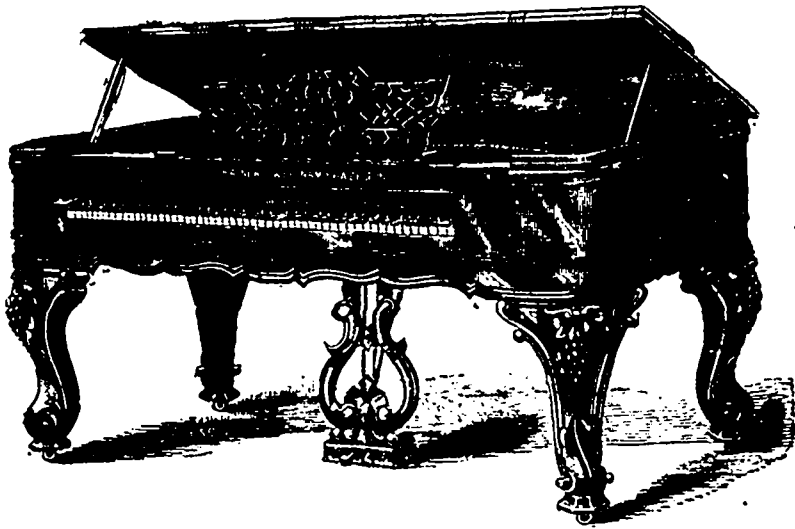
PETERBOROUGH, ONTARIO.

DAVID JONES' CELEBRATED Cast Steel Table Cutlery!

Best Cast Steel, Warranted.

Edge Tool & Cutlery Works, Woodstock, N.B.

Awarded Diploma and Medal by the New Brunswick Government in 1873.



The Rainer Piano Always Triumphant!

CARRIES OFF THE HONORS OF 1880 AS FOLLOWS:

- At Toronto Industrial Exhibition, 1st Prize, Diploma & Medal for Best Square Piano
- At Hamilton Provincial Exhibition - - - - - 1st Prize and Diploma
- At Brantford Southern Fair - - - - - 1st Prize and Diploma
- At Guelph Central Exhibition - - - - - 1st Prize and Diploma

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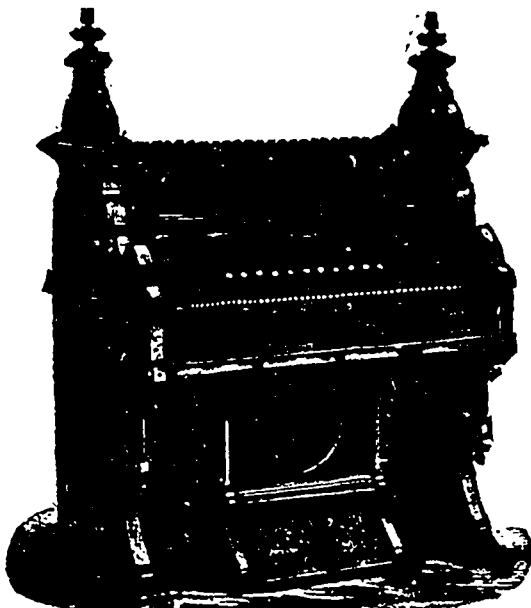
RAINER, SWEETNAM & HAZELTON,
MANUFACTURERS,
GUELPH, ONTARIO.

The Crowning Triumph of the Bell Organ

The Bell Organs have just received the HIGHEST AWARD and SPECIAL PRIZE (Gold Medal) at the International Exhibition, Sydney, Australia, this year for their Organs over all the English and American makers. This, along with the unlimited awards, prove that

THE BELL ORGANS LEAD THE WORLD.

WE RECEIVED
Medal and Diploma.....Provincial Exhibition 1871
Medal and Diploma.....Centennial Exhibition, 1876
International Medal and Diploma, Sydney, Australia, 1877



WE RECEIVED
Only Medal for Parlor Organ, Provincial Exhibition, 1878
Only Medal for Parlor Organ, Industrial Exhibition, 1879
And Gold Medal.....at Sydney, Australia, 1880

The Bell Organ Manufactory is the Largest and Oldest in the British Empire, and the fact that we have sold nearly 15,000 proves that they are the best in the market. We GUARANTEE ALL OUR ORGANS for five years. Correspondence invited. Illustrated Catalogue mailed free.

W. BELL & CO.
41 to 47 East Market Square, GUELPH, Ont.

35 Horse Mill on Bay Chaleur makes Norwegian Captains Exclaim

"They are the best Cut Deals we ever saw Shipped"

R. H. MONTGOMERY

writes from New Richmond, Bay Chaleur, P. Que., 12th June, 1881:—"Have just come from Mill. She is working well and doing good work. Got up at 7 from cold water in 25 minutes. We cut yesterday, (all spruce logs) 19,636 feet. When in the mill this afternoon, look out my watch and timed the mill. He cut 1 spruce log, 12 feet long, in 60 seconds. I am much pleased with my mill. He writes again 22nd June:—"My 35 Horse Power Belted Mill still con- out SIXTY-NINE DEALS." My Norwegian captians of the vessels waiting to be

BEST CUT DEALS THEY HAVE EVER SEEN SHIPPED.

The above Mill is our 35 H.P. Cut-off Engine; return tubular boiler; No. 2 saw iron cut 3 1/2 logs; endless chain belt-wheel; Sash Saw; New Brantford Edger; Single Drummer; Sawdust Carrier; Deal Halls, etc., put into operation.

Waterous Engine Works Company, Brantford Canada.

LUMBERMEN

Will always find a Large Stock of

Shanty Blankets

AND

HORSE BLANKETS

At LOWEST Mill Price, at

JNO. MACDONALD & CO'S

TORONTO.

Send Sample Order for our LINED SHAPED

HORSE RUG, a Specialty, highly recommended for

Wear and Warmth

EMERY WHEELS FOR SAW GUMMING!



Solid Emery Wheels are now almost in universal use for the purpose of gulletting and gumming saws. Statistics show from 25,000 to 30,000 saw-mills in the United States. Many of these run only a single saw each. A one-saw mill would use one or two wheels a year, costing \$1 to \$1 each, and when such small mills order single Emery Wheels from the factory, the express charges often equal the cost of the wheel. There was a time when the quality of Emery Wheels was so uncertain, and the demand so flake, that storekeepers could not afford to carry them in stock. Now, however, Saw Gumming Wheels have become as staple an article as Files, and every dealer in saws, Hardware and Mill Supplies can afford to carry a few dozen standard sizes in stock. Large dealers order stocks of \$500 to \$750 worth at a time. Saw Gumming Wheels are used with the edge (or face) square, round or beveled. Probably seven-eighths of all in use are beveled.

The principal sizes are:

8x4	} 1/2 in. hole.	10x4	} 3/4 in. hole.	12x4	} Holes, 1/2, 3/4 and 1 inch.
8x6		10x6		12x6	
8x8		10x8		12x8	
		10x10	12x10		
		10x12	12x12		
		10x14	12x14		

Probably more wheels 12x4, 12x6 and 12x8 are used than all the other sizes together. Saw Gumming Wheels are used, however, of all sizes up to 24x1. The most frequent complaint is that Emery Wheels harden the saw so that a file won't touch it. The answer is that you don't want a file to touch it. An expert workman will shape and sharpen the teeth with an Emery Wheel, leaving the teeth case hardened, in which condition the saw will cut about 33 per cent. more lumber than a soft saw will. Those who want to use the file, however, have only to touch the saw lightly a second time (after going all over it once), and this second touch will cut through the case-hardened scale.

A QUESTION OF QUALITY.

Thirteen years of experience as makers of, dealers in, and actual users of Emery Wheels, have led us to a decided opinion as to what quality is the best. We prefer for almost every use an "Extra Soft" wheel like the "Pocono." We believe that money lost through the rapid wear of the wheel is more than made up by the money saved on wages. As we cannot get every one to adopt our views, we make several qualities, so as to meet their views. We say to those who think they can only be satisfied with some other make of wheels (not Tanite), that we can furnish qualities to match any and every other make. If you have got used to some special quality of wheel, let us know what it is, and we can send you a Tanite Wheel of similar quality. Our regular classification of Saw Gumming Wheels is as follows:

CLASS 2. MEDIUM-HARD.—This Wheel is THE STANDARD Saw Gumming Wheel all over the world. Probably seven-eighths of all the Saw Gumming Wheels used are "Class 2. It cuts fast and keeps its shape well. Some think it too hard, some too soft. We prefer the "Pocono."

CLASS 3. MEDIUM-SOFT.—The same as to coarseness and fineness as "Class 2," but a softer, and therefore freer cutting wheel.

CLASS "POCONO." EXTRA SOFT.—This Wheel we prefer to all others. It is both finer in grain and softer than either of the above. As a Saw Gumming Wheel, Class "Pocono" is specially suited to those practical and experienced Sawyers who know how to grind with a light touch, and who want a free cutting wheel that will not create much heat.

Illustrated Circulars and Catalogue, showing Cuts of Saw Gumming Machines, and Shapes, Sizes and Prices of Wheels, sent free on application.

The Tanite Co. Stroudsburg, Monroe Co. Pennsylvania

CANADIAN TRADE SPECIALLY SOLICITED.

M. Covel's Latest Improved Automatic Saw Sharpener!

Is the Most Perfect Machine that has ever been Introduced into Mills for that purpose.

**CIRCULAR SAW
STEAM FEED!**

I would also call special attention to my

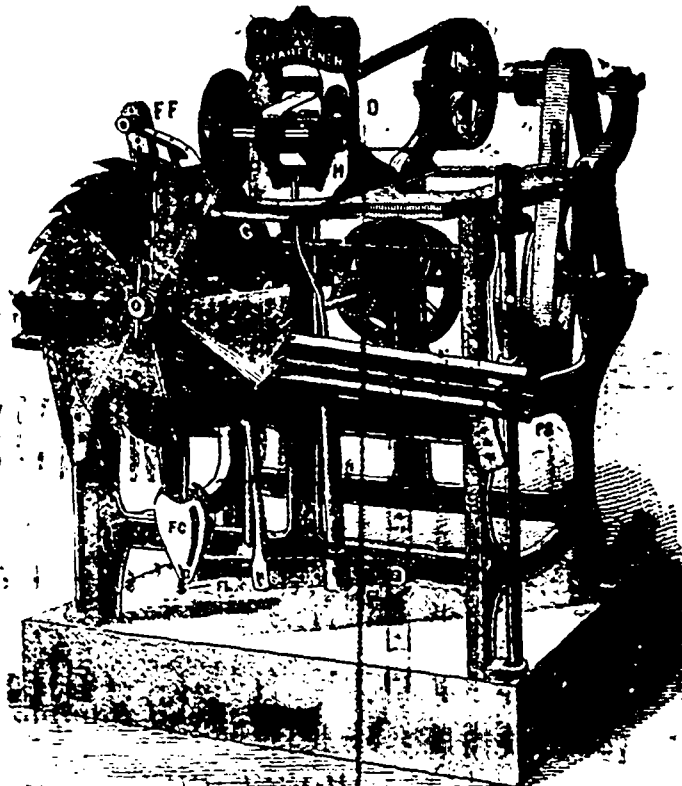
Heavy Circular Saw Mills

and for STEAM MILLS, would recommend the Steam Feed, having put in several which are giving the best of satisfaction, as will be seen by the following testimonials:—

GRAVENHURST, August 20th, 1880.
WM. HAMILTON, Esq., Peterborough.
DEAR SIR—I have used your Steam Feed for some four months, and it has given me perfect satisfaction in every way; it is admired by every person who has used it, and to be the best feed ever invented. Since I put it into my mill, I have not lost ten minutes time fixing anything belonging to it. I can cut 18 boards 13 ft. long in one minute. It can do much smoother and better work than the planer feed. It is easily governed and reverses the carriage instantly. I am thoroughly satisfied with it and can recommend it to any person who has a Circular Saw Mill for cutting long or short logs. I consider I have cut more lumber than will pay for the Steam Feed since I got it than I would have cut had I not put it in.

Yours respectfully,
WILLIAM TAIT,
Lumberman, Gravenhurst.

Toronto, August 11th, 1880.
WM. HAMILTON, Peterborough, Ont.
DEAR SIR—The Steam Feed you put in is working splendidly.
Yours, &c.,
THOMPSON, SMITH & SON.



MILL MACHINERY!

I am also manufacturing Saw Mill Machinery, for all sizes of Gang or Circular Mills, Span or Double Circulars for Blasting Small Logs. My Patent Jack Chain for drawing logs into Saw Mills, acknowledged by all to be the Cheaper and best ever got up; also, my Patent Lumber Markers, different sizes of Edgers, Gang Lath Mills, Trimmers, Power Gummers, and all Machinery used in a first class Gang or Circular Saw Mill; also, small Hand Goggles for use in the woods, for Cross-cut Saws. Rotary Pumps of different sizes, for Fire Protection in Mills, &c.

Horizontal Engines and Boilers



Where economy of fuel is the great consideration, along with uniformity of speed, such as is required in Grist and Flouring Mills, Woollen and Cotton Factories, or large Factories of any kind, I supply the Corliss Engine. I feel justified in saying that our Style, Workmanship and Finish on this Engine will be no obstacle to its reboon, and certainly is not equalled in this country for economy of fuel. I have them working at 2 1/2 pounds of coal per horse-power per hour.

WILLIAM HAMILTON,

PETERBOROUGH, ONT.