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

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VOL. 5.

PETERBOROUGH, ONT., JANUARY 15, 1885.

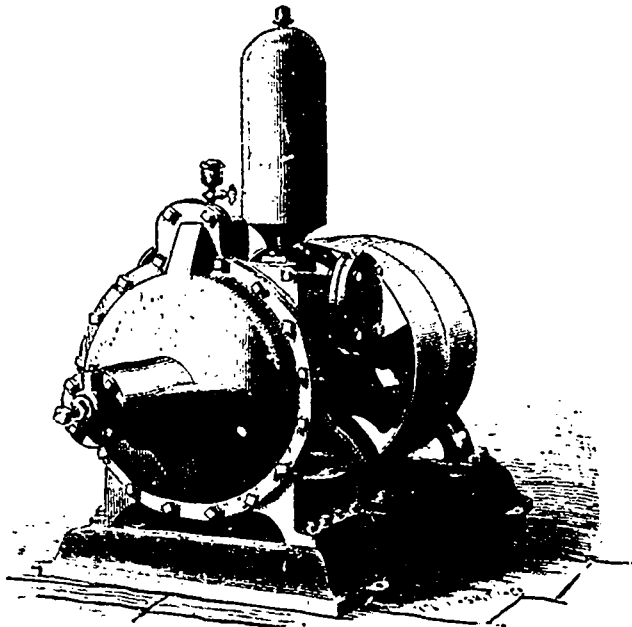
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NO. 2.

THE LUMBER AND TIMBER TRADE.

Messrs. J. Bell Forsyth & Co.'s annual trade circular is, says the *Quebec Chronicle*, very interesting to our commercial public. The figures presented deal, in an exhaustive manner, with the annual returns of manufacture, export and stock wintering, together with comparative statements, prices current, etc., etc. The arrivals of ocean steamships, during the year 1884, were 240, representing a tonnage of 427,834 tons. This marks a decrease of 29 steamships as compared with the list of arrivals in the previous year. Of sailing vessels from sea we had in 1884, 499 craft, with tonnage of 380,147, as compared with 627 vessels, 504,962 tons, last year. These figures indicate that the timber and deal trade of this port for the past season has been much more limited in volume than usual. A great falling off is also noted both in supply and export. The number of sailing vessels which cleared at the port of Quebec for sea, lumber laden, from the opening to the close of navigation, in 1884 was 366, tonnage 291,398. In 1883 the returns gave 487 vessels, tonnage 416,169.

"With this greatly reduced export," says the circular, "we might naturally look for more encouraging accounts from the principal markets in Great Britain to which our products are conveyed; but as yet we can discern no improvement, trade there is depressed, no revival has taken place in shipbuilding, which industry absorbs so much Canadian timber, and the imports of wood goods from other quarters have been more than sufficient for all requirements." It is gratifying to learn that the trade between Canada and South America is increasing. The shipments in 1884 amounted to about 37 million feet board measure from the St. Lawrence.

The table of prices current in Messrs. Forsyth's circular is based on actual sales. We print the statistics below, as they are likely to prove of interest to our merchants and others that are interested in the lumber and timber business:

	\$ cts.	\$ cts.
White pine, in the raft, for inferior and ordinary, according to average, quality, &c., measured off.....	0 15	@ 0 18
For fair average quality, according to average, quality, &c., measured off..	0 18	@ 0 22
For good and good fair average, according to average, quality, &c., measured off.....	0 22	@ 0 25
For superior, according to average, quality, &c., measured off.....	0 25	@ 0 29
In shipping order, according to average, quality, etc.....	0 20	@ 0 38
Waney board, 18 to 19 inch, according to average, quality, &c.....	0 32	@ 0 54
Waney board, 19 to 21 inch, according to average, quality, etc.....	0 34	@ 0 37
Red pine, in the raft, measured off, according to average and quality.....	0 12	@ 0 18
In shipping order, 33 to 45 feet, accord-		

ing to average and quality.....	0 16	@ 0 22
Oak, Canada, by the dram, according to average and quality.....	0 40	@ 0 45
Michigan and Ohio, by the dram, according to average and quality.....	0 46	@ 0 40
Elm, by the dram, according to average and quality, 45 to 50 feet.....	0 34	@ 0 35
Elm, by the dram, according to average and quality, 30 to 35 feet.....	0 28	@ 0 30
Ash, 14 inches and up, according to average and quality.....	0 28	@ 0 32
Birch, 16 inch average, according to average and quality.....	0 22	@ 0 24
Tamarac, square, according to size and quality.....	0 12	@ 0 16
Flatted, according to size and quality..	0 10	@ 0 12
Staves, merchantable pipe, according to quality and specification.....	\$305	@ \$320
W. O. Puncheon, merchantable, according to quality and specification.....	\$ 75	@ \$ 80
Deals, bright, according to mill specification, \$115 to \$118 for 1st, \$75 to \$80 for 2nd and \$35 to \$37 for 3rd quality.		
Bright Michigan, according to mill specification, \$130 to \$140 for 1st, and \$90 to \$93 2nd quality.		
Light spruce, according to mill specification, \$33 to \$40 for 1st, \$22 to \$24 for 2nd and \$20 to \$22 3rd quality.		

Timber sold in the raft subjects the purchaser to great expense in dressing, butting, and at times heavy loss for culls—if sold in shipping order, the expense of shipping only is to be added.

These excerpts from the circular relating more particularly to the varieties of wood employed in commerce, are of general interest to the public:—

WHITE PINE—Waney board.—The supply has been light, and generally speaking of good quality, the shipments considerable, leaving a stock on hand slightly over the average of the past five years. The demand has been good all season and especially during the autumn, when it was found that large average and choice lots were not easily procurable, and our highest quotations were given for timber of this class. As to the quality on hand we should remark that a large percentage is composed of Ottawa wood, small in size and poor in quality, while large average and choice timber is scarce.

SQUARE.—The quantity measured is unusually light, comprising as it does some rafts now wintering on the Ottawa; the shipments have been exceptionally small and the stock wintering rather over the average of past years. There has been considerable difficulty all season in placing square timber and transactions have been chiefly confined to those rafts containing a good proportion of first class wood. Apart from 12 to 14 rafts manufactured during the winter of 1883 and 1884 and which have been held back on the Ottawa, there will be but a small supply to come from that quarter next season, as the winter's production according to the last estimates will not exceed 1½ million feet altogether, including a proportion of waney

board. Quite sufficient, however, for all requirements likely to arise, and the manufacturers are acting very prudently in curtailing their operations to such an extent. Our present stock comprises the usual proportion of ordinary and inferior wood for which there is at the present period little or no demand.

	Supply.	Export.	Stock.
1884 { Square.....	3,707,159		
{ Waney.....	2,199,867		
1883 { Square.....	7,412,034		
{ Waney.....	3,786,623		
1884	6,047,680	{ 7,501,529 Square.	
		{ 2,399,001 Waney.	
1883	10,427,000	{ 7,780,620 Square.	
		{ 2,758,840 Waney.	

RED PINE—The supply though unusually light has been ample, the consumption in the home markets having greatly diminished of late years. Good timber has been in fair request and the stock now wintering includes a considerable quantity of small inferior wood. The production will be almost nil this winter.

	Supply.	Export.	Stock.
1884.....	327,735	614,280	1,012,426
1883.....	499,111	1,048,960	1,510,925

OAK—Both the supply and export have been exceedingly moderate, and the stock on hand unusually light. Prices have been well maintained although transactions have not been numerous. The quantity wintering at Garden Island, we learn, is heavier than last season. The present mild weather and want of snow in the West, should it continue, will seriously curtail the production of Oak and other hardwoods this winter.

	Supply.	Export.	Stock.
1884.....	772,260	1,212,520	837,715
1883.....	1,916,322	2,132,880	1,203,347

ELM—The quantity measured although double that which arrived in 1883 is still under the average and about equal to the shipments, leaving a small stock for next spring. Standing timber is scarce and the manufacturer finds much difficulty in procuring choice wood. The production will not exceed that of last year from all accounts.

	Supply.	Export.	Stock.
1884.....	657,919	658,000	114,961
1883.....	309,531	739,920	87,424

ASH—The receipts have been in excess of past years, the export an average one, and the stock on hand almost sufficient for a season's shipments. Prices are easier than last year and this winter's productions will be small in consequence.

	Supply.	Export.	Stock.
1884....	451,984	360,080	339,358
1883.....	263,448	346,320	135,228

BIRCH—With a limited supply and fair shipment this wood has been in good request. The quantity wintering is light and the supply for next year likely to be a moderate one.

	Supply.	Export.	Stock.
1884.....	194,346	241,120	23,038
1883.....	132,621	233,040	6,629

STAVES—PIPE.—The few Mille (94 in all) culled must strike our readers as being alarmingly small, still these figures are correct. Twenty years ago the receipts 1817 Mille, an immense decrease in this once profitable branch of the Quebec trade! This supply appears to have been ample, as prices in Great Britain have ruled low. The stock wintering, though apparently light, is above the average of the past five years.

PUNCHEON—In 1864, 4,623 Mille were received against 261 in 1884, a decline in the same ratio as pipe. The export has been less than usual, the stock on hand moderate. We reduce our quotations for both pipe and puncheon from those of a year ago.

1884 { Pipe.....	94	183	379
{ Puncheon.....	261	700	474
1883 { Pipe.....	680	549	470
{ Puncheon.....	663	933	805

DEALS—PINE.—The demand has been chiefly for 1st and 2nd qualities which have been scarce, have ruled high and been in great request, especially choice lots from Michigan and elsewhere. There is a very considerable decline at this port both in the supply and export, while we find statements from Montreal and elsewhere showing a very decided increase in the year's shipments. We are aware that there are several causes at present influencing a portion of the deal trade to Montreal, but when we hear that owners of steamships refuse to charter their vessels to load at Quebec owing to certain bylaws of the Ship Laborers' Benevolent Society we think it only right to call attention to this matter of such grave importance to the ship laborer as well as to all others interested in the trade or welfare of this port. The total shipments from Montreal and Piorroville, as we learn from the circular of Messrs. Anderson, McKenzie & Co., amount to over two million (Quebec stand.) pine and spruce—a very great increase in the past two years.

	Supply.	Export.	Stock.
1884.....	2,247,240	2,442,946	847,653
1884.....	3,228,622	3,993,071	1,543,359

SPRUCE have not varied much in value, the low prices ruling in Great Britain leaving an insufficient margin for profit. The supply and export have been light and the stock wintering a moderate one. Owing to the present prospects the cut of logs will be greatly curtailed. First quality are scarce and in great request while we do not alter our quotations for 2nd and 3rd quality.

	Supply.	Export.	Stock.
1884.....	2,222,537	2,636,465	838,817
1883.....	3,569,440	2,729,635	1,762,725

Freights opened at 20s. to 22s. timber, 50s. deals to Liverpool. 22s. to 23s. 3d. timber, 50s. deals to London. 17s. to 18s. 6d. timber, 50s.

deals to Clyde. Closing at 21s. timber, 50s. deals to Liverpool. 22s. 6d. timber, 55s. deals to London. 21s. timber to Clyde, 22s. 6d. timber for orders safe port U. K. Lambert freights for River Plate ranged from \$11 to \$14 per M. ft. B. M.

On the whole, the showing is not as bad as many were inclined to believe it would be, at the opening of business in the early part of the present year. Until business looks up our best policy will be to curtail our exports.

THE WOOD MARKET IN BRITAIN.

Trade in timber or lumber in the United Kingdom was very quiet at last accounts. "Hand to mouth orders" were the rule at Liverpool: "trade exceedingly quiet" at Hull; "the timber trade presents a very dull appearance" at West Hartlepool; "less is being done than at any time these twelve months" on the Tyne; "merchants still complain of the dull state of business" at Cardiff. Such are the reports to the *Timber Trades Journal* of Dec. 20th last. And at Glasgow there was, up to the 18th ult. "generally a quiet business, much of what was offered being withdrawn for lack of competition." From Leith comes word of "the dullness of trade, speculative building being practically at a stand still." In London alone does there appear to be any exception to the general tenor we have above described. Pine goods there are helped in price by the destruction of 70,000 pine planks by the great fire at Dalston, about 40,000 of which were owned, it appears, by Messrs. Bryant, Powis & Bryant.

The imports in English, Welsh, Scotch and Irish ports for eleven month of last year compared with the like period of 1883 show a decline at the close of November last equal to 324,000 loads or about 5 1/2 per cent. We subjoin the figures relating to principal ports:

	11 mo. 1884.	11 mo. 1883.
London.....Hewn	178,032 loads.	103,017 loads.
Sawn	1,196,934	1,189,034
Liverpool....Hewn	162,859	160,303
Sawn	409,180	474,000
Hull.....Hewn	84,055	80,993
Sawn	329,260	365,183
Cardiff.....Hewn	278,329	226,230
Sawn	110,540	82,913
Hartlepool...Hewn	143,837	153,346
Sawn	148,437	162,624
Grimsby....Hewn	78,900	99,647
Sawn	129,939	130,070
Bristol.....Hewn	19,372	19,885
Sawn	108,745	99,781
Newcastle..Hewn	48,741	65,890
Sawn	69,170	85,532
Sunderland..Hewn	87,127	115,036
Sawn	35,680	42,335
Greenock...Hewn	56,450	108,625
Sawn	34,940	46,647
Glasgow....Hewn	11,257	8,277
Sawn	56,326	58,572
Tot'l, 117 ports Hewn	1,872,080	1,006,622
Sawn	3,916,356	4,115,263

THE VALUE OF TREES.

A good lesson in regard to the value of trees as an agricultural product is now being taught the farmers of certain sections of Ohio and Indiana. As most of our readers know, this portion of the country has for many years been the principal source of the black walnut lumber, long so fashionable here, and still very highly prized abroad. Twenty or thirty years ago the black walnut trees nearly covered the ground in some counties, and although the beautiful color and grain of the wood caused a steady demand for it and at good prices, the process of cutting down and sawing the logs was too slow for the ignorant and improvident settlers, who burned over thousands of acres of forests to save themselves the trouble of thinking how to clear the land intelligently. The more sensible of them sawed and split the beautiful timber for framing their houses and building fences, which are worth to-day nearly as much as if they were of solid mahogany; but by far the larger portion was dispersed in smoke and ashes. As the supply of timber diminished the value has advanced, and a combination of speculators is said to have been formed within a few months to secure all the remaining available stock and hold it at its own price. The agents of this combination, which is

supposed to have been formed in England, are now engaged in buying the timber still standing, and are said to have secured already about \$5,000,000 worth of trees which are being rapidly cut down and shipped across the ocean. The sudden demand caused by these extensive operations appears to have opened the eyes of the farmers for the first time to the irreparable loss which they have inflicted upon themselves in the reckless destruction of twenty years ago. One, in particular, informed a correspondent of one of the New York papers that he worked almost incessantly for eight years to clear the black walnut trees off his farm, burning more than eighty acres of timber on his own ground. During the thirty years since this wholesale destruction was effected the farm has been constantly cultivated, and is now valued at about \$8,000. If it could be put again in the condition in which it was before the clearing commenced, it would be worth \$100,000, so that the old farmer's eight years of toil were practically devoted to throwing away his money at the rate of \$1,000 a month. It is true that by that means his land was cleared for crops, but the experience of other countries show that judicious thinning, in place of indiscriminate destruction, would have reduced the producing capacity of the farm very little, if any, and would have increased the value of the timber reserved so much as to compensate in a great degree for that cut away, so that the owner might have secured both profits instead of one. The advantages of such thinning, it must be remembered, would be greater with black walnut than almost any other timber, for the irregular twists which are apt to effect a forest tree deprived of its companions, while they would injure the value of pine, much increase that of the so-called fancy woods, by the variety in grain which they produce; and the gnawing of cattle or the effects of wind or lightning, to which trees standing in open fields are liable, are all sources of new beauty, and consequent enhancement of price. As we have said before, we have seen a single black walnut log for which \$5,000 was paid, and one gnarled or crooked tree to the acre would give such a farm a great value.—*American Architect.*

THE HAND DRILL FOR WOOD.

The hand drill or breast drill, originally intended for the hand drilling of metals, has taken its place among wood-working tools, says the *Scientific American*. In many instances it has displaced the bit brace, or at least has filled a requirement left unsatisfactorily supplied by the bit brace. The breast drill may be used for drill, gimlet or bit, and its speed—on the best forms—may be changed at will without a change of speed of the hand. It has its advantage, also, in the more natural motion of the hand—the vertical crank movement instead of the horizontal crank motion. A drilled hole in wood, for whatever purpose, is better than a bored hole. The drill cuts a clean hole; not merely finding its way between the fibres by displacing them, but removing the material entire as it advances. The gimlet form of wood borer is crude at best; a thread at the end is supposed to enter the solid wood, and by spiral friction pull the cutting portion after it. This cutting portion is a twist like a twist drill or auger, supposed to deliver the chips—which it never does deliver.

TERRIBLE RACE FOR LIFE.

A few days ago the federal mail diligence, which runs between Coira, Chiavenna, and Colico, had a singular escape in the Via Mala. The vehicle was drawn by four horses, and had four inside passengers. The name of the driver is Schwarz, and that of the guard Theuss. They had reached the heights of Rouzellen when Theuss, happening to turn round, saw coming after them at full trot a timber-laden waggon, drawn by two horses abreast. It had quite overpowered them, and was pushing them resistlessly down the mountain. The road is narrow and bounded on one side by perpendicular rocks, on the other by the deep abyss through which foams the infant Rhine. There was nothing for it but to keep ahead, and Schwarz, rousing up his team, let them go. Down the hill they speed at full gallop, and in

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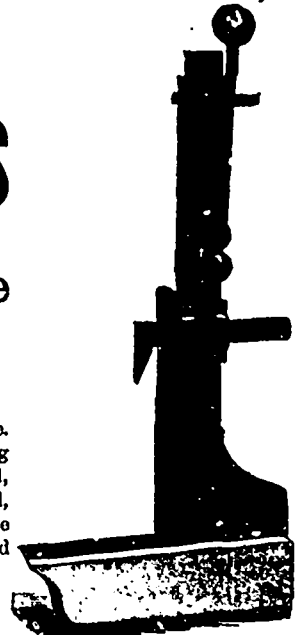
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a cloud of dust. The waggon, impelled by its weight, gained on the diligence every moment, and the pole was almost in contact with the back part of the vehicle. In desperation Schwarz whipped his horses, shouted at them like a madman, and urged them to their utmost speed. Just as they reached the level ground the waggon smashed into the rear of the diligence, which was thrown against and luckily retained by the stone parapet. The four inside passengers were safe, though terribly frightened. Theus jumped off betimes and was unhurt. Schwarz, however, was shot right over the wall. But he held on to his reins, and planting his feet against the rocky side of the gorge, he climbed in sixty up to the road.

The 31st Steamboat Inventor.

YONKERS, Jan. 12.—The building occupied by Reed & Carnick, manufacturing chemists, the Mating Manufacturing Company, and the New York Pharmaceutical Association, was burned this morning. Several other buildings were damaged. Loss, \$200,000.

Big Fire at Yonkers.

TRENTON, N.J., Jan. 10.—Search among the State records shows that Robert Fulton was not the inventor of the first steamboat. The first steamboat was launched on the Delaware river near Trenton, in 1787, two years before Fulton's steamer appeared on the Hudson. John Fitch was the inventor.

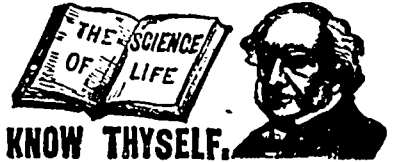
LUMBERING operations are quite lively in Albert County this year, though the cut will not be up to that of former seasons. Most of the old loggers are at work, and all report the season favorable for the handling of men and teams. The recent cold snap has solidified the swamps and rendered them fit for log hauling. There are 70 saw mills in Albert County, but not more than 20 are of any considerable capacity. About 5,000,000 feet of lumber will be got out this winter for the Point Wolfe mill; 9,000,000 for the Alma Milling Company, on Salmon River; and 3,000,000 feet for Mr. Turner's mills, on West river and Turtle creek.—*St. John, N. B., Telegraph.*

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain and cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup for children teething. Its value is incalculable. It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea, regulates the stomach and bowels, cures wind, colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system. Mrs. Winslow's Soothing Syrup for children teething is pleasant to the taste, and is the prescription of one of the oldest and best female nurses and physicians in the United States, and is for sale by all druggists throughout the world. Price 25 cents a bottle.

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International & Colonial Exhibitions

ANTWERP IN 1885—LONDON IN 1886.

IT IS THE INTENTION to have a Canadian representation at the INTERNATIONAL EXHIBITION at Antwerp, commencing in May, 1885, and also at the COLONIAL and INDIAN EXHIBITION in London in 1884. The Government will defray the cost of freight in conveying Canadian Exhibits to Antwerp, and from Antwerp to London, and also of returning them to Canada in the event of their not being sold. All Exhibits for Antwerp should be ready for shipment not later than the first week in March next. These Exhibitions, it is believed, will afford favorable opportunity for making known the natural capabilities, and manufacturing and industrial progress of the Dominion. Circulars and forms containing more particular information may be obtained by letter (post free) addressed to the Department of Agriculture, Ottawa. By order, JOHN LOWE, Secy., Dept. of Agric. Department of Agriculture, Ottawa, December 19th, 1884. 6d1-6d1

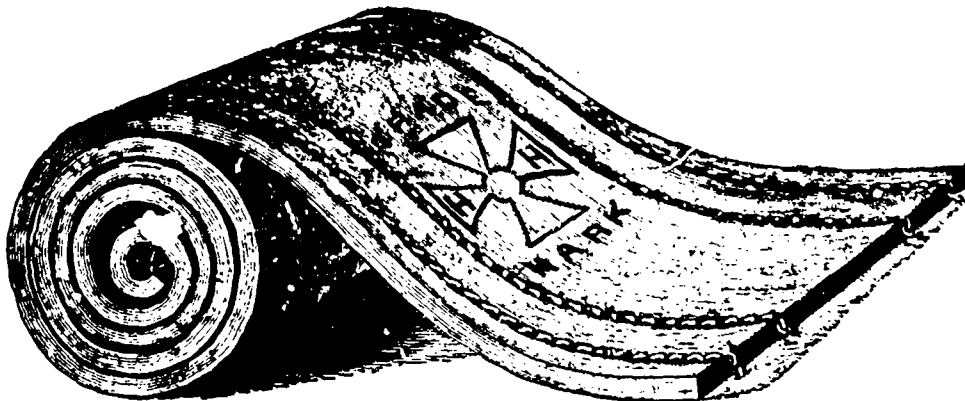
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 DEAR SIR.—Your Patent Sewed Belt has been in use in our "City Mills" for some time. We are thoroughly convinced of its superiority over any belt, American or Canadian, we have used in an experience of over .5 years. It stretches so little, and gives so little trouble, that compared with riveted belting, the sewed belt saves double its price in time and labor saved. We heartily recommend it to manufacturers as the cheapest and most satisfactory belt in the market.
 Yours respectfully,
 W. C. HERSHALL,
 Foreman City Flour Mills.



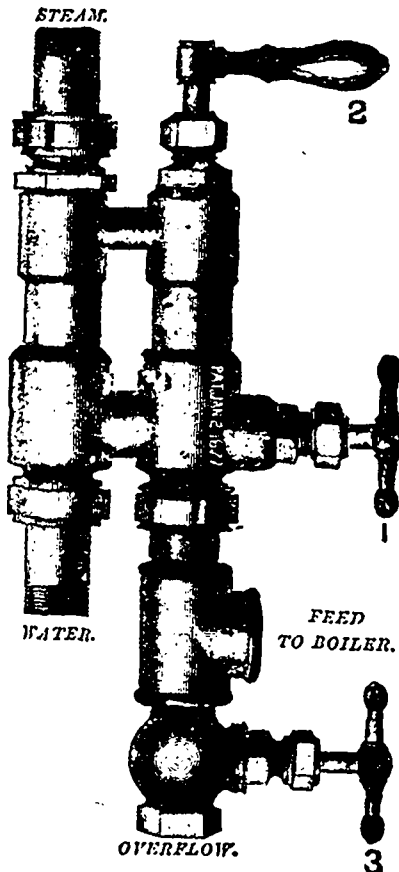
TESTIMONIAL.
 PECK, BERRY & Co. CANAL HOIST SHOPS AND
 NAUL WORKS, MONTREAL, 15th Nov. 1884.
 Messrs Harris, Heenan & Co., Montreal.
 I have pleasure in recommending the belting manufactured by Messrs. Harris, Heenan & Co. of this city. After thoroughly testing it, I find it greatly superior to any belting that has come under my notice and fully equal to all they claim for it, and certainly without an equal for cross or double belting.
 CHAS. R. ELLACOTT,
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LEATHER BELTING!

*The Best, therefore the Cheapest, Belt in the market.
 Replaces, when used, all others.
 More Pliable and Durable, especially at the splices.
 Single equals medium double.*

*Stretches but little, always retains its original width.
 Superior for Cross or Double Belts.
 Runs straight and true, does not start at the laps.*

25 per cent Stronger, 33½ More Lasting, and 12½ Heavier, than any other Leather Belt.



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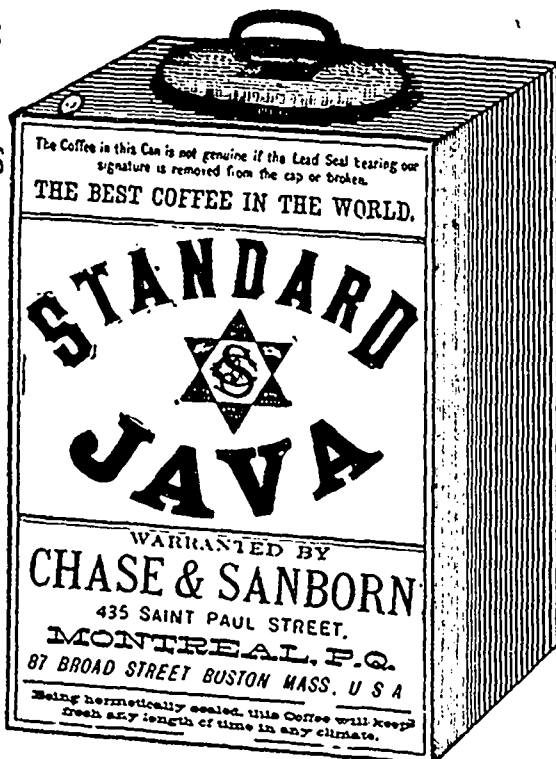
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CAUSES OF BOILER EXPLOSIONS.

Water, having the property, to a slight degree, of compression by mechanical means necessarily has the property of elasticity; hence, heavy bodies brought in sudden contact with water, or vice versa, the heavier will rebound. This is one of the fundamental principles involved in steam boilers, and which is worthy of lengthy discussion. Supposing the water to be pure *e. g.*, accurately proportioned as to the hydrogen, nitrogen, etc., in its combination, it requires a certain amount of heat to disturb its molecular make up, rendering them gaseous or volatile, the result being steam, but without perceptible color, until brought in contact with the atmosphere (if we examine boiling water in a glass retort or flask, no vapors can be seen); the water, however, like a majority of other bodies, expands by heat before this volatilizing ensues; hence, when placed in the boiler it occupies much greater space when hot than before, inasmuch as the iron, or any metal, will not expand in like proportion. In addition to this, water pressing equally upon itself from all points, the boiler has to submit to the weight of the water before ebullition, with the combined pressure of the generating gases or vapor from above—the water being homogeneous throughout and possessing compressibility to such a slight degree, carries this combined pressure of the water with its accumulating weight or pressure of vapor from above—makes the pressure at the base of the boiler much greater than at the top, until boiling begins, when these forces are changed instantaneously, and the bubbles of air or gas, in their ascent carry with them increased force, besides which the water being in violent agitation makes the pressure vacillate from one point to another. Hence, if any portion of the iron is weak, this unequal pressure is sure to find it, and will eventually burst.

Again, as the water boils and the pressure is constantly changing from one point to another, it is natural to suppose that when it is forced out of true in one place there must be a corresponding depression in another; hence the process of crystallization begins with the use of a boiler, and some morning the country is startled with the report of a violent explosion from causes unknown.

The liability of boilers to explode increases with unequal firing, together with the sudden turning the steam on or off, as the transition of pressure from one point to another is so instantaneous the iron eventually succumbs, and a rupture is the result; these explosions, however, are not so violent and the results as disastrous as when the explosion is the result of other causes, such as alkaline reactions of the water causing a calcareous deposit in certain portions of the boiler, and an acid reaction which causes another corrosive deposit above, the results of each of which are eventually the same. —*Midland Industrial Gazette.*

TIMBER SUPPLIES OF GREAT BRITAIN.

In a paper on "The present and prospective sources of the timber supplies of Great Britain," read recently by Mr. P. L. Simmonds at a meeting of the Society of Arts, presided over by Sir Charles Tupper, the supply of foreign wood was broadly divided into four classes. These are:—1. Ordinary soft woods of construction, consisting chiefly of pine and fir, obtained from North America and the North of Europe. 2. Shipbuilding woods, principally oak and teak, with small quantities of greenheart and mora from British Guiana, and a few Australian woods. 3. Hardwoods and furniture woods, which are at present very limited in number, though they might be largely increased by a little enterprise and judgment on the part of cabinet makers and dealers. 4. Dye woods. They are less important now than formerly, owing to the extensive employment of aniline dyes and the chemical improvements constantly making." Mr. Simmonds, added: "There are ninety-five species of forest trees in Canada, of which Ontario, the most southerly of the provinces, has sixty-five. British Columbia is amply supplied with lumber, and, as its facilities for export increase it must develop a large trade. The coast line of British Columbia,

both on the island and mainland, is clothed with the finest lumber. The Douglas pine, with its straight, uniform trunks, often 200 feet high, and exceedingly tough and flexible, furnishes the finest masts and spars for the largest vessels." Mr. Simmonds spoke of the attention that had been given of late to the preservation and reproduction of forests in Canada and other colonies. The immense importance of the extraneous supply of wood to Great Britain was shown by the trade reports of the last two years which gave an excess in value of £18,000,000, while other forest products brought the total up to £31,500,000. The increase during the past forty years is shown by the fact that in 1844 the whole quantity of timber imported was under 1,500,000 loads, whereas in 1883 it exceeded 6,640,000 loads. Of that quantity only a little over 1,529,000 came from India and the other colonies. Sir Charles Tupper, in thanking the lecturer, expressed his satisfaction that, however great might be the demand of the country for wood production, England could obtain all needed supplies from one or other of her own dependencies. —*Montreal Gazette.*

ACCIDENTS IN PUTTING ON BELTS.

A writer in a mechanical paper discoursing of accidents from running machinery, makes the following pertinent remark as to a preventable class of accidents: "One great fault, and one that causes numerous accidents with many workmen, is the manner in which they attempt to put on belts while pulleys are under motion. More people get caught in belting by attempting to do this than in any other way. I have seen men on a ladder trying to put on a 10-inch belt running at high speed, crowding the belt against the pulley, and burning it as well as their hands; and finally having to give it up as a failure; then they had the speed decreased and the belt put on without any trouble. I think that they never calculated how fast they would have to move the belt to get it on easily. There is nothing that agitates my nervous system more than to see some one attempt to put on a belt standing on the wrong side of the pulley. He stands no chance of getting the belt on, and a good big chance of being caught and wound up around the shaft. The right place is to stand on the opposite side of the belt, putting it on as it travels toward you. Having a good foundation to stand on, take the belt in hand and lead on to the pulley, moving the hand as fast as the pulley travels. This is the whole secret. I have seen a little fellow who understood this principle go to a large that three men were tugging at, and easily put it on the pulley at first trial."

SAWS.

The improvements made in saws form one of the most important steps in modern progress. It is now practicable to run circular end band saws with a capacity of 4,000 feet per minute. Circular saws have even been run in soft wood with a circumferential velocity of 9,000 feet (nearly two miles) per minute; but the difficulties of any higher rate than that we have indicated as the ordinary maximum are due to heating and trembling, especially if the parts are dull and unbalanced. Band saw dodge; they can be made to bear a great number of the moderate flexures required by sufficiently large wheels and can be guided very successfully at the points of entering and emerging, but no practicable amount of skill can make them saw in absolute planes through thick and knotty wood. Circular saws heat and buckle in working, unless just enough distorted when cold to allow it. Reciprocating saws cannot work with a speed satisfactory for modern progress. The teeth of the power saws may hook, and draw the wood indefinitely. Hand-saws cannot be so shaped, for unless the cut is gauged they will take hold too rank. The saws made of three layers, each side cast steel, and the inner layer tough iron, are very serviceable. For woods of a woolly fibre, such as poplar, the tooth of the saw should be of coarse space and set, to effect a clearance and overcome its clinging property. For cutting the harder and close grained woods, such as oak, beech, etc., the saw should be increased one gauge, the teeth should be more

upright and space finer, and the set also should be reduced. A cross-cut saw must be sharpened with reference to the wood, whether hard or soft. If not properly set it is evident it will take more power to drive it. For sharpening cross-cut saws for hard wood the file should be at an angle of 45°, for medium wood at an angle of 35°, and for soft wood at 12½°. So much for position. There is no difference in the angle of a large or small file. Difference of action in working depends on the fine or coarse cut of the file. We prefer for the purpose of sharpening a good sized file, not less than 4½ or 5 inches, if it is cut equally fine and sharp on the corners. The cutting angles and the tops and faces of the teeth should be beveled exactly alike, and the cuttings should be of even depth, the saw working freer and with less power if the teeth are allowed to get short and stumpy. In clamping a saw for sharpening the jaws of the vise should be covered with sheet lead, about ¼ inch thick. If not so covered the saw will vibrate in sharpening and most probably strip the file. In setting saws with a hammer, the best plan is to fit the saws horizontally on a stud fitted in a wooden frame, having a transverse movement. A small steel anvil with a beveled face should be placed at one end of the frame, and the saw traversed backward or forward for the teeth to overlap the anvil centre, the distance of the set required. A series of short, sharp blows should be given to the hammer in preference to a heavy one.

For setting saws, several different machines have been patented by which the teeth may be set to a uniform level, one of which is made in the form of pliers. The object of setting saws is to lessen friction. The reason of greater power being requisite for cross cutting than for ripping is that the former is not parallel to the grain. In filing, the edges are, of course, beveled opposite ways. The sharp beveled edge will be outward on the side to which the tooth is bent.

In sawing a large amount of lumber, the thickness of the saw, as effecting the wood, is a matter of consideration; the thinner the saw, too, the less is the power required to drive it. An objection, however, against thin saws worked in tension, is that from their pliability, the cuts are apt to diverge from a straight line. On the other hand with a thick saw blade, the thrust tends to bend it, while the pull on the thin saw straightens the blade. The thin blade in tension must be considered as preferable for hand and machine frame saws as well as band saws. In scroll bands, the thickness and narrowness of the band permit the saw to cut out corners, and segments of circles of extremely sharp curvatures.

A great improvement in the circular saw is the application of inserted teeth, this allowing of ready renewal in the case of any being broken, and that thorough renewals, the diameter of the saw is not permanently reduced by the process of sharpening. In the use of saws care must be taken that the teeth are on the same general level; if the opposite be the case, proper action of all the teeth cannot be secured; they will become more readily blunted, and through the longer teeth being drawn more deeply into the timber than the others, they will be apt to be broken off; power, too, will be lost in driving the saw. —*London Timber Trades Gazette.*

VIBRATION IN BUILDINGS.

An exchange, in speaking on this matter, says: "At one of the print works at North Adams, Mass., a new and unoccupied building was found to vibrate in consequence of the puffing of a small steam engine sixty feet away. At Centerville, R. I., it has been necessary to change the height of the column of water flowing over the dam, to prevent the excessive vibration of the adjacent mill. At Amesbury, Mass., out of eleven mills that are near the river, two vibrate when water in certain quantities flows over the dam, but the tremor can be wholly stopped by closing the flow of water. The most frequent cause of vibration is due to the running of machinery, and it has repeatedly happened that a complete cessation has been obtained by increasing or lessening the speed at which the

machinery is run. This is not always profitable or possible, and the fact that this vibration results in a loss of power, variously estimated from 10 to 20 per cent., is a strong argument in favor of the construction of one-story mills, which would necessarily vibrate much less than factories having a height of six or eight stories. But it is not alone the loss of power that has to be considered, for in addition there is the straining of the building and machinery, and in the manufacture of textile fabrics this unsteadiness causes a great breakage in the threads, and a consequent damage to the material."

Oiling Machinery.

An old machinist of nearly 50 years' experience stated in his shop recently that he had run a counter shaft, which he pointed out, on five drops daily of oil, the shaft being 1½ inches in diameter and having three bearings in hangers. "Yet," he said, "that shaft has never squeaked." The shaft carried pulleys which drove a drilling lathe, a polishing and wood turning lathe, a small screw cutting lathe and a grind stone. Most of the weight of the pulleys was between the two hangers, on which he lavished two drops of oil a day. He kept his shaft level and in line. The belts pulled almost equally. The boxes were babitted. The shaft made about 300 turns. The experimenter said that he had tested oils as well as quantity. He believed in clear animal oil—whale or lard. He felt assured that good oil was wasted wherever drip pans were used, and he never used them. There is a text here for establishments to sermonize over, where the shaft bearings drip oil and the floors are soaked with it. —*Industrial World.*

Dr. Pierce's Compound Extract of Smart Weed combines French Brandy, Jamaica Glycerine, Smart Weed, and Camphor Water, the best preservative agents for the cure of diarrhoea, cholera morbus, dysentery or blood-flux and colic, or to break up colds, fevers and inflammatory attacks.

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PETER HAY, Galt.

Chips.

BIRCH wood sells on the street at Rhinelander, Wis., at 75 cents a cord.

THE saw mills at Fort Edward, N. Y., did not shut down until Dec. 22nd.

It is stated that the T. W. Harvey Lumber Company will bank about 12,000,000 feet of logs this winter.

A LOCAL authority estimates the amount of standing pine in Calcasieu, La., parish at 4,000,000,000 feet.

DECEMBER 29 a lumber freight rate of 18½ cents from Eau Claire, Wis., to Missouri River points, went into effect.

T. F. THOMPSON, lumbering in Iosco county, Mich., will bank 2,000,000 feet of logs into the Au Sable river this winter.

THE schooner Frank L., from Nova Scotia to Boston, put into Portland, Dec. 26th, with loss of deck load of lumber.

A DULUTH, Minn., lumberman claims that at least 150,000,000 feet of logs will be cut in the Duluth district this winter.

AT Jackson, Mich., a pulp mill owner is said to have contracted for 2,000 cords of poplar, to be furnished by a man in Dundee.

JOSEPH SWEATMAN, of Door county, Wis., has a contract for getting out birch broom brush for sweeping the streets of Chicago.

THE shingle cut on the Saginaw River in 1884 amounts to 261,266,750, of which 29,614,000 are still piled on the docks.

THE schooner Champion, from St. John, N. B., for Newport, R. I., put into Portland, December 24th, with loss of the deck load of lumber.

THE schooner E. & G. W. Hinds, from Calais, Me., for New York, arrived at Portland, Dec. 24th, with loss of part of her deck load of lumber.

THE extensive barrel factory of E. M. Jewett at Buffalo Plains, N. Y., was burned Dec. 30th, causing a loss of about \$100,000; partially covered by insurance.

THE lumber shipments from Dalhousie, N. B., for 1884, were 18,235,140 feet of deals, 2,953 tons of birch timber, 1,476 tons pine timber, and 411 tons spruce timber.

PINE logs have recently been contracted for at Orange City, Texas, at \$4.60 to \$4.75 per thousand feet, which is thought to indicate the price which will rule for the coming season.

IN the steamer Cumberland, recently launched from a Bath, Me., ship yard, the panels in the ladies' cabin are of California redwood, the other finishing in that cabin being of mahogany and rosewood.

SEVERAL large gangs of shantymen left Ottawa on Dec. 31st by special train on the C. P. R. for the Nipissing district. They all hired at an advance on last year's rate of wages.—Citizen.

THERE is an abundant supply of labor in the Saginaw Valley for a plentiful scarcity of work. Operators in the lumber woods seem persistent in their determination of curtailing the log output; and hence the slight demand for men.—Lumberman's Gazette.

THE J. E. Potts Salt & Lumber Company will, this month, put a third locomotive on its logging road, northwest of the Au Sable river, Mich. It is intended to bank 35,000,000 feet of logs this winter from its five camps now in operation. The company employs 240 men.

A MAN named Barker in the employ of J. R. Booth was rolling saw logs in one of the Victoria Lake shanties, when the pile in the rear of him started, rolled against him, and jammed his head between two logs, killing him instantly. He was a native of England, aged 29 years, and had been in the country about three years. This was his first year in the shanty.

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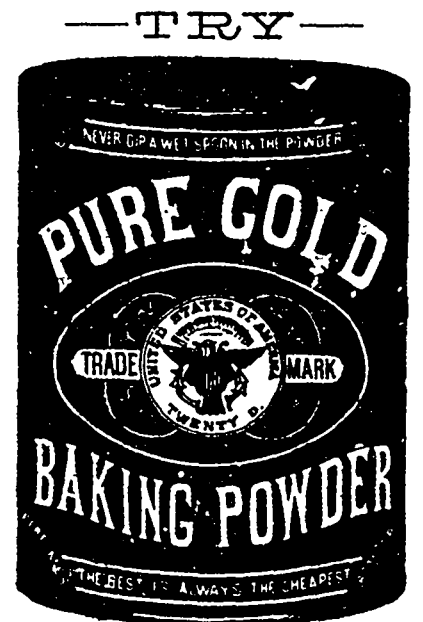
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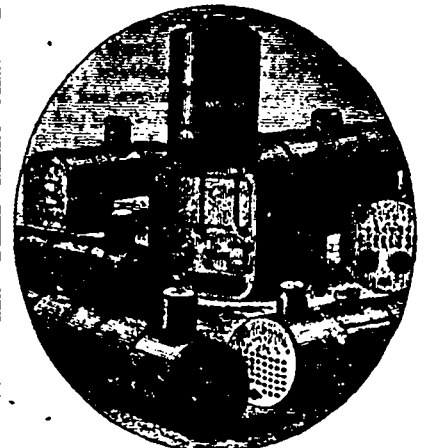
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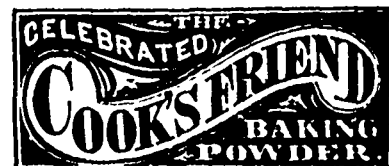
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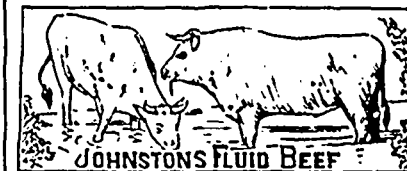
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DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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

PETERBOROUGH, Ont., JAN. 15, 1886.

A FIRE at Buffalo on Jan. 11th destroyed Hoefler Bros. planing mill on Elm street. Loss \$20,000, insured for \$10,000. Forty men are out of employment.

MR. PRENEAU has commenced preparations for the erection of a steam saw mill at Tucker's Landing, on Belmont Lake, Peterborough County, Ont.

MESSRS. Mills Bros. new shingle mill that they recently erected a little way up the river from Kinmount, Ont., at a cost of over \$3,000, was destroyed by fire on Jan. 3rd. There was only \$1,000 of insurance on it.

QUITE a number of teams arrived at the lumber offices yesterday seeking engagement, but the lumbermen were somewhat reluctant to engage teams owing to the soft condition of the weather and the probabilities of bad roads in the upper district. Should the soft weather continue lumbermen will be in a dilemma about getting out their logs.—Ottawa Free Press.

EACH of the chains in the large floating bridge connecting Portsmouth and Gosport, which have recently been made in England, is 640 yards in length, and consists of nearly 5,000 links, the diameter of iron being 1 1/16 in., and the weight of each 21 tons, tested to a tensile strain of 40 tons, or twenty per cent over Admiralty test, the actual breaking strain being proved to be 70 1/2 tons. Each chain was loaded upon a carriage weighing 11 tons, the load for road transit being 32 tons.

AT Bathurst, N. B., on the Bay of Chaleurs, during the opening season of 1884 there were loaded thirty-eight vessels of 19,122 tons, which carried 14,901,282 superficial feet of deals, ends, scantling and battens, 1,080,692 feet of boards, 481,323 pieces of palings, 4,000 feet of plank, 985,100 laths, 10,000 shingles, 30 spars, 1,069 sleepers, 10 tons birch timber, 130 tons pine timber, and 20 tons spruce timber. These shipments were all made by K. F. Burns & Co., R. A. & J. Stewart, and James Buttner, who loaded respectively 20, 16, and 2 ships.

AMERICAN TARIFF ON LUMBER.

The New York Herald furnishes an argument in favor of the admittance of Canadian lumber into the United States free of duty. Of course, the motive which our enterprising contemporary has in view is a selfish one. It is based on self preservation, that first law of nature, which used to be distilled into us all at school, from the head lines of our copy books. The Herald fears that the wasteful cutting down of the American forest trees will produce ere long, a wood famine, and thinks that Canada ought to have the chance of destroying her supply for a while. This waste of Canadian trees, it thinks, could be superinduced if the United States Government were to repeal the tariff duty and admit Canadian lumber free. No doubt there is a reason in the Herald's premises, but we question much whether our people would be short-sighted enough to embark on a wholesale system of cutting the best trees in the country merely for the purpose of stocking a market which, from all accounts is very much overstocked now. The prices realized would be ruinous, and the experience gained in the British markets, during the last few years, ought not to be lost on us, nor will they. The pith of our contemporary's remarks will be found in these paragraphs:—

"Apart from the comparatively small number of men interested in lumber investments, there is a feeling that something should be done to protect what of the forests of the country remains from wasteful cutting, and to encourage the planting of forests wherever practicable and economical. Not that the price of lumber is high. It is not high just now, by reason of the large stocks on the market. But the present policy, state and national, respecting the forests is recognized as producing much mischief and as unquestionably leading up to great evils unless a more settled and intelligent system be introduced. Just now the lumber trade is in no better condition than the iron or the textile industries, and the proper regulations for cutting planting will not cause its speedy revival. That is not the main point to be considered. The main point is that the future good of the whole country requires that forests at once should be preserved or planted wherever science may demonstrate their expediency.

"To wait, as many suggest, until the scarcity of good lumber will so enhance the price as to allow the profitable cultivation of trees would be shortsighted. Wood in all its forms is so extensively used that even a moderate rise in price will create much inconvenience and loss. Doubtless invention would be stimulated to find substitutes for wood, such as steel railroad ties, but it could not wholly fill the gap that would be created. The necessary rise in price, moreover, could hardly be expected for some years to come, whereas the need of enlarging the sources from which lumber may be drawn is immediate. The simplest way would be to repeal the tariff duty, and this we would urge, apart from any question of free trade or protection."—Quebec Chronicle.

A VALUABLE INVENTION.

Mr. M. D. Campbell, head miller in the Deseronto flour mills, has introduced into that establishment a new invention of his own to be known as "Campbell's Dust Collector" and for which he has taken out the patent for Canada and the United States. It has been severely tested and works most satisfactorily. We had the pleasure of examining one in the sash shop the other day which had been constructed by Mr. Geo. Field, under the supervision of Mr. Campbell. It stands about five feet high, is four feet long and three feet wide. In front of the machine is a fan, so attached as to draw dust, etc., through an opening in the bottom of the machine into a round keel about three feet in diameter and covered with fine wire. This reel revolves slowly and has under it a conveyor between which and the reel there is placed a brush revolving in a direction the reverse to that of the reel, thus keeping the wire clean and brushing the dust into the conveyor below by which it is carried to one side until it drops into a spout. The new machines will be built by the Rathbun Company and will be made of all sizes. They can be used in flour mills in

connection with purifiers and in all factories where planing machines, &c., are used. They are evidently destined to work their way into public favor and prove themselves a source of profit to the lucky inventor.—Deseronto Tribune.

NEW BRUNSWICK SHIPMENTS OF LUMBER.

The St. John, N. B., Globe prints a resume of the deal and timber exports of the city of St. John during the past year. There has been a decided falling off in the shipments of deals to trans-Atlantic ports, the amount being very nearly 20,000,000 superficial feet less last year than in 1883. Compared with the returns of 1882 the decrease has been about 40 millions, the figures being:—

1882	201,413,717 sup. ft.
1883	181,518,132 "
1884	162,080,218 "

As regards timber, the Globe says that in birch here has been some increase, but pine remains in about the same position as during the last two years. The returns for 1884 are birch, 13,995 tons; pine, 3,646 tons. In addition 1004 cords of lathwood and 68 m. palings were sent to Great Britain. These shipments gave employment to 225 vessels, representing a tonnage of 187,308 tons—a decrease of 45 vessels and 18,003 tons, compared with 1883.

The following returns are printed in the Globe from the principal ports in New Brunswick.

BATHURST.			
Year.	No. vessels.	Tons.	Deals, s. feet.
1883	53	27,483	23,415,607
1884	38	19,122	14,901,282

DAY VERTE.			
Year.	No. vessels.	Tons.	Deals, s. feet.
1883	3	1,370	1,350,000
1884	5	2,066	2,100,000

DALHOUSIE.			
Year.	No. vessels.	Tons.	Deals, s. feet.
1883	44	26,847	18,726,737
1884	43	23,782	18,235,140

MIRAMICHI.			
Year.	No. vessels.	Tons.	Deals, s. feet.
1883	278	172,510	149,004,441
1884	214	126,030	108,274,864

RICHIBUCTO.			
Year.	No. vessels.	Tons.	Deals, s. feet.
1883	21	12,090	15,090,150
1884	2	839	12,205,700

COCAIGNE.
 (Included last year in Richibucto.)

Year.	No. vessels.	Tons.	Deals, s. feet.
1884	2	839	737,405

Making a fair allowance for Shediac, and any other little port from which an odd cargo might have been sent, the total deal shipments from New Brunswick to trans-Atlantic ports last year would be about 328,534,600 feet, compared with 404,287,676 feet in 1883, and 381,990,174 feet in 1882. The falling off of shipment from Miramichi has been enormous.

OPERATIONS IN THE SOUTH RIVER DISTRICT.

There was little or no snow in the South River district up to the 7th inst. The South River is a tributary of Lake Nipissing.

Lumber cut in this district is towed across Lake Nipissing and transported by rail from North Bay to Papineauville, via the C. P. R.

A hired team, in the service of Fraser, Sereny & Co., was accidentally drowned while crossing Lake Nipissing recently.

Some 26 car loads of horses were shipped from this city, via the C. P. R., on Tuesday last. They were destined for various points between Ottawa and Thorncliffe, and are intended for shanty purposes.

In the South River district this season, Mr. Wm. Allen will take out from 150,000 to 270,000 logs. P. and H. Colton's cut will average between 200,000 and 225,000. Booth & McCann will take out 40,000 standards, together with last year's drive of logs, while Fraser, Sereny & Co. will cut 30,000 standards, and also take out 60,000 cubic feet of timber.—Ottawa Sun, Jan. 9.

Despite not the day of Small Things.

Little things may help a man to rise—a bent pin in an easy chair for instance. Dr. Pierce's Pleasant Purgative Pellets are small things, pleasant to take, and they cure sick headaches, relieve torpid livers and do wonders. Being purely vegetable they can harm do one. All druggists.

LIST OF PATENTS.

The following list of patents upon improvements in wood working machinery, granted by the United States Patent office, Dec. 30, 1884, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of American and foreign patents, No. 617 Seventh St., Washington, D. C.:

309,868.—Auger—H. Alson, Olesburg, Kan.
 309,902.—Bit stock—J. Watson, Buffalo, N. Y.

310,060.—Chuck lathe—H. Johnston, Boston, Mass.

309,871.—Lathe tool—J. M. Palmer, Chicago, Ill.

309,825.—Log and raft coupling—A. K. Doe, Stillwater, Minn.

309,857.—Planer motion, variable, reciprocating—C. A. & G. Juengst, New York, N. Y.

310,075.—Saw, drag—O. S. Nowcomb, Heppria, Mich.

309,878.—Saw sharpening device—R. E. Poindexter, Indianapolis, Ind.

308,870.—Saw tooth swaging machine—J. Orm, Paducah, Ky.

PATENTS ISSUED JAN. 6.

310 538.—Lathe, multiplex turning—E. J. Pennington and A. E. Gatchell, Cincinnati, Ohio.

310,260.—Lathe tail stock—A. Dodds, Grand Rapids, Mich.

310,163.—Plane—W. E. Achenbach, Reading, Pa.

310,232.—Lumber stacker—W. T. Smith, Bozeman, Ala.

310,473.—Plane bench—W. Steers, Brattlebrough, Vt.

310,349.—Plane, chamfering—R. V. Wicks, Brooklyn, N. Y.

310,190.—Saw mill dog—E. & C. M. Drake, Gardiner, Me.

310,491.—Sawing machine, scroll—A. Ball, Seneca Falls, N. Y.

BETMONT.

SAW MILL REBUILT.—Coon's mills, near Rush Point post office, in the township of Belmont, which were totally destroyed by fire last October, have been rebuilt on an enlarged plan. The new machinery, boiler, engine, saws, &c., are all of the latest improved style, and the capacity of the mill is thereby greatly increased. Mr. Coon is now resuming work determined to make up for lost time.

The Square Man.

The following is Josh Billings' description of a "square" man in lumber parlance:—"The square man mezzures the same each way, and has no wainy edges or shaky lumber in him. He is free from knots and wont warp. He is clear stuff, and I don't care what you work him up into, he won't shrink. He is among men what good kiln-dried boards are among carpenters—he won't crack. It makes no difference which side you approach him, he is the same bigness each way, and the only way to get at him is to face him. He knows he is square, and spends no time in trying to prove it."

Tree Felling With Dynamite.

The London Lumber Trade Journal states that a new method of tree felling by dynamite has been successfully introduced. A cartridge of the explosive substance is placed in a channel board directly under the tree to be operated upon, and when exploded the tree is simply forced up bodily and falls intact on its side. If this system works as well as it is represented to do, and the tree is not fractured by the force of the explosion, a large proportion of valuable wood at the base of the trunk can be utilized which is now lost. For clearing forest properties to convert into arable land, this method appears admirably adapted, as it brings up the root of the tree at the one operation, and dispenses with the tedious and costly process of grubbing the roots of the felled timber.

A DESPATCH from St. Paul says:—The total cut on the northwestern lumber region last year was 2,534,298,000 feet of lumber, 1,059,354,000 shingles, and 630,080,780 lath. The increase over 1883 was 447,812,000 feet of lumber, 302,994,000 shingles, and 85,800,000 lath.

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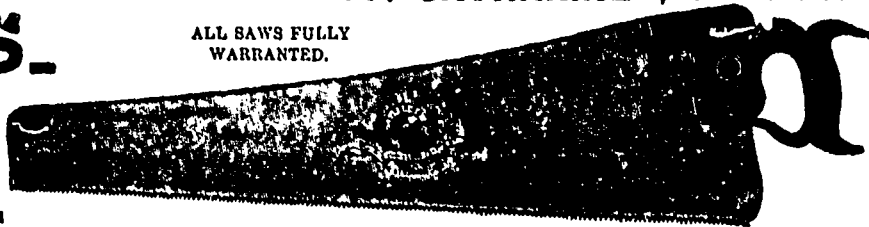
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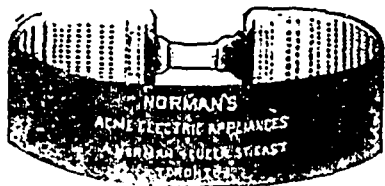
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Terrific Boiler Explosion.

WILLIAMSPORT, Pa., Jan. 12.—The boiler in the saw mill of Weigel & Babst, opposite here, exploded this afternoon. Peter Houser and Thomas Purvis were instantly killed, and seven others seriously injured. Daniel Babst, one of the proprietors, was so badly scalded that one of his legs had to be amputated. He is not expected to recover. The force of the explosion was terrific, not a timber of the mill was left standing. A visitor to the mill said to fireman Purvis this morning. "That boiler isn't safe." Purvis replied, "I'll risk it." It is stated that the boiler was full of leaks and two flues plugged.

A New Application of Paper.

Wm. J. Griffin, of the Holyoke envelope works, has invented and patented a new application of paper. It is designed as a substitute for wood in blocks or bars wherever a knife is used in a mechanical cutter. In the shape of bars, it has been put into every paper mill in his district where an undercut cutter is used. The Whiting, Albion, Winona, Nonotuck, Massasoit, and other mills have it. The invention is also applied to blocks for shoe cutting and cigar making. At the Holyoke envelope works it is used in cutting blocks in the envelope cutters. One outlasts a dozen of the formerly used wooden blocks. In its manufacture, sheets of paper are compressed by enormous force into blocks or bars, as wished, harder than wood and far more durable. Mr. Griffin has just received his patents on the invention, and will now introduce them outside of Holyoke.—*Holyoke Transcript.*



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A FEW SIMPLE TESTIMONIALS THAT SPEAK FOR THEMSELVES.

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

Yours truly, R. E. HALIBURTON.

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

Yours truly, J. GREEN.

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

At this time, when so much interest is being manifested in the merits of the poplar when used for building purposes, it may be profitable to consider shortly in our columns the cost of producing the various items required in house-building, and compare it with the foreign timber which has so successfully of late years competed with our home produce. Before going into figures some of its properties may be generally stated as helping in arriving at a proper comparison with other woods.

In the case of flooring it has been a matter of surprise that poplar has decreased to such an extent in popularity. It is most essential in all kinds of wood for flooring that it should be thoroughly seasoned, but especially is this so in the case of poplar, which shrinks in the drying to a very great extent, but when once thoroughly dry will not warp or twist, as is the case with some foreign battens and it is with the greatest difficulty that dry poplar will ignite—in fact, by itself it will rarely make a fire even after being lighted up by some other combustible, but will gradually die out. Poplar, when seasoned, has also in the eyes of every well-regulated housekeeper another very important property, which is its nice white color for flooring, and the closeness that the grain has acquired in the drying makes its white color easily retained by scouring, which color it retains for many years, being very unlike the foreign wood, which soon becomes musty and dirty, which no amount of scouring can take out. It may be judged how much poplar shrinks in the drying, and how fine the grain must necessarily become, that thoroughly seasoned only weighs about one-half of what the green timber weighs.

It may here be stated that according to eminent authorities its tenacity is from 6,000 to 7,000, comparing very favorably with other woods generally used in house construction.

It should not be forgotten that poplar, when used in a damp building, is very liable to go to decay, but poplar is certainly not an exceptional wood in this respect, as all woods are liable, more or less, to decay when exposed to dampness.

A very important feature in poplar, when comparing its cost as a building wood, is its lightness. When the quality can be combined with moderate strength, as it is in poplar, its value in house construction is very much enhanced. Its lightness acts advantageously in two ways. First, as regard cost and carriage; and secondly, effecting the desirable object of not overburdening a house with heavy-weighted timber. The average weight of seasoned poplar is about eighty cubic feet to a ton, which is considerably lighter than Norwegian white-wood. Of course its heavy weight when in a green state necessitates its being converted and seasoned as near as possible to its place of growth, otherwise extra carriage on double the weight adds very materially to its cost, and when competing with foreign battens it requires every economy to be exercised.

The great length to which poplar grows, and carrying with it its girth, enables the saw-miller to procure extreme lengths suitable for joists, beams, or rafters, and its parallel growth enables the conversion to be done with the smallest percentage of waste, which is one of the principal considerations in producing scantlings. When converting poplar into the various items for housebuilding, so many are those sizes that only a very little study is required to utilize the whole tree.

When cutting up a poplar tree into sizes suitable for building material, there need be very little waste, as the flooring board sizes being as thin as from 1 in. and upwards, by breadth, from 6 in. to 7 in., lengths being no great object, the thick slabs may all be utilized, as recommended above. It effects a considerable saving to have the timber converted at a saw-mill as near as possible to the place where it has grown. It is well to have the tree crosscut in suitable lengths from 12 feet and upwards, joists, rafters, etc., being wanted in such various lengths, and the oftener a poplar tree is crosscut, the more profitably does it cut up. The average amount of over measure in fairly well grown poplar is about 25 per cent.; of this

there is thrown off as entire waste when cutting thick sizes nearly one half, but in the case of building sizes, which are of such a variety, the amount of slab waste with careful study should not be more than five per cent.; this leaves a clear gain of 20 per cent., or one fifth of its value. No doubt, in the case of so cheap a wood as poplar, this does not amount to more than from 1d. to 1½d. per foot, as the cartage from the woods and other labor expenses have to be paid on the ½ girth measure. The cost of sawing up poplar into such sizes as are required in building, running from 6x1 for flooring up to 10x3 for joists, averages upon the whole, as near as may be reckoned, somewhere about 3d. per foot cube on the converted sizes.

The whole of the scantlings should be immediately piled up for drying, and in the course of six months they will have dried sufficiently as to have reduced the weight so far as to permit their being conveyed by rail or otherwise at a weight of from 70 ft. to 80 ft. to a ton, and poplar being a wood which is produced in almost every part of the country, it is unnecessary to send it off from any particular spot to an extreme distance. In the case of the flooring boards they should be thoroughly seasoned before being planed, which, if done, will enable them to put on a much smoother surface than foreign battens; they must not, however, be planed in a green state, as its then fibrous nature prevents the irons from leaving a nice surface, and the shrinkage in seasoning, after being planed, causes it to get very rough. There are no other expenses connected with the conversion of poplar, and it will thus be seen that with careful cutting up all sorts of scantling can be produced at a cheaper price than what even foreign white battens can be delivered to any inland town; we have, therefore, a superior wood, in every respect cheaper, ready to hand, and this fact only requires to be known and brought prominently before the attention of architects and builders by our English timber merchants. *London Timber Trades Gazette.*

SCARCITY OF TIMBER.

The time was, and that not over twenty-five years ago, when lumbermen could get any quantity of timber for a mere song. Some of the old farmers were at one time thankful when they came and took it out of their way, as it saved them the trouble of cutting and burning it. These times are gone, and timber, either for Quebec or for saw logs, is every year becoming scarcer, and prices are now being paid which, if any one had predicted them a few years ago, would have been deemed incredible. One old resident recently sold a single pine tree for \$14, and another sold three of them for \$40. Such prices are enough to make the old settlers wish that they had been content to let their timber stand. Other kinds of timber sell well. Large quantities of firewood are being taken out and that will soon become scarce. It was indeed time for the Provincial Government to resort to measures for protecting the timber that remains, and also making efforts to promote tree culture if the inhabitants are not to be starved out, but it will take all their skill to succeed. — *Fenelon Falls Gazette.*

PULLEYS AND GEARS.

In American practice, pulleys have led gears for more than thirty years. There was a time when no large establishment driven by power could be engaged to run except by gearing; all the main shafting was geared to the prime mover, and if that was a steam engine a jack wheel instead of a belt imparted motion from wheel to crank shaft. The writer remembers a set of cards in a cotton mill; the cylinders, licker ins, doffers, and even the doffer comb, were all connected by gear wheels. Years after the grinding, wearing, noisy main gears were superseded here by the smoothly running pulleys and belts, the English adhered to the toothed wheel system. It had its value; it has its advantages, and the gear wheel is taking its place as a valuable adjunct to machinery of all kinds. One of these advantages is its absolute security, "give a tooth take a tooth" is the old adage in mechanics, and is an absolute law in gearing, there is no slipping, and no failure in transmission of power.

But there were objections to the gear, and although some have been removed, others remain. One of the great objections to the gear, as it was formerly made was its tendency to crowd apart—the two gears working against each other rather than with one another. But with the recent improvements in gear teeth cutting that objection is entirely removed, gears properly cut run together with no inclination whatever to come apart, except with a speed that develops centrifugal force. Some recent experiments seem to prove that the forcing apart tendency of well set gears is reduced to nil; while on the other hand the connection of pulleys by belts necessitates a very strong pulling together, proportioned to the diameter of pulleys, width of belts, distances apart of the pulleys, and their relative positions.

Another objection to the use of gears is where the reach is considerable between the shafts, in which case the only connection feasible is by means of one or two intermediates, as the direction of revolution may demand. If the two connected shafts are to revolve in the same direction, a single intermediate may be used; but it is evident that the diameter of this wheel must be sufficient to reach between the peripheries of the two other wheels, else three intermediates must be employed. Sometimes these transmitters—or otherwise idlers—are unhandy, and then the advantage of pulleys and belts is apparent. The belt and pulley have a reach that is impossible without a train of gearing or a belt connection of links of machine chain. Except for this lack of reach it is evident that the gear connection is superior in itself to the pulleys and belt, which at its best must be considered a makeshift for an absolute transmitter. — *Scientific American.*

A LARGE BUSINESS.

Deseronto, as you approach it from the water, seems to a stranger like a full fledged city. For fully a mile along extend wharves stocked with lumber, fine storerooms, etc., where but fifteen years ago but one small pier was the only landing place. The population has steadily increased until now it numbers about 2,500. Down near the steamboat wharf stands an old rookery of an office wherein daily sits the man (Mr E. W. Rathbun) to whose success can be attributed the building up of the place, surrounded by a perfect network of telegraph, telephone wires and electric bells. He controls probably the most extensive business of any man in Canada to-day. Fully 1,200 men are in his employ, and his business all over the continent. Shipments of doors go from here to Liverpool, Australasia and Glasgow; flour to South America, and lumber to nearly every state in the Union. His last speculation has been the taking hold of the Napanee & Tamworth railroad, which road, under his management, is already doing a good business, and although the terms of contract read that Napanee shall be the terminus of the road, yet the chances are that the Deseronto line will be extended to Napanee to meet it, and this virtually make Deseronto the terminus. He is always happy in his old office. His reply to the question "Why don't you build new offices?" being "I haven't time, yet I believe the company intend to erect offices which will probably be grand and extensive." — *Kingston News.*

WOODEN PIPES.

Pipes made of wood can be made strong enough to contain water or steam under pressure, by winding iron bands about them to resist the bursting strains. The pipe is made in sections of about eight feet in length, from the best of white pine, by first boring them out nice and smooth with an auger that will bore straight from one end to the other. The outer surface is then removed by the turning lathe, leaving it uniform in size and free from sap. They are then laid away to season in a drying room. When they are ready to be banded, the iron bands are drawn around spirally by steam power so tightly that the band is imbedded in the wood and appears like a screw thread, except at the end where the band is wound around three or four times to strengthen the chamber that has been bored out to receive a thimble where the joints are to be made so

that they may be driven together tightly without weakening the joint. The thimble is made of seasoned timber turned about an eighth of an inch larger in the middle than the chamber in the ends of the pipe, so that they must be compressed where the sections are driven together, making in this way a perfectly tight joint without packing of any kind. The weight of the iron banding, and the nearness of the bands' each other, are easily regulated by the amount of pressure that the pipe is to be subjected to in actual use, and where the bands are likely to corrode, they should be passed through a preparation of coal tar, before they are wound on the pipe. After the pipe is laid, it can be tested with hydraulic pressure and then given a heavy coating of asphaltum cement; and where the water is impure, or impregnated with acid, so that the threads of an iron pipe are cut out in a short time, these wooden pipes can be laid by a skilled workman so as to remain air tight, without the liability of bursting or become disjointed.

TO SAW TOUGH TIMBER.

All tough timber, when the logs are being sawed into lumber of any kind, whether scantling, boards or planks, will spring badly when a log is sawed in the usual way, by commencing on one side and working toward the other. In order to avoid this it is only necessary to saw off a slab or plank, alternately, from each side, finishing in the middle of the log. We will suppose, for example that a log of tough timber is to be sawed into scantling, a uniform size. Let the sawing be done by working from one side of the log toward the other, and the ends of the scantling will all be of the desired size, while at the middle some of them will measure one inch broader than at the ends. After the log has been spotted, saw off a slab from one side, then move the log over and cut a similar slab from the opposite side. Let calculations be made by measuring before the second is cut off, so that there will be just so many cuts, no more and no less, allowing for the kerf of every cut. If the log is to be cut in three-inch scantling for example, saw a three-inch plank from each side, until there is a piece six and a quarter inches thick left at the middle. The kerf of the saw will remove about one-fourth of an inch. When a timber log is sawed in this way, the cuts will be of a uniform thickness from end to end. Now turn the log down and saw the cuts the other way in the same manner, and the scantling will not only be straight, but of a uniform size from one end to the other, if the saw be started correctly. — *Sinc's Lumberman's Form Book.*

Don't Wear Cumbersome Trusses

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

A FIRE at Summit, Mich., December 12th, burned 250,000 feet of lumber belonging to W. H. Raiguely & Co., of Grand Rapids, 40,000 feet owned by A. B. Mitchell & Co., and a box car owned by the Flint & Pere Marquette railroad.

Catarrah—A New Treatment.

Perhaps the most extraordinary success that has been achieved in modern science has been attained by the Dixon treatment for Catarrah. Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefited, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination. This accomplished the Catarrah is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrah in this manner, and no other treatment has ever cured Catarrah. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure. The majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. R. DIXON & SON, 207 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrah. — *Montreal Star.* 1y122.



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To Mill Owners, Lumbermen, Manufacturers

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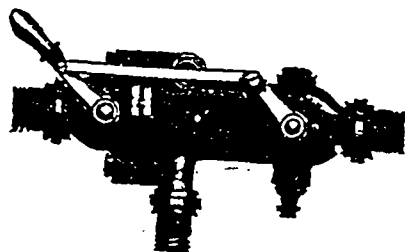
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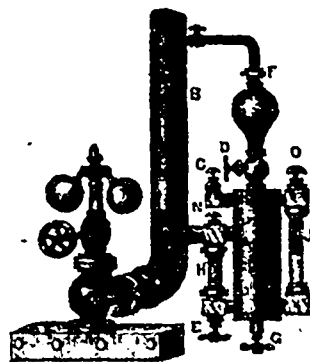
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Send Sample Order our LINED SHAPED HORSE RUG, a Specialty, highly recommended for wear and warmth.

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STILL RETAINS THE LEAD

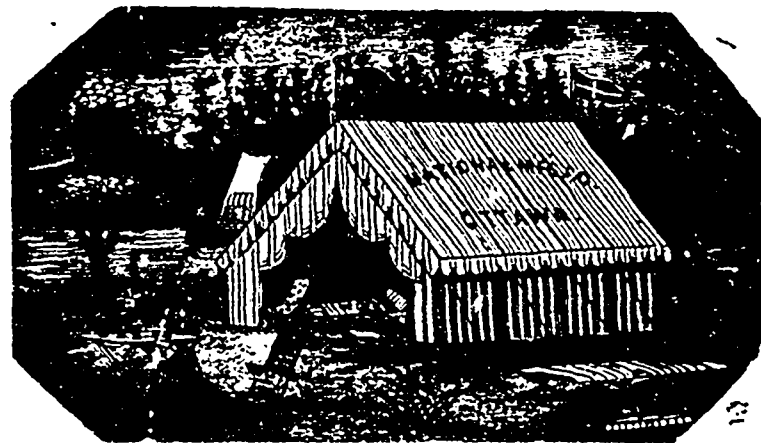
Have been awarded every Medal ever offered at Exhibitions in Canada for our Lines of Goods, notwithstanding the misleading advertisements of unscrupulous firms claiming awards, medals, &c., which they have never received. See letter from H. J. HILL, Esq., Secretary Toronto Industrial Exhibition Association,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

10—MEDALS—10

—FOR—

TENTS, MARQUEES,

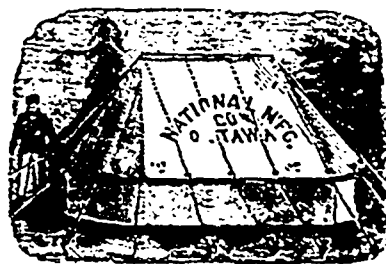
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Camp Furniture, Shanty and
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Are without Doubt the BEST and
CHEAPEST in the Market.

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P. O. BOX 345.

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

The National Manufacturing Co'y, Ottawa:

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

I am, your respectfully,

H. J. HILL, Manager and Secretary

Market Reports.

TORONTO.

From Our Own Correspondent.

JAN. 10.—Receipts of lumber by railway have fallen off during the holiday season fully one-half, but the recent mild weather has had the effect of stimulating the building trade materially, and quite a number of brick and brick-clad buildings are in course of erection. Some of the retail dealers from whom I made enquiries state that they have a fair run of trade, others call it dull, and considerable cutting in on prices for small bills is being done. Some grades, especially of coarse shipping cull boards and plank are quoted at extremely low figures, one contract having been taken at \$8.82 per M for 150,000 feet of S. C. boards, which means about \$6.82 on car at mill door. Not much margin for profit, I imagine, at that figure. Tenders are now being taken by our corporation for 3 in. plank for sidewalk purposes, which is specified to be gang cut, which will tend greatly to limit competition, and should the present scarcity of snow continue parties now tendering for summer delivery may get badly left. The prospects for a considerable advance on present prices may be considered as morally certain, and it is devoutly to be wished for that nature may do for the lumberman that which he is unwilling to do for himself. Former quotations may be continued, any alteration has only been in car load lots.

Table listing lumber prices in Toronto, including items like Mill cull boards and scantling, Shipping cull boards, Scantling and joist, up to 18 ft., Cutting up planks to dry, Sound dressing stocks, Picks Am. inspection, Three uppers, Am. inspection, 1 1/2-inch flooring, dressed, etc.

MONTREAL.

From Our Own Correspondent.

JAN. 9.—The weather we have been having lately has been mild, wet and unseasonable, and if it continues much longer it will no doubt seriously effect the making of logs in the woods, and it will have an effect on general trade that will not tend to improve matters. A few of the large dealers in the United States have been making enquiries for lumber lately, and they state that the prospects for business are not at all bad. It is thought that by summer or fall there will be quite a healthy tone to the market. Deals are still lively and large quantities have been placed at high prices, and prices generally for lumber do not show any depreciation at present. We quote prices ex yard as follows:

Table listing lumber prices in Montreal, including items like Pine, 1st quality, Pine, 2nd, Pine, shipping culls, Pine, 4th quality deals, Pine, mill culls, Spruce, Hemlock, Ash, run of log culls out, Oak, Walnut, Cherry, Butternut, Birch, Hard Maple, Lath, Shingles, 1st, Shingles, 2nd.

WINNIPEG.

The Commercial of a recent date says.—Lumber is one of the lumbering branches of trade at present, and the past week has been almost a blank. The appearance of snow has somewhat cheered those who have gangs in the timber woods at present, and the hope of a good logging season is now general.

BOSTON.

The Journal of Commerce of Jan. 10th says: Trade is naturally very quiet, the turn of the year curtailing operations still more. Eastern lumber is unchanged, except spruce, which latter is a little firmer owing to reduced stocks consequent upon the open and generally mild season thus far. Hemlock boards are likely to rule firm, with a moderate demand. Western pine is quiet and steady. Yellow pine is unchanged, with flooring and step plank in steady demand, and timber orders scarce.

Walnut has a moderate call. Cherry, quartered oak and whitewood hold their own. Ash is dull and quiet.

CANADA PINE.

Table listing prices for Canada Pine, including items like select, dressed, Shelving, Dressed, 1sts, 2nds, Dressed Shippers, Dressed Box, Sheathing, 1st quality, 2nd.

OSWEGO, N.Y.

From Our Own Correspondent.

No change in price since last report. We have been looking for a little better demand, but up to the present everything in the line of lumber has been very quiet. Stocks on hand are well assorted. We do not think the absence of trade depends upon prices. Customers all complain that they are selling nothing of consequence and only buy to keep up stock—weather fine.

Table listing prices for Oswego, N.Y., including items like Three uppers, Picking, Cutting up, Fine Common, Common, Culls, Mill run lots, Sidings, selected, 1 in., Mill run, 1x10, 13 to 16 ft., Shippers, Mill run 1 1/2x10, Selected, Mill run, 1 & 1 1/2 in. strips, Selected, Culls, 1x7 selected for clapboards, Shingles, XXX, 18 in. pine, Cedar, Lath, No 1, No 2.

ALBANY.

Quotations at the yards are as follows:—

Table listing prices for Albany, including items like Pine, clear, Pine, fourths, Pine, select, Pine, good box, Pine, common box, Pine, 10-in. plank, each, Pine, 10-in. plank, culls, each, Pine boards, 10-in., Pine, 10-in. boards, culls, Pine, 10-in. boards, 16 ft., Pine, 12-in. boards, 16 ft., Pine, 12-in. boards, 13 ft., Pine, 1 1/2 in. siding, select, Pine, 1 1/2 in. siding, common, Pine, 1-in. siding, select, Pine, inch siding, common, Spruce, boards, each, Spruce, plank, 1 1/2 in., each, Spruce, plank, 2 in., each, Spruce, wall strips, each, Hemlock, boards, each, Hemlock, joist, 4x6, each, Hemlock, joist, 2x4, each, Hemlock, wall strips, 2x4, each, Black walnut, good, Black walnut, 3 inch, Black walnut, 2 inch, Scymore, 1 inch, Scymore, 1/2 inch, White wood, 1-inch and thicker, White wood, 3/4-inch, Ash, good, Ash, second quality, Cherry, good, Cherry, common, Oak, good, Oak, second quality, Basswood, Hickory, Maple, Canada, Maple, American, per M, Chestnut, Shingles, shamed, pine, 2nd quality, extra, sawed, pine, clear, cedar, mixed, cedar, XXX, hemlock, Lath, hemlock, Lath, spruce.

BUFFALO.

We quote cargo lots:—

Table listing prices for Buffalo, including items like Uppers, Common, Culls.

TONAWANDA.

Table listing prices for Tonawanda, including items like Three uppers, Common, Culls.

LIVERPOOL.

The Timber Trades Journal of Dec. 27th says:—With the termination of the public sale of mahogany on Friday last, column, the actual business of the year 1884 may be said to have terminated.

Complaints of the slackness of business and the difficulty of obtaining orders are great, even taking due consideration for the time of year, when few dealers or consumers will entertain business except for some special and pressing work. This is the case to so great an extent that the trade have come to a mutual agreement to close their places of business at the Canada Dock, from Wednesday, the 24th, until the end of the current week, a concession which will be hailed with gladness by many of the employes who wish to visit their distant friends.

LONDON.

The Timber Trades Journal of Oct. 27th says:—With the markets here crowded to excess with all descriptions of wood and trade almost at a standstill it is hardly the time for foreign shipping houses to pledge themselves to a curtailment of the usual credit to the buyer on this side. Agree amongst themselves to a curtailment of the log crop and a diminished production for the forthcoming season, and they will be doing some good to prices, but talking about a limitation of credit to the importers here when as soon as the season commences they will all be rushing to thrust goods upon him, to say the least, rather absurd. When wood is at a premium and trade flowing in abundance will be time enough to raise the question.

The deliveries from the Surrey Commercial docks are going the wrong way again, and we have to record a drop as compared with last year's at date on deals 402 standards, and 26 standards on flooring boards. As some set-off against this, the deliveries of timber have exceeded those of the corresponding week 12 months since by 741 loads. We are on the whole season's deliveries short of 1883 8,967 standards of deals and 4,676 loads of balk timber. We need hardly remark upon the utter impossibility of balancing this in the short interval now remaining to 1884.

The cargoes arriving in the river between the 19th and 22nd inst. amount to 14, against 23 that came forward the corresponding interval twelve months since. At that time there were five fully laden deal cargoes in the list, but this time the fleet bring a very miscellaneous assortment of wood goods to market, there being only one cargo that could be so described, viz., the Chapman, from Uleaborg, with 9,146 deals and battens, and these do not look a very full cargo either. There are two flooring cargoes from Norway, with an intermixture of joinery and other oddments.

The regular liners from Gothenburg and Christiana with part flooring and case boards, &c., are about the most prominent in the list, which, with an abundance of staves and sleepers from the east country ports, represent the import. The whole of the contributions included will not make any material difference to the market; in fact, timber in odd lots, coming forward in this way, can hardly be felt, as the bulk of it is for private hands, while it is a rather favorable sign to see the arrival list less than that of last year at date.

GLASGOW.

The Timber Trades Journal of Dec. 27th says:—Since last writing there have been no auction sales to report and no additions to stock, with the exception of some parcels of staves per steam liners, and the timber wharves have, for several weeks been unusually quiet, arrivals being so light. The parcels of staves arriving from time to time per steam liners from New York, &c., amount to a pretty large total, over 600 million States staves having been imported this year, which, however, is considerably under last year's total.

Preparations, it is stated, are being made for building several tenements of houses at Clydebank, a shipbuilding and machine-making district near Glasgow; and at the Dean of Guild's Court here, on the 17th inst., linings were granted for some fresh erections, among

which one by a leather merchant and tanner appeared to rather surprise the Dean in these quiet times when he was told that when completed it would be the largest tannery in the world. The Dean said that he was glad some industry was prospering in the city.

The total importation of mahogany and cedar in all descriptions this year to Glasgow has been eight cargoes, comprising 5,032 logs and ends, measuring 1,268,633 sale feet, about 60,000 feet less than the import of last year (1883).

These eight cargoes received have consisted chiefly of wood of small sizes, but had shippers been able to provide large and medium dimensions this market could have easily taken up more cargoes than have been imported, and at satisfactory rates, we believe, as the demand for large and medium sizes has been all through the year very good. There is no mahogany here at present in first hands, and for about three months there has been no import.

TYNE.

The Timber Trades Journal of Dec. 27th says:—The arrivals of the last week may be said to be covered with one entry, that of the usual steamer from Christiania, the others being merely oddments. The weather has been cold and stormy, rendering outdoor work almost impossible; so that little is doing, and the holidays now commencing practically close business altogether for the season. The new year's week being held of even greater importance than Christmas in these northern parts, all manufacturers take the opportunity of repairs to machinery, &c. At present any excuse for closing for a few days is very gladly hailed.

AUSTRALIA.

Messrs. Lord & Hughes' monthly circular, dated Melbourne, Nov. 19th, says:—

The amount of business done in timber and building materials since the date of our last report on the 22nd ult., has been below the usual monthly average, in consequence of the holidays.

Offerings at auction have been principally Baltic deals and flooring, Oregon timber, Kauri pine, cedar, and redwood. Prices for red deals are slightly easier, owing to large arrivals. Flooring maintains last month's rates. Oregon timber shows an advance of about seven and a-half per cent. on previous sales. Kauri pine, cedar and redwood are lower.

The Otus, from Drammen, is not included in our imports of flooring, as she has been ordered on to Sydney.

Delivery from yards for consumption have been on a very liberal scale and likely to continue, as building operations are active in the city and suburbs.

RED DEALS.—Imports: 1,769 standard from the Baltic, and 1,561 pieces from Great Britain. The arrivals have been—Jotun, from Sundswall; Telefon, Nebo, and Mississippi, from Soderham; William Le Lacheur, and Hilma, from Gefse. Sales by auction have been small quantities ex Telefon and Glencairn, and small line ex Lindsay. MB, 11x4, realizing 6d. per foot 9x3, 11x3, 5 1/2, 9x3, 5 1-16d. SBS, 8x3, and 7x3, 4 7-16d. S.A.B, 11x3, 4 1/2, 9x3, 4d. The cargo ex William Le Lacheur is advertised for sale on 21st inst., and that ex Hilma on 25th.

SPRUCE DEALS.—Imports: Nil. Auction sales: Nil.

OREGON TIMBER.—Imports: Nil. The only public sale since our last has been cargo ex Republic, which was sold yesterday at a decided advance on previous rates, prices ranging from £7 12s. 6d. to £7 5s.; average, about £7 10s.

LUMBER.—Imports: Nil. The shipment, ex Onoida, was sold on 31st ult. at an advance on last month's quotations. The only other public transactions have been of small balances ex Adelaide, and as there is now no lumber in first hands, a further advance is anticipated for first shipments arriving.

REDWOOD.—Imports: Nil. The balance of consignment ex Kylemore was all cleared off at auction on 31st October at £9 to £8 10s., besides which there have been other public sales.

FLOORING AND WEATHERBOARDS.—Imports: 1,639,633 feet lineal. The arrivals have been Star of the East, from Frederickstad; Darling

Downs, Rodney, and Aviemore, from Great Britain. Sales by auction have been—cargo ex Lindsay, balance ex City of Agra, and various lines ex G. P. Harbitz, Hertha, Helene, Atlantic, Kamfjord, Stallknecht, and Avanti, at following prices, viz.:—Red 6x1½, 10s. 9d.; 6x½, 8s. 3d.; 6x½, 6s. 3d. and 6s.; 6x½, 5s. to 4s. 9d.; 4-out weatherboards, 6s. 3d.; White, 6x1½, 9s. to 8s. 6d.; 6x½, 8s. 3d. to 8s.; 6x½, 6s. 7d. and 5s. 6d.; 6x½, 5s. 9d. to 5s.; 4-out weatherboards, 6s. 3d. to 6s., the above prices showing a marked improvement on every line as compared with our last advices. The cargo ex Magna is advertised for sale on 25th inst.

KAURI PINE.—Imports: 1,032,253 feet super. The arrivals have been Cabarfeidh, Albert the Good, Jules Marie, Waitemata, and Darcy Pratt. Auction sales have been ex Grassmere, Cabarfeidh, Jules Marie, Albert the Good, and Waitemata. So many arrivals coming together has had a depressing effect on prices, consequently sales have been made below last month's quotations.

CEDAR.—Imports: 153,300 feet super. The arrivals have been ex various coasting steamers. Sales have not been so heavy as last month, but prices are lower.

DOORS.—Imports: Nil.

LATHS AND PICKETS.—Imports: Laths, 3,201 bundles; pickets, 1,392 bundles.

SLATES.—Imports: 797,200 pieces. The arrivals have been—Garfield, Sudbourn, Micronesia, and Oakworth, from Liverpool; Abiel Abbott, from New York. We have no sales by auction to report.

PLASTER.—Imports: 163 barrels. There have been no auction sales since our last.

CEMENT.—Imports: 4,980 barrels. There is no improvement to report, and prices remain about the same as last advised, viz., for best brands, 13s. to 12s. 6d.

GALVANIZED IRON.—Imports: 1,145 tons. Remains unchanged; no private sales of importance having transpired, neither have there been any at auction.

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

THE CHICAGO YARD PINE TRADE OF 1884.

The wholesale lumber trade of this city entered the year 1884 with a stock of 635,348,561 feet of lumber compared to 655,013,520 at a corresponding date last year. The comparison between shingle stocks at the beginning of the two years was—1884, 461,930,496—1883, 290,946,350. Thus it can be seen that there was about 20,000,000 feet less of lumber on hand January 1st, 1884, than there was at a like date the year before, while there was a vast increase of shingles last year as compared to 1883.

The past year had been one of marked decline in prices on common lumber, and the trade entered the new year with some doubt and misgiving. Since the spring of 1882 a shrinkage in the value of lumber had been threatened by a manifest inclination to overproduction. The boom of 1880-81 had spent its force, and all the great industries of the country had faced the probability, that at length grew into a certainty, that a fall of all kinds of coarse products must decline to minimum standards. During 1883 values took a decided run down hill. When 1883 closed on the Chicago lumber trade, the merchants and manufacturers looked back upon a twelvemonth of unsatisfactory experience, and forth on a year of uncertainty.

It is worthy of note that between the price lists of the trade for December, 1883, and December, 1884, there was considerable difference. On upper grades and select published prices in December just past were about \$1 below what they were the year before; on inch finishing lumber they were nearly the same in each December; 12-inch stock boards were the same, as were box boards; on dressed and matched flooring there was a decline from December, 1883, to December, 1884, of \$1, and on rough flooring of \$1 to \$3; on tied siding 50 cents to \$1.50, on beaded ceiling about the same; on 12-inch common boards from \$1.50 to \$3; on

common and cull boards, from \$2 to \$3; on common and cull fencing, \$1.50, and on dimension from \$1 to \$1.50. Shingles were listed for December, 1884, at 25 to 50 cents lower than they were for December, 1883.

In making the above comparisons it is proper to observe that the December list for 1883 was not as honest a one as that for December just passed; that is to say that the list one year ago more widely diverged from prices made in actual sales than the list for December just past. It will thus be seen that the actual difference between prices in the two Decembers was not as great as appears by the comparison of price lists; yet there was a difference that represented a decline during the year, and it would probably average from \$1 to \$1.50 a thousand, and possibly more on thick uppers.

A QUESTION ABOUT DOORS.

Of what shall our doors be made? The rooms are finished with the more common hard woods as ash, cherry, butternut and pine. The regulation thing is to veneer them with the varieties of wood conforming with the finish of the rooms, but such doors are expensive, even if simple in design and give an impression of stiffness and formality that is not always agreeable. Is it necessary to insist on this literal conformity?

Well, that depends upon what necessity rests upon. If we allow a mahogany chair to stand in the same room with one made of black walnut, or a Wakefield rattan to lean against a comrade clad in crimson plush; if a cherry chimney piece may be near neighbor to a rose-wood piano and an ebony cabinet stand beside a marble topped table, it is certainly no sin to hang a pine door to an ash casing. The prejudice in favor of making the door "match" the visible wood finish of the rooms in which they show when they happen to be closed, seems to have too slender a foundation to be called a necessity. Such doors are no better, and it would not be easy to explain why they should be esteemed better in appearance.

One of the best doors that can be made has a solid pine frame-work with panels of some hard wood, the latter readily matching the standing finish if desired, and the pine being comparatively free from the tendency to warp or submit to the weather, which characterizes most of the harder woods and makes it unsafe to use them solid even when it is permitted the door to have both sides alike. Since the advent of portieres the doors are of less importance than formerly, and in the case of sliding doors that are only closed on sweeping occasions, or when the house has gone to sleep, it is a waste of resources to make them anything but severely plain and plainly useful. The chief duty of a sliding door is to slide, and whatever interferes with this separation, as much elaborate work is apt to do, is a mistake and a blemish.—*The Builder.*

A DESPATCH from Buffalo on Jan 12th says that Sheriff Ketch has seized 514,719 feet of pine lumber on an attachment issued by Judge Corlett, in the case of the Canadian Bank of Commerce v. Hugh Wilson, jr., and others.

There shall be no Alps.

When Napoleon thought of invading Italy one of his officers said: "But, sir, remember the Alps." To an ordinary man these would have seemed simply unsurmountable, but Napoleon responded eagerly: "There shall be no Alps." So the famous Stropion pass was made. Disease like a mountain, stands in the way of fame, fortune and honor to many who by Dr. Pierce's Golden Medical Discovery might be healed and so the mountain would disappear. It is specific for all blood diseases, such as consumption (which is only scrofula of the lungs), pimples, blotches, eruptions, rashes, swellings, fever sores and kindred complaints.

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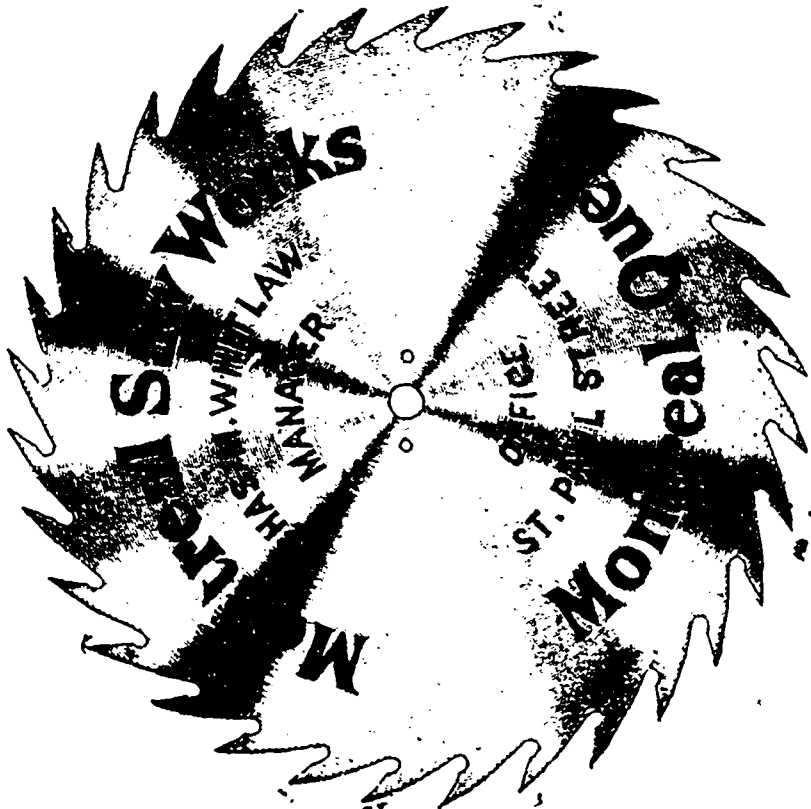
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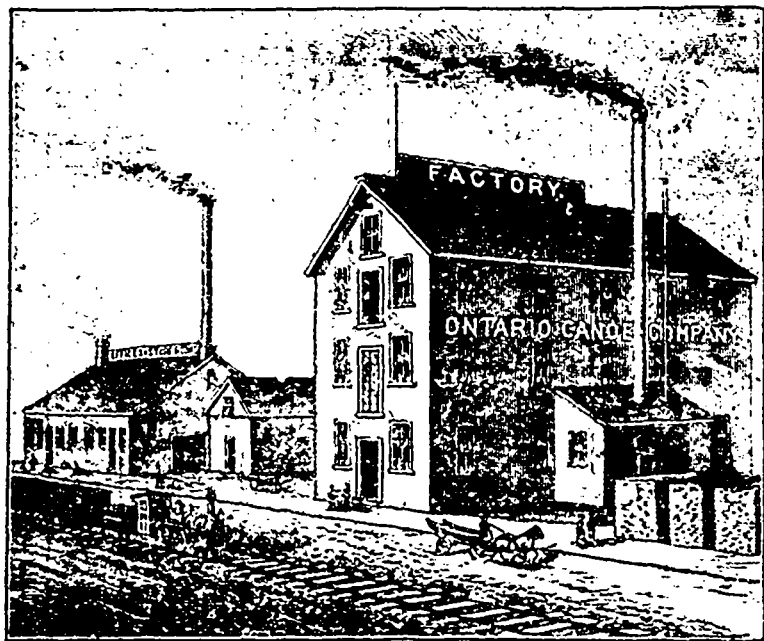
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Manufacturers of all kinds of PLEASURE, FISHING and HUNTING

CANOEES

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



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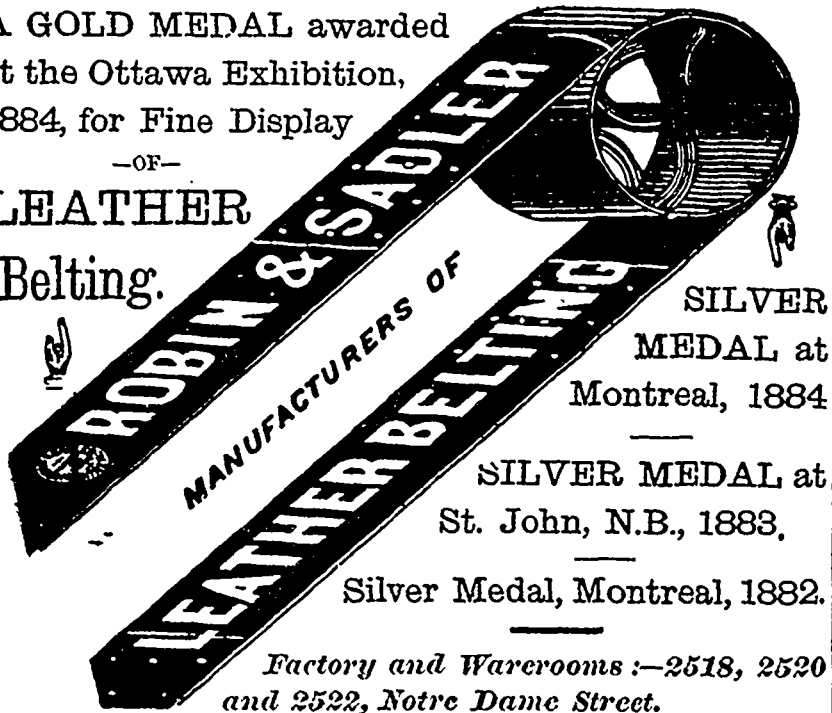
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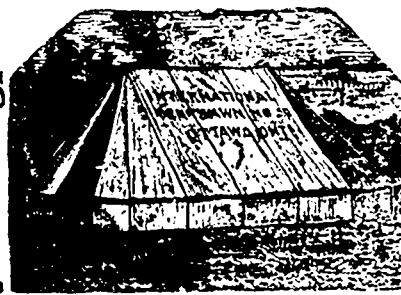
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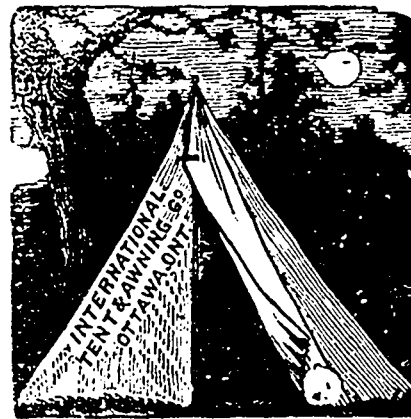
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We control "THE LATOUR PAT." for Camp Furniture, the best on earth. The only Gold Medal ever given for this class of goods was awarded to the Latour Camp Furniture at Toronto in 1882.

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

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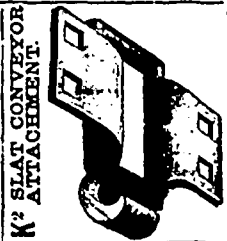
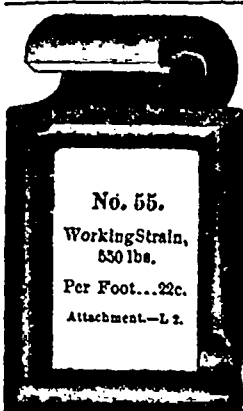
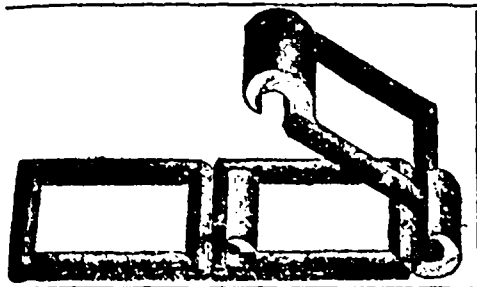
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International Tent & Awning Co.,

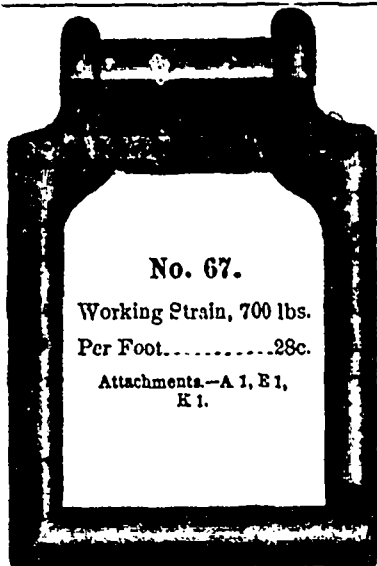
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For CONVEYING, ELEVATING, and TRANSFERRING every Product of a Saw Mill, into, through and out of the mill.

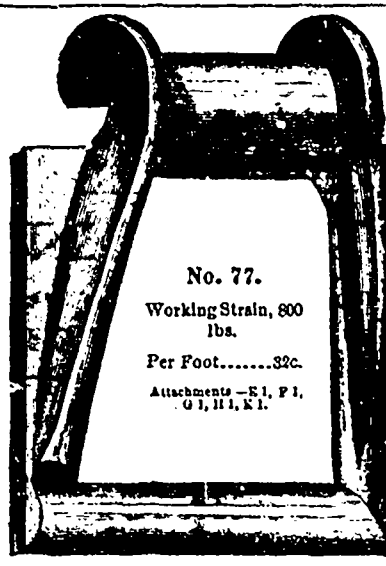


No. 45-18 cents per foot and 55 used for light Sawdust Conveyors.



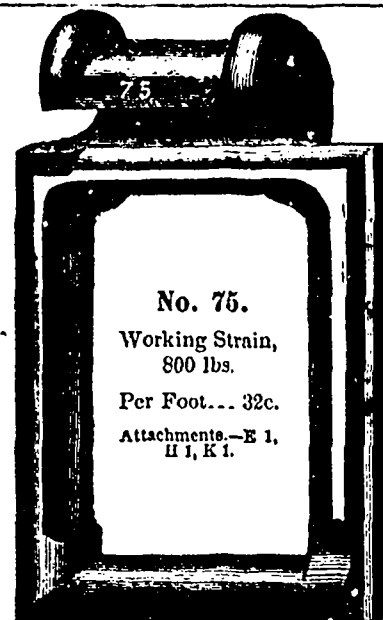
No. 67.
Working Strain, 700 lbs.
Per Foot.....28c.
Attachments—A 1, E 1,
K 1.

No. 67—MEDIUM SAWDUST CONVEYOR CHAIN.



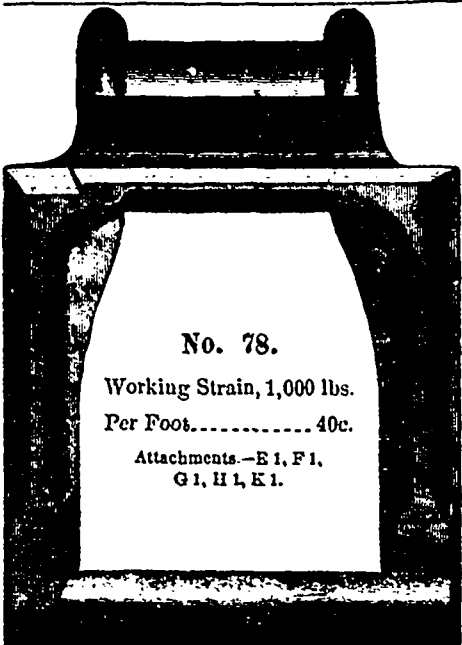
No. 77.
Working Strain, 800 lbs.
Per Foot.....32c.
Attachments—E 1, F 1,
G 1, H 1, K 1.

No. 77—CONVEYOR AND LIVE ROLL CHAIN.



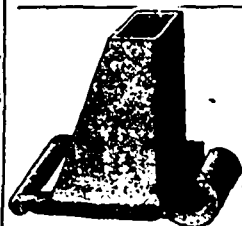
No. 75.
Working Strain, 800 lbs.
Per Foot... 32c.
Attachments—E 1,
H 1, K 1.

No. 75—LIVE ROLL AND DOUBLE STRAND ELEVATORS.

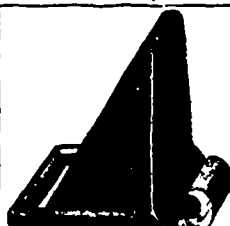


No. 78.
Working Strain, 1,000 lbs.
Per Foot..... 40c.
Attachments—E 1, F 1,
G 1, H 1, K 1.

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

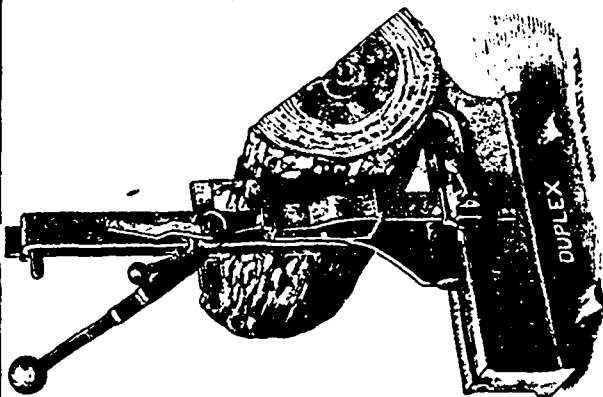


H1 TRANSFER ATTACHMENT.



H2 TIE & POLE LOADING ATTACHMENT.

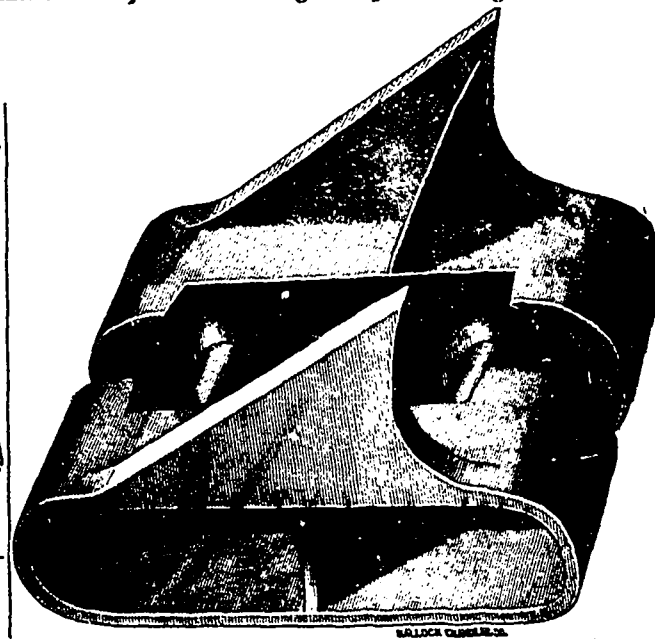
KNIGHT'S PATENT SAW MILL DOG.



One of the Best Log and Board Dogs made.

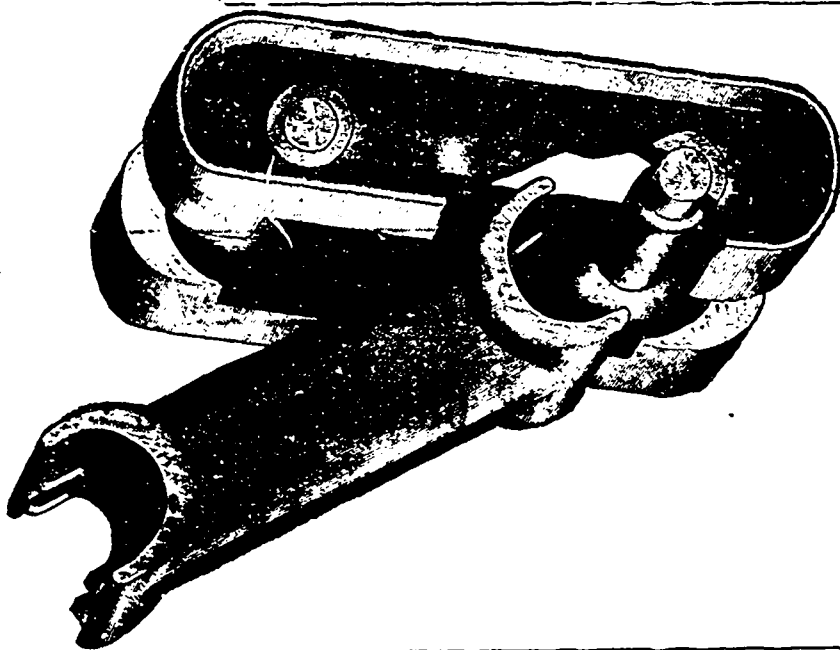
GIANT CHAIN for Log Haulups

And Main Refuse Conveyors for Large Mills.



LOG TOOTH.

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



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

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

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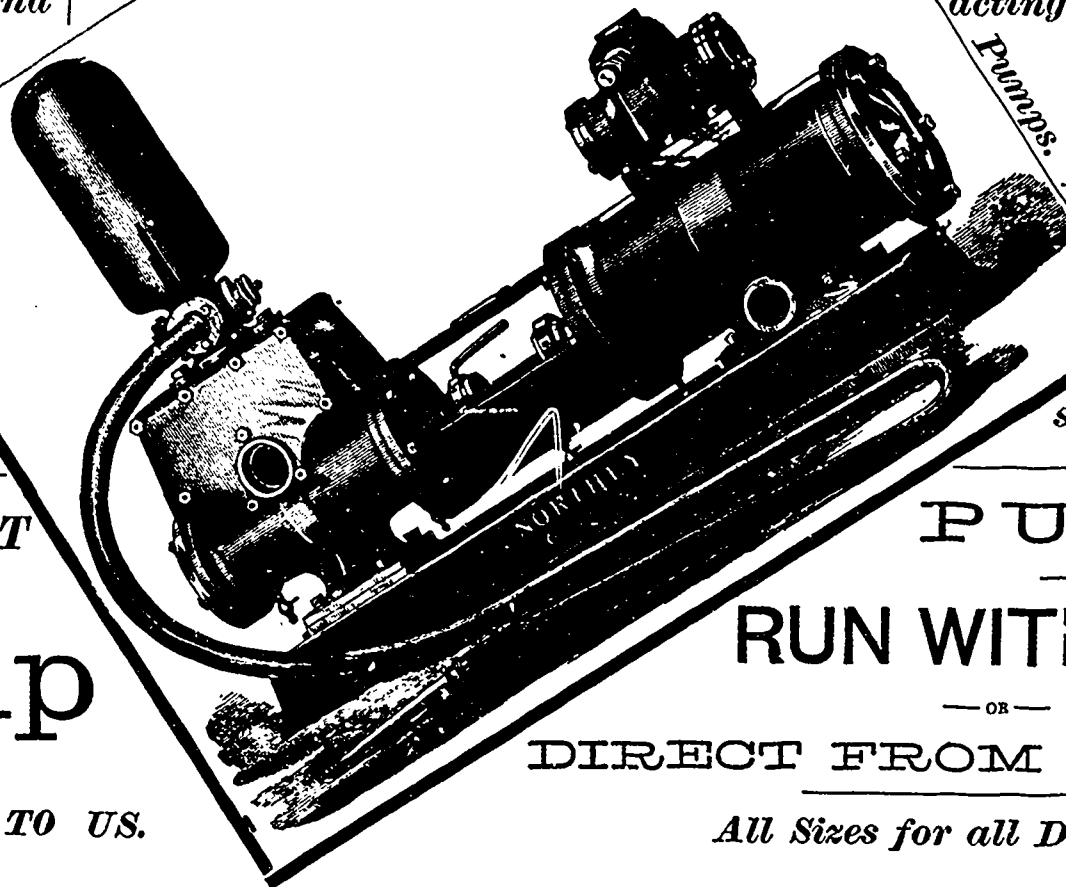
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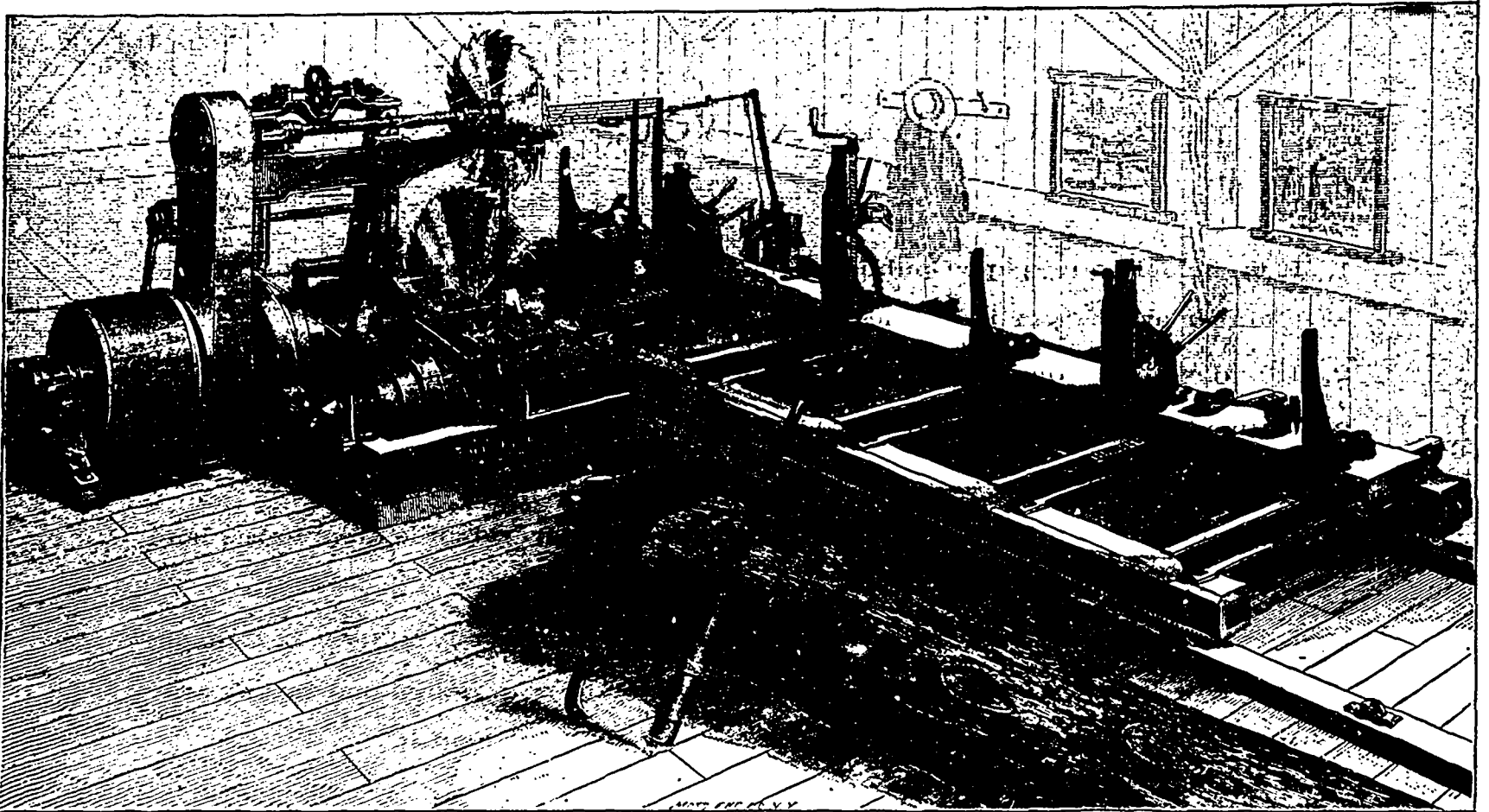
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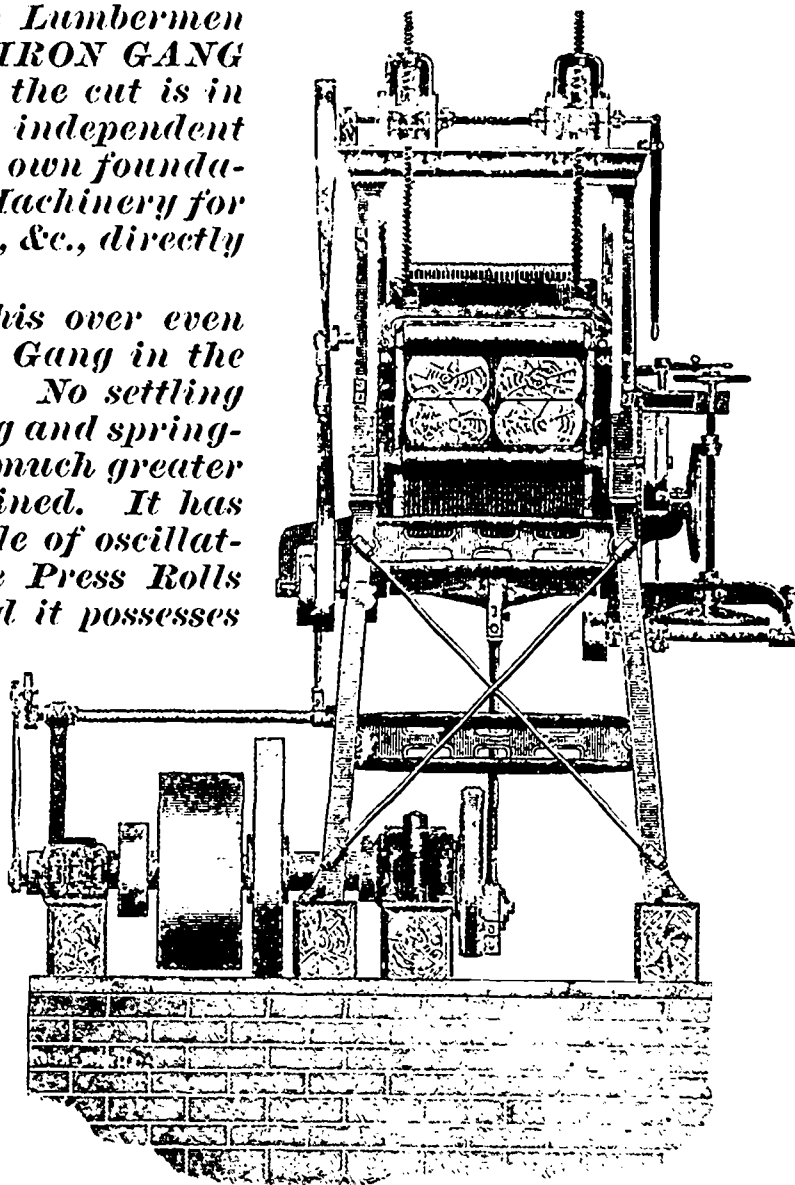
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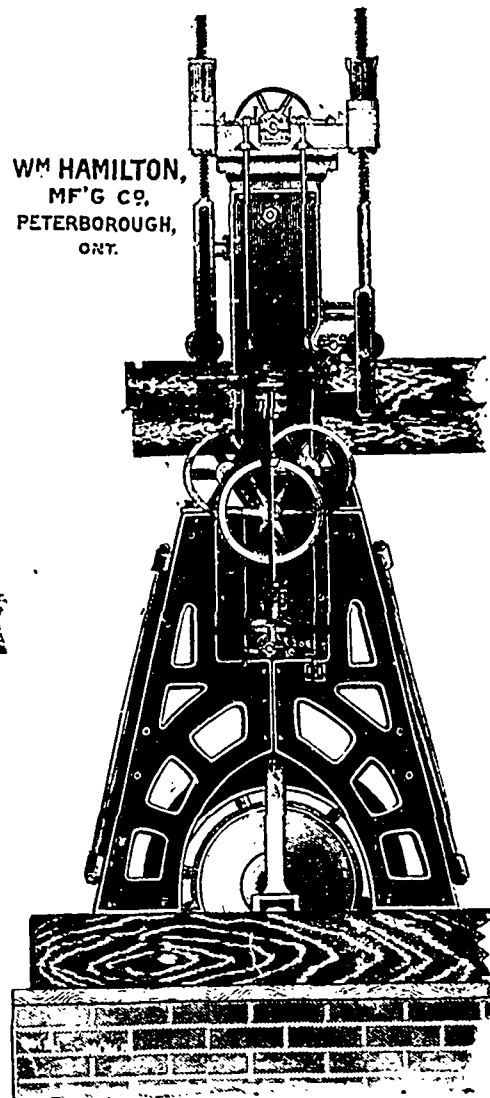
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We introduce to the Lumbermen of Canada, our New IRON GANG which will be seen by the cut is in itself a complete and independent Machine, resting on its own foundations, having all the Machinery for operating, feeding, &c., &c., directly attached.

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



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

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

Serpent River, September 28, 1884.

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