

## ST. CATHARINES SAW WORKS!



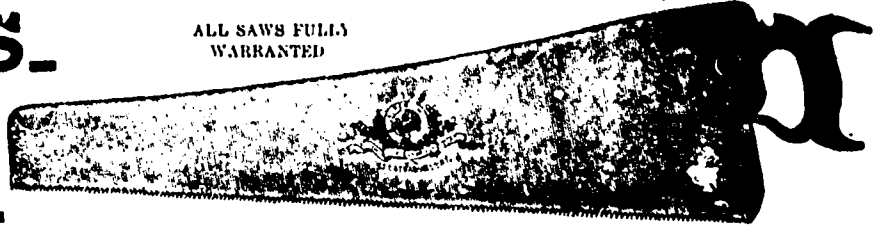
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MANUFACTURERS OF EVERY DESCRIPTION OF  
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ST CATHARINES, ONTARIO.

Sole Manufacturers for the Dominion of  
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ALL SAWS FULLY  
WARRANTED



## MILL OWNERS AND MACHINERY.

Men who conduct great business enterprises are naturally conservative and averse to innovations and experiments. And yet it is through experimental knowledge, acquired by reducing theory to practice, that all progress in the useful arts is made. But it is not the business of the purely practical man to theorize; he is concerned only with actual results, and adopts those means which he finds ready made to his hand, and which he thinks are best calculated to produce those results. The field of scientific speculation, in which the investigator reasons from cause to effect, and applies well-known principles and the laws of matter in working out those mechanical problems which relate to production and industry, belongs exclusively to the inventor. He is the manufacturer's best friend and benefactor, and yet he is sometimes regarded by the latter almost in the light of an enemy, because he is the instigator of changes and innovations, because he will not let "well enough" alone, but is continually coming forward with some new mechanical device or machine in the line of improvement, which revolutionizes the existing order of things, and which the manufacturer is compelled to adopt.

Hence there are many fossilized mill owners who dread the appearance of the inventor with his new machine, as the sick man dreads the option of physic or the surgeon's knife which is to cure his infirmities and give him a new lease of life. He would rather be let alone and plod along in the same old beaten track which leads to no progress, provided his contemporaries in the same line of business are content to do the same. Even if it can be demonstrated that the new invention is one in the interests of true economy, and will pay for itself ten times over in the course of a few months, he is reluctant to investigate its merits, and don't care to experiment with it. He can only be interested on compulsion. Especially if its adoption would involve any considerable immediate outlay, he can't see any good in it and won't touch it until compelled to do so by the action of some more enterprising and progressive rival, who knows a good thing when he sees it, and who believes that the best is the cheapest in the long run.

It is undoubtedly true that the continual improvements in machinery involve frequent changes, which are sometimes expensive and burdensome to manufacturers. But on the whole the latter, as well as the great consuming public, are large gainers by these changes, on the score of improved processes and cheapened production. In this age of progress no producer of textile, leather or metal fabrics can afford to ignore any new device or invention which secures the best results with the greatest economy of time, labor and raw material. In the race of trade competition he will be forced to take hold of these new things sooner or later, and he had better be among the first than the last to take advantage of them.

Of course we do not recommend the practical manufacturer to grab at every new patented machine which comes along regardless of merit. While open to conviction and ready to investigate, he also needs to be cautious, deliberate and discriminating in his action, in order that he may be sure to get the best, and not throw

away his money on mere pretentious and catch penny devices. There is no danger of his being deceived or imposed upon if his investigation is properly conducted. He is not called upon to take the word of any man, however well known or expert in machinery, as to the merits and capabilities of any new specialty. A mere guaranty of certain results should hardly satisfy him. It is not unreasonable for him to require the proof, the practical ocular demonstration; and the owner of any really meritorious patent will never shrink from the real test however vigorously applied. But after the demonstration is complete, and its utility is established beyond doubt or question, there should be no holding back, if terms are reasonable on the part of the buyer. A new and good thing in the machinery line, which is really wanted and needed by manufacturers, will not long go begging for customers. *Manufacturers' Gazette*

## THE MURDEROUS SET-SCREW

Beware of set-screws when putting on belts. A set-screw is a terrible thing when running exposed. Mill owners should be made liable to a fine of a \$1,000 for each and every set-screw left sticking out of their machinery, and said fine should be rigidly enforced by payment of \$900 fine to the person who enters complaint against the owner and proves it. Unprotected belts are another source of danger, but they are as nothing beside the set-screws. Let every mechanical journal, every newspaper, and every publication in the world, raise a hue and cry against this demon of the shop. Every year it kills more people than does the smallpox, yet it still lies in wait for its victims in ten million shops, mills and factories. If we should go into all these places and see as many rattlesnakes coiled up all ready to spring whenever a man came within range, then we would get a fright that would last us to the grave. As it is, we pass as great a danger many times a day. We never think of it unless some poor fellow gets wound up or torn to pieces. Then, perhaps, we may get two or three pieces of board and nail over the man-killer, have a sigh for poor murdered Billy, and go to work until the next set-screw gets a victim.—*Jas. F. Holart.*

## THE LUMBER TRADE.

By the census of 1880, says the *Lumberman's Gazette*, the total value of the products of sawed lumber in the United States is given at \$233,268,720. Great as these figures appear to be, says the *American Merchant*, they do not approximate the value of the material when it has passed through various stages of manufacture and has given employment to thousands of people who devote their attention to and derive a livelihood from wood working industries. The valuation above given, it will, therefore, be understood, only covers what may be called the raw material and not that converted by the multiplication of the numerous articles which enter into use and consumption.

The variety of wood of American growth gives a wide range for the operations of the handicraftsman, and has led to the development of industries of a widely-diffused character, yet largely interdependent and altogether dependent upon the forest supplies of the country.

But while the timber lands of the United

States are as a resource and supply the means of great industrial development for the people of this country, they are no inconsiderable factor in helping other countries to like development, and in supplying the needs of other people. Our export of wood and its manufactures make an item of our foreign trade which deserves attention. During the fiscal year ended June 30th, 1880, the exports of this character were valued at \$23,255,128, a small amount compared with the value of the wood products of this country, as stated in the beginning, and very much more so in comparison with the results derived from the subsequent industrial reproduction.

But the sum of \$24,000,000 representing one feature of our export trade, is by no means contemptible and insignificant, and that it has been attained despite the fact that very little energy relatively has been exerted for securing such a trade, suggests that with proper effort it can be expanded to an extent which will be limited only with our ability to meet the demands which may be made upon us.

The increase of our exports of lumber and of the product of lumber should receive the careful consideration of every person who is concerned in the business, and this thought should lead to persistent and earnest endeavor to enlarge the field of our foreign trade and to secure custom.

The appended table gives some details of the lumber trade which may interest our readers.

EXPORTS OF LUMBER, ETC., DURING THE FISCAL YEAR 1884.		
	Quantities	Value.
Boards, deals and planks, ft.	414,920,000	\$ 7,079,701
Joists and scantling, ft.	12,622,000	195,043
Lath, M.	9,180,000	11,295
Pickets, palings, &c., M.	1,577,000	16,615
Shingles, M.	1,062,000	183,521
Shooks.		1,713,290
Staves, &c.		2,656,473
Hoops, &c.		350,470
All other lumber.		970,191
Total.		\$13,208,599
Corrwood, cords.	2,646	9,464
Sawed timber, ft.	201,257,000	247,328
Hewn, cubic ft.	10,616,993	1,735,352
Logs and other timber.		1,704,033
Total.		\$5,096,800

## MANUFACTURES OF WOOD.

Doors, sashes and blinds.	\$ 574,294
Mouldings, &c.	173,661
Hhds. and abls., empty.	320,184
Household furniture.	2,420,831
Woodenware.	406,264
All other manufactures.	1,714,833
Total.	\$ 5,340,730
Grand total.	\$ 21,255,128

## MACHINERY ACCIDENTS.

We dare say that more men are killed by accidents from the death traps than are killed by all the murders we read of, and where can you find even one case of this kind that has been published? Once in a while a poor fellow gets a leg torn off or an arm pulled out, and if he does not die he may, after a law suit, secure a few thousand dollars damages, but what a

contract, life and limb against a few thousand dollars. We can almost cry out for a little of the Mosaic law about the eye for eye business, and say. When a man gets caught in unprotected machinery, let the owner of said machinery be cast forthwith into the same place, and let him be killed as an example. It sounds very much like barbarism, but it is good homoeopathic doctrine and is not a particle more barbarous than the idea of letting these machine-owner murderers go scot free and unpunished.

*Holart in Lumber World.*

## AUCTION SALE

The New York Lumber Auction Company held its forth auction sale on the 16th inst., the attendance being good, composed of yard dealers, commission men and manufacturers. The prices averaged were not as good as at the other sales, which was due to the average grade being lower. White pine, 1 inch selects and uppers sold at \$41 fine common 1 inch at \$29, clear moulding strips at \$24 to \$25, pine box 1 inch, at \$13, stock boards \$13 to \$13.50, 1 pine shelving at \$16.50. Ash sold at \$12 to \$13 for mixed lots. Oak 1 1/2 inch sold at \$11; cherry, 7,410 feet, half of it 1sts and half 2nds, sold at \$49; walnut, 1 and 1 1/2 inch, firsts and seconds, at \$66; basswood brought \$18.50 and white-wood \$16.50.

THE *Calgary Herald*, commenting on the presence in that city of two Toronto dealers with the object of buying hides, discusses the question whether it will not be profitable to establish tanneries in that locality, where the raw material for the manufacture of leather is produced in such abundance. There is no doubt about a market being secured, the trouble being that in that region no hemlock is found. The problem is whether it is cheapest to move the hides to the neighborhood of the forests, or the product of the forests to the neighborhood of the hides. The *Herald* thinks the Government should cause enquiries to be made as to the capacity of the land there for the growing of hemlock trees, so that these could be planted for future use. More present needs it might be possible to supply with the extract of the bark largely produced in this province and that now finds a market in the old country or the United States.

WAGES for men in the camps, in Michigan, range from \$18 to \$26 per month.

## SNOW DRIFT

## BAKING POWDER

The Peoples' Favorite.

## W. D. MATHEWS &amp; CO.

Having made arrangements for purchasing GRAIN at Peterborough, will buy all kinds,

Wheat, Barley, Pease, Oats, Rye, Clover Seed and Wool,

At Stevenson's Storehouse, North End