

or to be changed, is avoided, thus saving time, trouble and expense, while their first cost is much less than any other pulley made not having these advantages.

The Compression Fastening whether used with keys in iron center or compression alone, keeps the pulley always in balance as the compression on the shaft, and key is always towards the center.

The most perfect balanced iron pulley fastened with set screws or key, is invariably out of balance by being thrown from the center, this fact is obvious to all mechanics.

The advantages of our mode of fastening over any other are: It is the only absolutely true fastening for a pulley. A pulley once properly balanced cannot be thrown out of balance in securing with this fastening. A pulley fastened with key or set screw in the ordinary way, cannot be screwed without lifting the pulley from the shaft at that point where the key or set screw is placed, thus throwing the pulley out of balance.

Manufacturers should carefully avoid any pulley with a set screw fastening for shaft; also a key, unless the pulley is compressed on it. The Dodge Patent Bushing system is a great convenience to manufacturers and also to agents who carry pulleys in stock, as with the aid of the patent bushings every pulley will fit 22 different sizes of shafts.

As well as the acknowledged authority and most quoted by American mechanics, summarizes thus: The ratio of friction to pressure for leather belts, when worn over woollen pulleys is 47, over turned cast iron pulleys, 24, thus showing the average advantage of a wood pulley over iron to be 50 per cent.

While on the subject of transmitting power effectually and economically we would respectfully draw the attention of all interested to the system of grooved hardwood pulleys manilla rope as advertised by the Dodge Wood Split Pulley Co. on another page of this paper. The transmission of power by ropes is not new but the Dodge patent system of adjusting the pulleys applying the ropes, taking care of the slack and stretch is new and most effectual, and is giving the best of satisfaction, as certified by the testimonials of numerous well known manufacturers who are using this method of transmission.

Illustrated catalogues of belt pulleys and the rope transmission system will be furnished on application to the Dodge Wood Split Pulley Co., 51 to 59 Adelaide Street West, Toronto.

FIREWOOD IN ONTARIO.

To the Editor of the Canada Lumberman.

SIR.—Perhaps you can afford me room for a reflection on the above subject, which the following paragraph has suggested:—

SCARCITY OF FUEL IN KANSAS.

There was last week great suffering in Kansas for want of fuel. Much of that state is treeless, and wood is not to be had. Corn is sometimes used there for fuel, but the corn was a failure this year, and the unfortunate settlers were deprived of that resource against the inclemency of the winter weather. In some counties the inhabitants had nothing to depend upon but a scanty and uncertain supply of coal. Some of them had to travel thirty, forty and fifty miles to a railway station for coal, only to find that there was none to be had. The roads were working to their utmost capacity, yet they could not supply all who needed fuel. In one place the cars were stopped by the citizens, who were ready to perish, and they helped themselves to what they wanted. Many persons have been frozen to death, and many who have not actually perished with cold have endured great suffering.—*Natural Star*.

This was two weeks before the late windstorms in the west. Returns from a great number of Ontario townships have brought out the fact that, throughout settled Ontario, the average amount of firewood standing is but fifteen years' consumption, at the present rate of using, when most of our best farming sections will be in the same position, as far as fuel is concerned, as Kansas, which has great forests near her, as Ontario would still have, but in both cases they are so distant that carriage costs more than would purchase coal. When in Kansas last year, I found people doing as they do here. The wise were planting groves of maple, hickory, and ash, and the others were not—they were even cutting down, dragging long distances and burning the few great trees which fringe the river banks.

The moral to Ontario is obvious. Why should not the coming spring witness a great tree-planting movement?

Yours truly,

R. W. PHIPPS.

Toronto, January 27, 1888.

—Mr. W. P. Sayward, Victoria, B.C., proprietor of the Rock Bay Saw Mill, has the only saw mill in that place. It has the capacity to cut 6,000,000 feet of lumber per annum.

—Toronto dealers report a large demand for leg lail stuff and red pine for car building purposes. J. B. Smith & Co. have had an enquiry from Montreal for 200,000 feet 16x8 inches, and 16 feet in length, for the construction of a Howe Truss bridge. The same firm last year filled an unusually large contract of this character, supplying 300,000 feet 3x14, and averaging 40 feet in length, for the building of the Christian Brothers College, Montreal. The stuff was cut on Lake Nipissing.

LETTERS FROM CORRESPONDENTS.

What the Millmen are Doing Here, There and Everywhere—Prospects for Next Season's Operations.

BRAYSON, QUE.—The shipments of lumber from Canada past Rome's Point last year, the great bulk of which went from this section of the country, were as follows. Pine lumber, 138,017,880 feet; spruce, 24,007,168; hemlock, 9,502,757; basswood, 553,662; ash, 1,348,294; birch, 76,445; elm, 63,749; maple, 240,006; lath, 45,103,530 pres.; shingles, 4,389,500; pickets, 2,630,177 feet; match blocks, 745½ cords; hemlock bark, 6,415; wood (lime), 1,360; R. R. ties, 243,750; telegraph poles, 9,550; cedar posts, 13,987; wooden doors, 10,458; reel stock, 396,000 feet; shooks, 3,314,000; match splints, 140,220 gross. The above does not include the exports by Burlington in barges, say 60,000,000 feet. The approximate value of the exports is as follows. Lumber, pine, spruce and hardwood, \$3,644,000; shingles, \$15,000; pickets, \$32,000; match blocks, \$4,500; hemlock bark, 36,000; firewood, \$3,050; R. R. ties, \$75,000; telegraph poles, \$15,000; cedar posts, \$1,100; wooden doors, \$13,072; shooks, \$50,200; match splints, say \$5,000, or say in round figures, \$4,000,000.

McKELLAR.—Lumbering operations are brisk in this neighborhood this winter, and the weather has favored the work so far. The snow is now only about 22 inches deep and comparatively loose, so that operations go on in the woods without the need of shovelling roads. S. & J. Armstrong will get out three million feet of saw logs for The Georgian Bay Consolidated Lumber Company on Maganetawan river, and two million feet for Mr. Richard Power, of Barrie, on Parry Island. They are also taking out some saw logs in McKellar for C. Beck & Co., of Penetanguishene, and have some three thousand pieces of cedar cut for telegraph poles. These last are the result of a new venture and they expect to get market for them next summer at Parry Sound or Midland. Cedar in some parts of this district is very good, and if a market can be got there will likely be large quantities of it got out hereafter. The Parry Sound Lumber Company, Midland, and North Shore Lumber Company, and Conger Lumber Company, of Parry Sound, are all stocking up heavy for next summer's cut. The Georgian Bay Consolidated Lumber Company, of Wauhaushene, will stock their Byng Inlet mills by way of the Maganetawan river. They are also taking out some board pine in Croft. Chew Brothers, of Midland, are getting out stock in Burpes, and there are numerous lumber concerns operating heavily in the northern portion of the district toward French river. Oats are in good demand at 40 cents; hay plentiful at \$8 to \$10; teams are in demand at \$1.50 to \$1.75 per day, and men's wages are very good, \$20 to \$22.

NIPISSING DISTRICT.—A correspondent writes from Wahnapiatae as follows:—I am much surprised to find such a centre of business among the mountains of Nipissing as I find here. At Wahnapiatae there are quite a number of new buildings—a hotel or boarding house, a post office, a general store, kept by Messrs. Simard & Roy. The Emery Lumber Company's buildings make quite a show in the embryonic town. The Georgian Bay Lumber Company has also built a magnificent storehouse and office alongside the C. P. R. track, and in close proximity to the Emery buildings. These two companies are lumbering extensively on the Wahnapiatae river, principally saw logs. I took a trip up through the lumber woods, and I was very much pleased to see how these Americans conducted their work. To see their teams moving away from the skidways with their loads of logs was a grand sight. But they spare no expense in grading their roads and using sprinklers, making a solid ice road in a very short time. Mr. Robert Gorman, of the firm of Timmins & Gorman, is also logging in this locality. His camp is only two miles from the railway. All these firms have now got pretty well into the hauling, and their logs are all of a superior quality. As a rule they cut and take out smaller logs than we do on the Ottawa river.

BRUSSELS, ONT.—There is a large falling off in the cut of logs from year to year, in this section. Timber is about exhausted and in a very short time saw mills can be dispensed with. Local demand uses the greater part of lumber manufactured here, except perhaps a little hardwood. We do not saw much till spring opens up, generally.

CHIPPAWA, ONT.—There will probably be about three millions of oak and as much of elm, ash and basswood hauled on the Chippawa creek canal feeder and Grand river. No pine to speak of.

PARRY SOUND LUMBER CO., Parry Sound, Ont.—We are getting out about 9,000 feet to saw, which, with 4,000 ft wintered over, will give us 13,000 feet to cut next summer. We are building a shingle mill of about ten million capacity, and are taking out a full stock for it. We expect to start the mill early in April, and expect to see business good this coming season.

OTTAWA, ONT.—The lumber cut in this section was much maller than usual, owing to the lowness of the water, but we expect the cut for 1888 will be of normal proportions. The winter has thus far been favorable for logging operations, and we look for an advance in all the lower grades of lumber, and possibly a decline in the better grades.

GOODEYE & BRIGHAM, ALLEN PARK.—Logs are coming in freely. We expect to get this winter about 1,000,000 feet, principally hardwood, such as maple, rock and soft elm, basswood and a quantity of cedar and hemlock. The demand is better this season so far than last, but prices are not much better. We keep our mills running all the time.

ALLAN'S MILLS, ONT.—The local demand for lumber is dull, owing to a scarcity of money amongst the farming community, on account of slight grain crops. During the last season J. & R. Ritchie fitted their mill with a set of new machinery throughout, of modern design, made by the Waterous Engine Works Company, of Brantford. The principal lumber exported from here is ash and basswood. Very little pine goes across the lines now.

JOSEPH P. WALLIS, Port Carling, Ont.—The lumber business in this vicinity is fairly active, and the prospects for the coming season are good. Next season, all being well, I will have a small steam tug on the water, and my shingle mill, which I sold some time ago, but have re-purchased, will be in operation, as well as the saw mill and planer which I have been running for some years.

FENELON FALLS, Ont.—There are only two lumber firms operating here at present. Their combined cut for the coming season will be about 10,000,000 feet, made up as follows: Thomson & Co., 5 to 5½ million, Green & Ellis, 4½ to 5 million. Report says Mr. Mossom Boyd is negotiating for the purchase of the large gang saw mill belonging to the R.C. Smith estate. If he succeeds in buying he will cut a large stock here this season.

KINGSBURY, Que.—Lumberers are busy getting out logs in this vicinity. The Pierreville Mills Co. are getting out 45,000 logs on Salmon Creek. Williamson & Crombie are having 30,000 logs put in same stream. The latter are also getting a quantity of cedar out, and propose going into the manufacture of shingles. This firm also do a large business in butter tubs and spruce clapboards. The New Rockland Slate Company, who have a saw mill for cutting their own lumber, are also getting out a supply of logs. Spruce and hemlock are the kind of logs made here, pine is exhausted. The Quebec Government are supplying blank books, to be filled in by the lumbermen, with the quantity of logs cut by them. The cut of logs in this vicinity will be nearly as follows:—Pierreville Mills Co., 45,000 logs; Williamson and Crombie, 30,000; New Rockland Slate Co., 3,000. The above will be nearly all spruce logs, no pine of any amount down here.

H. L. LOVERIN & CO., Coldwater, Ont.—Lumbering operations in this section are unusually brisk this season. Owing to the extensive bush fires last summer large quantities of timber has to be taken out to keep it from spoiling. Our output this season in lumber and shingles will be between three and four million feet. Our shingle mill will start about the first of February and will continue running until the opening of navigation, at which time the lumber mill will be started. Most of the mills here will start as soon as the lakes open in the spring and all anticipate a busy season. Our mill is especially adapted for cutting bill stuff, and we have overhauled it this winter, putting it in first-class shape. We expect to do a good trade in that line next season.

TORONTO.—Were it not for various causes, some remote and others near, trade might be better. Of course the truth of the above is apparent. To state as briefly as possible the condition of the lumber trade, it may be said to be non-existent. No sales of any consequence. Dealers are engaged in the pleasant pastime of taking stock, closing their books and looking for profits or losses. Prices about as usual.

J. E. MEKIVY, Hepworth, Ont.—I am operating two mills this winter, and will cut from two to two and a-half millions of mixed stock: hemlock, maple, beech, less, cedar and pine, principally hemlock. The hemlock and hardwood shipped from this station during the season will probably amount to six millions.

PORTWILL, Ont.—The following is a rough estimate of the proposed output of lumber in this neighborhood during the coming sawing season: John Kennedy, saw and shingle mill, 1,500,000 feet; W. C. Irvin, saw and shingle mill, 2,000,000 feet; Charles Ashby, saw mill, 800,000 feet; H. Staples, in his new saw mill, about 2,000,000 feet; George Lapp, saw mill, 400,000; John Karnick, saw mill, 1,500,000 feet. Logs for these mills are secured entirely from local forests. Mr. W. C. Irvin, is about the only one who is doing any considerable stocking.