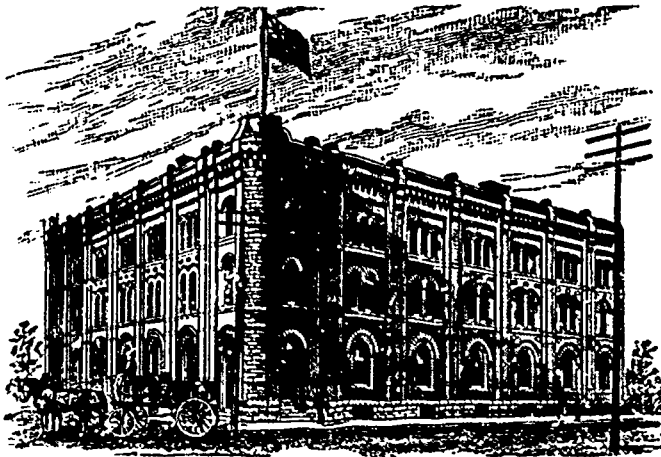


GOODS SOLD TO THE  
TRADE ONLY.



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TRADE ONLY.

**G. F. & J. GALT,**  
**DIRECT IMPORTERS**  
**TEAS, SUGARS, WINES, LIQUORS and GENERAL GROCERIES**  
 CORNER PRINCESS AND BANNATYNE STREETS, WINNIPEG, MANITOBA.

**Band Saws vs. Circular Saws.**

As regards rapidity of production, the circular saw has at present a decided advantage. Producing on an average, in white pine, 50,000 square feet of lumber, 1 inch thick, in a day of ten hours; while the band saw, in the same time, turns out on an average about 35,000 feet. It should, however, be borne in mind that the circular saw, having been in use for so many years, has probably reached its utmost limit of production, while, on the other hand, the band saw, having been but recently introduced for this purpose, is capable of considerable further development. This assumption is confirmed by the fact that a band-saw mill of the most approved construction has been known to produce as much as 52,000 in a day of ten hours—the product of 102 logs.

As regards the quality of work, the advantage is undoubtedly on the side of the band-saw, for whereas it is practically impossible to run a large circular saw at a high velocity without a certain amount of vibration, which naturally produces a somewhat rough surface, a band saw, being packed immediately above and below the cut, passes through the log in a straight line; and, moreover, as the teeth of a band saw, are considerably finer than those of a circular saw, they produce a smoother surface. It is unfortunate that, owing to the question of power being so little considered in America, and to the fact that the application of the band saw for logs is comparatively new, no authentic tests as to the power required by the latter machine have as yet been made with the indicator; but by comparing the engines usually employed to drive both the band and circular mills, an approximate idea on this point may be arrived at. To drive a circular mill with a 6-foot saw, an engine with a cylinder 18 inches in diameter, a piston travel of 500 feet per minute, and an average pressure on the piston of 40 pounds to the square inch, is generally employed. Such an engine develops 154 indicated horse-power. To drive a full sized band mill, an engine with a cylinder 12 inches in diameter, working under similar conditions as to piston, speed and average pressure, is recommended. This would develop about 98 indicated horse power, or considerably less than one-half that required to drive a circular mill.

The last, but certainly not the least, important point, is the question of the waste of wood; and here again the band saw gives by far the best results. The amount of wood lost in sawdust per cut by a circular saw is five-sixteenths of an inch; therefore, when producing boards 1 inch thick the waste is 31.25 per cent. A band saw at most wastes one-eighth inch per cut, or, when cutting 1 inch boards, 12.5 per cent. Again, to make a board cut by a circular saw, when planed on both sides, hold up to seven eighths of an inch, it must be cut 1 inch thick—that is, one sixteenth of an inch must be allowed on each side for planing; while on the other hand, owing to the superior cutting of the band saw, it is only necessary to allow one thirty second of an inch on each side for planing, showing an additional saving of one-sixteenth of an inch per cut. This gives a total saving of one fourth of an inch per cut by the use of the band saw.

The foregoing calculations apply to timber of such a size as can be converted by a circular saw 6 feet in diameter; but for larger logs, it is necessary to employ an overhead saw, and as the tracks of the two blades never exactly coincide, the boards thus sawn show a joint, which necessitates a still further waste of wood. This objection does not apply to the band mill, which will saw through logs of any diameter.

It is thus evident that for the conversion of pine logs the balance of advantage lies distinctly with the band saw; and if this is so in the case of comparatively small and cheap timber, it is certain that for the more valuable descriptions of hard woods, which frequently run to very large sizes, these advantages would be enormously increased; and it is not too much to say that the band saw will in a few years be universally employed in preference to any other machine for the wholesale conversion of timber.—*Manufacturer and Builder.*

**A New Manitoba Town.**

A correspondent writes the following description of the new town of Balder: This thriving town on the Morris-Brandon branch of the Northern Pacific railway, has two general store-keepers, viz: J. Smith & Co., late of Crystal City, and G. A. Griffith, late of Balmoral.

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Both have good accommodation and a fine stock, and what is of more service, a good trade. Two lumbermen are Geo. W. Playfair, from the well known Playfair settlement at Otenaw, and Dennis Brundrit, formerly of Winnipeg. Besides lumber Mr. Playfair is agent for Harris, Sons & Co. in implements and also handles furniture, whilst Mr Brundrit also offers implements and keeps a stock of harness for sale. Patterson Bros. & Co., implements, are represented by Jas. Graham, their agent, and the Massey firm by Mr. Christoferson from the Icelandic settlement at Grund. The last gentlemen is also a financial agent and represents several landed interests. Wm. McKnight runs the blacksmith shop, assisted by J. C. Porter, late of Minnedosa. In hardware we have T. E. Pool, from Ashdown's, of Winnipeg. The last arrival was C. Watson, from Pilot Mound, who opened out a full line of saddlery this year. We have also a boarding house under the care of J. Chester, who also has a livery stable. Our grain buyers are R. Anderson, representing J. T. Gordon, of the Mound, and Mr. Playfair, representing N. Bawlf. The elevator belongs to the Manitoba Elevator Co. and has been of great value to this community this season. The Methodists have a fine parsonage, erected this summer. The rains of last fall did great damage to the crops, but our farmers will profit by the lesson not to go pig less another year; and while many have to curtail expenses, the majority have pulled through all right.

**Alaska Salmon.**

Of the forty odd canneries in Alaska not over thirty, it is stated, will be worked this year. The fleet of vessels, usually numbering over fifty, will also be less in number. The canning industry last year gave employment to nearly 3,000 men, including seamen, clerks, fishers and canners, but a prominent local canner estimates that less than 1,000 will be worked this year. The San Francisco *Chronicle* says that "it is estimated by the knowing ones that the pack in Alaska during the coming season will be much less than the past year, and that the difference will cut quite a figure in local competition with foreign markets."