MERITS OF DIFFERENT TYPES OF SAWS.

UNDER what conditions it is profitable to employ a certain type of saw- band, circular or gang- is a point on which opinion is greatly divided. We give below the views of a few practical lumbermen on the subject :

CHESLEY, ONT., Dec. 11th.—We have been using a circular saw and find it very satisfactory. We have been thinking of replacing same with band saw mill, but have not done so yet. In looking into the band saw mill, there certainly seems to be a great saving in cutting.

KRUG BROS. & CO.

CHARLEMAGNE, QUE., Dec. 12th.—We have in our mill here one set of twin circulars, one stock gang 54", and two Prescott band mills; the band mills we have been running five seasons, twin circulars and gang thirteen. We cut principally spruce for export, and find the band mills by far the best machines to saw with, as we can cut our logs to better advantage and save nearly half in the saw kerf. If we were to rebuild our mill now, would put in all band mills and use band resaws for cutting up all our small logs.

A. MACLAURIN,
Manager Charlemagne & LacOuareau Lumber Co.

WOLFVILLE, N.S., Dec. 20, 1900.—Circulars have an advantage in small holdings when it would not pay to build stationary mills, otherwise they destroy too much good lumber in making sawdust. The gang is too well known for an opinion to add any acceptable information, yet we consider it away behind the band—first, the great saving in sawdust, next, the ease in which you can handle rough large logs and change cut without changing saw from plank board or timber, also rapidity of cut, smoothness of cut, and advantage can be taken of every log on its own merits. We have operated a band saw four years only, gang twenty-five years, rotary same.

THE S. P. BENJAMIN CO., LTD.

BRACEBRIDGE, ONT., Dec. 22, 1900.—My views about the respective merits of the different kinds of saws are : 1st, I am using a double band saw, and find it gives perfect satisfaction ; it will cut from 10 to 15 M ft. in an hour more than a single band and will not make shaky lumber. If the saw is out of order or the carriage out of line, a double band will make thick and thin lumber, while a single band will snake. 2nd, in comparison with a gang saw, the gang will cut about 15 M feet per hour more than a double band, but on the other hand there is a loss of from ten to twelve dollars per M in grade. 3rd, in comparison with a circular, there is no loss in grade, but a circular loses one eighth in kerf. A double band saw requires two extra men to run it.

J. D. SHIER.

BRACEBRIDGE, Dec. 15, 1900.—As to the relative merits of the different lumber producing machines now in use, I cannot but give the palm to the band saw for economy, speed and grade. In band sawing, while you may get a greater uniformity in thickness, it must be apparent to any practical miller or lumberman that the best results are not reached by the gang, especially when we consider how close pine and other woods are taken to-day ; even the rejects of former logging operations are not neglected. Many of these logs seem useless at first sight, but by careful sawing they produce some of our best lumber. In gang sawing you have no opportunity to sort the best lumber from the log. The circular, while in many cases taking more saw kerf than the gang and slabber, made it possible to get better results and a higher priced lumber, and sawing became an art. A sawyer's reputation depends as much on his ability to cut for value and grade as for a large output. Circular lumber is scarcely as ridged or snaky as gang sawn, as the latter is more easily led by the grain or turned aside by a knot. But long ago it became apparent that the circular was wasting too much valuable timber, nearly ⅓ sawn in kerf alone with the heavy gauge and swage. This has been partly remedied by reducing the saw kerf, but the sawing of large logs, through which the saw would not reach, results in great loss, as the log must be canted until it is almost octagon shaped, causing great loss in edging ; nearly or quite 25 per cent. of the best timber is thus lost. The band saw, however, removes nearly all these difficulties. Few logs are so large that it will not saw up to square edge or cants. The great saving in this alone would soon repay any millman to make the change. Again, the saw kerf is only a trifle more than half that of the circular in general use, which alone represents a fair profit to the millman, as slabs and edgings are cheaper fuel than lumber (sawdust). I believe the band is here to stay, and for economy, speed and good work is unsurpassed as yet.

J. M. BIRD.

WOODSTOCK, ONT., Dec. 12th.—In this northern country we think the gang has no place because of the mixed class of timber; it is more suitable for operating in timber such as southern pine or Pacific coast pine, where lumber as a rule is made into stock sizes and the quality is of uniform grade. The circular saw is most advantageous where the following conditions prevail—(1) Where the timber is small and the quality poor or of low value ; (2) in isolated or mountainous districts where the mill would require to be frequently moved to new locations ; (3) when the annual cut is less than, say, one million feet per annum.

The band mill is more suitable when the opposite conditions prevail, viz.: (1) Good quality of timber at high value ; (2) a comparatively permanent location ; (3) large annual cut.

From the foregoing data we conclude that the band mill is the most profitable mill where a moderate stock of high quality of logs is to be sawn or a large stock of a general quality, but for small operations the circular mill will always have the advantage in consequence of the small capital investment necessary to install and operate it.

O. G. ANDERSON.

RAT PORTAGE, ONT., Dec. 11.—Regarding the merits of band and circular saws for the manufacture of lumber, as far as my experience goes I can advance several good points for both. First, I will take up some advantages of the band saw. Where there is good timber to be sawn, by all means use a band saw. In logs running from eight to twelve to the thousand feet, there is a saving of ten per cent. over a circular saw ; some claim a greater saving, but I think that in all classes of logs this is an average estimate of what is generally saved. Other advantages possessed by a band saw over a circular are that when properly handled the lumber is so much better manufactured that you can slab much lighter and consequently make into lumber what is generally wasted in slabs with a circular, and with larger logs the band will saw faster and waste much less timber. I have learned since I came into contact with band mills, to take good care of the saws and see that they are properly hammered and teeth kept in proper shape. To accomplish good results from a band saw good filers should be employed, and the way to find out a good filer is to watch that his saws do not crack, that they do not shove back on the wheel when cutting in the log, that all the lumber is sawed straight and even, and, providing the mill is a modern one with latest and most improved machinery, that it saws 50,000 feet in ten hours. Sawyers and filers should command good wages, and it is a mistake to experiment by changing too frequently. The above remarks refer only to single band mills, but as I intend changing one of our band mills here into a double cutter this winter, I will be in a position later on to state more definitely what a double cutting band can do. Now, as to a circular saw. In small and rough timber a circular will do good work and more of it than a band. By using 10 gauge saws the sawdust will not amount to much. In small logs, in double mills where there is a gang, where one side is used for slabbing and logs can be separated on dock, a circular will do good work because it will take the slab off small and rough logs faster than a band saw will do. All good logs are sent to the band saw. One objection to circulars in past years has been the waste in sawdust ; saws were used from six to seven gauge. Now we find good work can be done by using nine to ten gauge, which is a great difference from the old style of circulars. By using two guide pins on a ten gauge circular you can saw faster in small timber than with a six gauge in the old way and do good work.

"OAK."

A new line of steamers will be established next spring between Liverpool and Manchester and a port on the Baie des Chaleurs. One of the chief purposes of the line will be to carry pulp.

CORRESPONDENCE

IMPORT DUTY WANTED.

BRACEBRIDGE, Dec. 18th, 1900.

Editor CANADA LUMBERMAN:

DEAR SIR,—Allow me through your valuable paper to call the attention of the Ontario lumbermen to the system of pine lumber export into Canada, and more particularly into Ontario. While our neighbors to the south of us will allow no lumber except basswood to go into their country from Canada unless we pay a duty of $2.00 per M, and $1.00 per M on basswood, they have free access to our market, sending in without duty many woods which compete directly with our native Canadian lumber. These are oak, southern pine, whitewood, balm, white pine, elm, ash, hemlock, and a number of other woods, all of which compete very strongly against the lumbermen of this province. Take for instance hemlock. Owing to cheap water transportation this lumber can be laid down in Buffalo or any other lake or river port cheaper than we can supply it. Hemlock is being freighted to lake and river points and sent inland throughout western and southern Ontario by American firms cheaper than we can supply our own people. Take, as an instance, a vessel carries a load to Sarnia or Windsor, they unload on cars which carry the lumber inland at from 60 cents to $1.00 per thousand, delivering the lumber to the buyer at about $12.00 per M or less, which is about $1.00 per M less than we can possibly deliver the same class of lumber to western or southern Ontario, and about $3.50 per M less than we can lay it down in Buffalo or similar points. It is even reported that the harbor improvements at Port Colborne are being supplied from American sources to the detriment and loss of Canadian producers. This is no small matter, and means a greater loss to Ontario lumbermen than may appear at first sight. Let us meet our neighbors fairly, and if they still bar the door by an import duty they should pay a like duty for the privilege which they enjoy in our markets. Trusting that you will place this matter more forceably than I have done before our lumbermen, I am,

Yours truly,

J. M. BIRD.

BRITISH COLUMBIA SHINGLES.

VANCOUVER, Dec. 21, 1900.

Editor CANADA LUMBERMAN:

SIR,—Some London, Ont., architects have recently been informing Col. Tracey, city engineer of this city, that British Columbia shingles are over dried, and that as a consequence the demand for them is decreasing in Ontario. I wish to most emphatically contradict these statements. British Columbia shingles are not over dried, and the demand for them in Ontario, instead of decreasing, has been constantly increasing since they were first introduced into Ontario. I have spoken to all the manufacturers on the coast who ship to Ontario, and have been informed that they have no complaints whatever about their shingles being damaged by over drying. In a personal experience of over twelve years in shipping B. C. shingles to Manitoba and Ontario, I cannot call to mind but one or two trivial complaints about this alleged damage to our shingles. I may also state that I have recently returned from an extensive tour of Ontario in the interests of our business, and called on all the prominent retail lumber merchants, without hearing a single complaint on this question.

Our shingles have now been in use in Ontario for eight to ten years, and in Manitoba and the Northwest about fifteen years, and there are hundreds of buildings throughout these sections of the country which have been covered all these years with British Columbia shingles, and the shingles are lying perfectly flat on the roofs and are as sound and durable now as the day they were put on, and will continue to properly protect the buildings on which they are placed for the next twenty-five years.

While the statements to which I have called your attention are untrue, we as manufacturers have a good many difficulties to contend with, such as the free importation into our markets of United States shingles, the slaughtering of our prices, and the division of a trade which is far and away too small for our own mills.

The production of the shingle mills in British Columbia at the present time is about three times in excess of the demand, and as a consequence competition is very keen and prices exceedingly low.

As an instance of the large over-production of shingles in British Columbia, one of the largest companies in the Province has closed down its mill, and has gone out of the business of manufacturing shingles; and unless we get protection against U. S. shingles other mills will have to follow their example, or move to the American side where we can have better markets free.

H. H. SPICER.