

MR. J. W. CRAWFORD.

THE residence and saw mill shown in the accompanying illustration is owned by Mr. J. W. Crawford, of Durham, Ont., one of our enterprising lumber manufacturers. Mr. Crawford is a native of Scotland, and first saw the light of day on October 21st, 1848, his birth-place being Aberdeenshire. When a boy of seven he removed



RESIDENCE AND SAW MILL OF MR. J. W. CRAWFORD, DURHAM, ONT.

with his family to Canada, and in 1870 engaged in the saw milling business at Aberdeen. A few years later he removed to Durham, erecting his present mill, to which has been added a sash and door factory, planing and shingle mill. The saw mill is equipped with modern machinery, and has a daily capacity of 20,000 feet. Power is supplied by a Cowan & Co. 45 h. p. engine and boiler. Mr. Crawford has built up quite an extensive trade. In local affairs he has always taken an active interest, and has served as councillor for several years.

BAND VS. CIRCULAR SAW.

THE band saw is adapted to the needs of saw-mills which are of a permanent character only, and consequently there is an enormous number of the smaller class of portable, or semi-portable, mills which have never considered the adoption of the band, but even among the substantial and permanent mills it is the minority only which have adopted that log-cutting machine that has come to take first rank in the public estimation and in saw-mill discussion, says the Timberman. We do not know what the proportion may be, but presume it would not be an exaggeration to say that there are five circular mills running to one band mill, in saw-mills of standard construction.

It is an interesting question why the band mill during the ten or fifteen years that it has been making such headway during which time most of the mills in the country have been rebuilt in whole or in part has not come into exclusive possession of the field, if all the claims of its advocates are well founded. These claims are based on two vitally important points—economy of material and better quality of product. As to the first claim there can be no question as to the fact, except when it be compared with the gang. The gang mill, if properly operated, is as economical as the band, though with a disadvantage in many classes of material that there is no chance to improve the grade of the product by turning the log or cant. As far as perfection of manufacture is concerned, there is more divergence of opinion.

The fact seems to be that there is more than mere prejudice resisting innovation more than a mere clinging to old methods. That the band mill is a more expensive machine than the circular is one point which must be taken into con-

sideration. It requires a greater expense to keep it up, and a higher degree of skill on the part of the filers and sawyers, and, in the third place, there is a legitimate question as to its economy when cutting small and cheap logs.

No one will deny that on large or costly logs the band mill is the only machine that should be used, and that to employ a circular for such a purpose means wanton waste of material. But there comes a point where, as logs decrease in size, and perhaps in quality, the circular is the more economical. There is no chance for argument in the proposition that for large logs the band mill is the more rapid producer, for the reason that it cuts almost as fast in the largest-sized logs as it does in the smallest. If the logs run two

or three, or even four, to the thousand, the band mill will unquestionably show as great as, and even greater, capacity than the circular.



MR. JOHN CAREW.

In logs that run two or less to the thousand, the advantage of the band in point of capacity is a great one; but when you come down to logs that run ten or more to the thousand, that are perhaps only ten to fourteen inches in diameter, the circular is unquestionably the more rapid machine.

There are a good many lumber manufacturers, and among them some of the best in the country, who insist that for any class of work—no matter how small or cheap the grade or defective the logs may be—the band saw is the proper machine; but, considering its slower speed on this class of work, and its higher cost to buy and maintain, there must be a point where the advantages and disadvantages balance each other, and below which the circular is the more profitable machine.

The capacity of the band on large logs was demonstrated not long ago by the Burns Lumber Co., at Sattes, W. Va. On Saturday, June 12th,

a trial run of ten hours resulted in a production of 133,277 feet of poplar lumber, of which 9,741 was inch, 21,840 feet one and one-half inch, and 81,696 feet two inch. This product was claimed to have been perfectly manufactured, and, considering that fact, the proprietors of the mill believe that the run was the best ever made. Yet that production was not the largest as a mere matter of record, for considerably larger outputs have been made in ten hours, though, perhaps, not of perfectly manufactured stock.

It is evident that the capabilities of the band mill have not, until a recent time, been thoroughly appreciated and developed; and yet it seems probable that to a certain extent it has been put to uses for which it is not well adapted.

SAW MILL OF MR. JOHN CAREW, LINDSAY, ONTARIO.

WHEN in Lindsay recently a representative of THE LUMBERMAN visited the establishment of Mr. John Carew, who owns one of the many complete saw mills with which the province of Ontario is possessed, and of which the accompanying illustration gives a fair idea.

Mr. Carew manufactures all kinds of lumber, lath, shingles, pickets, etc. The business has been established seven years and occupies a large frame building 70x30 ft., with a wing 30x24 ft., all two storeys in height, with a brick engine house 36x24 ft. The mill is fitted with the usual saw mill machinery, with facilities for an output of twenty thousand feet of lumber per day, and in the shingle department the output averages 25,000 per day.

The grounds in connection with the mill cover an area of four acres on the west side of the river bank. Mr. Carew's trade extends over a large section of the Dominion, and he is also a very extensive exporter, shipping largely to the United States and other foreign markets.

Mr. Carew gives employment to about 35 hands, and his establishment is one of the important factors of the industrial interests of Lindsay. He is also part owner of the steamer Beaver, which is used for towing logs from



SAW MILL OF MR. JOHN CAREW, LINDSAY, ONT.

different points on the river and lake to the mill.

Mr. Carew is a Canadian by birth, and has resided in Lindsay for upwards of thirty years, having been in the lumber and wood business for five years previous to branching out into his present enterprise.