

THE CANT BROS. CO., OF GALT.

THE Cant Bros. Co., of Galt, Ont., made a fine display of their woodworking machinery in Machinery Hall. A machine which excited much interest was an automatic hollow square chisel mortising machine, a representation of which is seen in this company's advertisement on page 178 of this journal. This machine has proven itself to be most useful for mortising in hardwoods, thus rendering it invaluable for car, carriage, wagon, furniture, blind, sash and door factories. The novelty of this machine consists in the peculiar formation of the chisel, which is square, and is fitted with an auger made to revolve inside it. The end of the auger projects slightly beyond the edges of the chisel, and when brought up to the timber it bores a round hole the chisel following it, and simultaneously squaring out the four corners and sides, and with no jarring to the machine. A finished mortise of any length, from $\frac{1}{2}$ to one inch square, and free from chips, is thus made. The depth of the mortise is regulated by the adjustments of the table or the adjustments of the stroke. The movement of the chisel is governed by a treadle placed at the side of the machine, which gives it a continuous reciprocating motion. The stroke is variable by changing the position of the crank pin on the reciprocating frame. The table is counterbalanced, and is adjusted vertically by a lever provided with stops by which one or more mortises can be made as in double mortising. That is, a $\frac{3}{4}$ inch chisel will make any size mortise from $\frac{1}{2}$ to $1\frac{1}{2}$ inches by passing through twice. It has an adjustment endwise for regulating the length of the mortise by a hand-wheel operating a rack and pinion. A $\frac{3}{4}$ inch chisel and auger is provided with each machine and a full set of wrenches. Other sized chisels are extra. Countershaft has tight and loose pulleys, 9 in. by 44 faces, and should make 960 revolutions per minute. Weight, 1,700 lbs. This machine has been sold to Messrs. Adams & Sons, Paris, Ont. The Bain Bros Manufacturing Co., Brantford, Ont., who have one of these machines, say "It is just the thing for our work. It cleans the mortise out perfectly, and will do it quicker than any other kind of mortiser."

This is one of the oldest established manufacturing concerns in Canada; which, by long experience in the business of making wood working machinery, have attained a most enviable reputation.

DODGE WOOD SPLIT PULLEY CO.

THE Dodge Wood Split Pulley Co. made an interesting exhibit in Machinery Hall, as they have done for years. In addition to the stacks and piles of their pulleys, in all sizes and for all purposes, they show a special line of shafting well filled with pulleys, all in motion, driven at a right angle with the general power shaft overhead, by the Dodge system of transmission with manilla rope. This feature in itself is exceedingly interesting, giving as it does a good idea how power may be transmitted to places and in positions which would be simply impossible under other circumstances. And it also illustrates how power may be transmitted over long distances, as over the tops of buildings, across streams, and up or down precipices and steep places. It is interesting to mechanics to witness with what facility power can be transmitted where the driven shaft is at right angles with the driver; where the drive is perpendicular, particularly when it is in quarter twist and perpendicular; where the driver and driven are close together, etc. In transmitting power from a line shaft there is a steady, uniform strain, without flapping, jerking, stretching, slipping or other loss of power; and it is claimed that an engine with this system of rope transmission of power will do twenty-five per cent. more work on the same consumption of fuel than with any other arrangement.

Regarding the Dodge wood split pulley manufactured by this company, they are made in sizes to suit all possible demands—iron centre pulleys, where such are desired, to be placed directly on the shaft of the driving engine; wood arms and centres, with the Dodge patent wood bushing, for service on driven shaft; smooth face pulleys, where leather or rubber belting is to be used, and grooved face pulleys where the transmission of power is to be by manilla ropes. They are made in all sizes, ranging from a few inches in diameter, and for use with narrow belts, up to as many feet in diameter, with face sufficient to accommodate the widest belts.

President, W. K. McNAUGHT

Secretary, J. J. CASSIDY

Treasurer, GEORGE BOOTH

The Canadian Manufacturers' Association

THE OBJECTS
OF THIS
ASSOCIATION
ARE:

To secure by all legitimate means the aid of both Public Opinion and Government in favor of the development of home industry and the promotion of Canadian manufacturing enterprises.
To enable those in all branches of manufacturing enterprises to act in concert as a united body whenever action in behalf of any particular industry, or of the whole body, is necessary.
To maintain Canada for Canadians.
Any person directly interested in any Canadian manufacturing industry is eligible for membership.

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