

TRADE IN WOOD-WORKING LINES.

A STUDY of the figures contained in the report of the Department of Trade and Commerce, for the fiscal year ended June 30th, 1894, now published, furnishes some suggestive thoughts as to the possibilities of extending Canadian trade in wood-working lines.

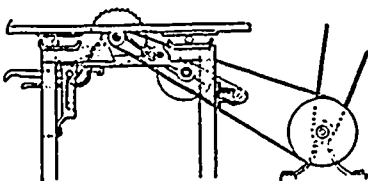
The export trade in doors, sashes and blinds during the past five years has grown at a satisfactory rate, the business for 1894 being more than double that of 1890. The figures are as follows. 1894, \$158,196; 1893, \$130,349; 1892, \$123,144; 1891, \$86,450; 1890, \$60,474. Let this increase continue in the same proportion for another five years, or why not at a greater ratio, and the trade will have assumed a very considerable size.

The difficult matter in building up an export trade is to obtain entry into foreign markets, but having done this then time will establish the merits of the goods imported. Furthermore, it takes some years for manufacturers to ascertain just what class of goods particular localities require, and this now done, the business in doors, sashes and blinds of Canadian manufacture ought to grow apace. It is unnecessary to remark that no goods in these lines are imported into Canada, showing that the home goods are of a class that meet fully the requirements of our people, even those who may be deemed specially fastidious in their tastes, or who consider it the proper thing to look abroad for what is wanted.

If reference is made to the trade in mouldings it will be learned that the exports in this direction have since 1891 grown largely. The figures are. 1894, \$36,558; 1893, \$23,164; 1892, \$7,083; 1891, \$5,153. There was imported during 1891, mouldings to the value of \$31,745. The question may be asked. Why the necessity for imports, reaching almost the size of exports?

Figures bearing upon the manufacture of furniture are not so favorable. In 1894 Canadian furniture was exported to the extent of \$144,702, whilst there were imported goods to the value of \$276,909, on which a duty of \$73,104.11 was paid. It is a complaint among furniture dealers that for the finer classes of stock they are compelled to look to the United States. There hardly seems to be any reason for this. The raw material is here in abundance, and as a matter of fact Canadian lumber is shipped to the United States and comes back to us in the shape of furniture. Factories can easily equip themselves with the best in machinery, and there is a wide enough field for goods so generally in demand as furniture to encourage the manufacture of the finest class of stock.

NEW UNITED STATES PATENTS.

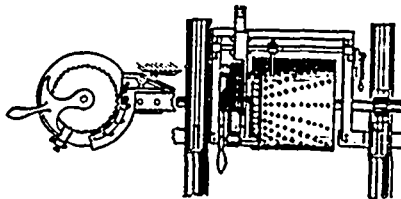


CIRCULAR SAWING MACHINE.

Patentee: Henry L. Beach, Montrose, Pa.; Filed Jan. 30, 1895; serial No. 536,687; dated April 16, 1895.

Claim.—1. In circular sawing machines, the combination, with a revoluble frame having arbors adapted to receive saws, of a support for said revoluble frame, adjustable in vertical planes, and a driving belt passing over revoluble frame to a pulley on one of the arbors, and receiving the revoluble frame centrally between its folds, said belt having its tension automatically adjusted

with relation to the kind of work to be performed, by the adjustment in vertical planes of the support for the revoluble frame. 2. The combination, with a frame revoluble about a certain axis, and carrying at each end an arbor adapted to receive a saw, of a frame pivotally secured and having the revoluble frame mounted within it whereby the cutting plane of the saws carried by the revoluble frame is adjustable in vertical planes by the movement of the supporting frame, a driving belt receiving the revoluble frame between its folds, and adapted to drive a pulley on one of the arbors of said frame, and means for locking the revoluble frame and pivoted frame in their adjusted positions. 3. The combination, with a revoluble frame carrying arbors adapted to receive saws, of a frame pivoted at one end and having its opposite end free, said frame supporting the revoluble frame and its adjuncts; a spring arm carried by the pivoted frame, having a means for engaging and locking the revoluble frame in position, means for locking the pivoted frame and means for operating the saws.



AUTOMATIC RECRUDING SAW-MILL SET-WORKS.

Patentee: Algernon S. Pettigrew, St. Louis, Mo., filed Aug. 6, 1894; serial No. 519,522; patented in Canada Sept. 1, 1894, No. 46,918; dated April 23, 1895.

Claim. In a device of the class described, the combination of a segmental lever, a series of pawls each mounted on said lever on the same pin or bolt, another series of pawls mounted all on another pin or bolt and carried by the same lever, a separate series of pawls mounted on a stationary pin or bolt, a suitable reversing spring, a segmental pawl trip provided with an outwardly projecting flange and handle, said outwardly projecting flange adapted to engage upon the rear ends of the stationary and moving pawls, thereby disengaging the points of the pawls from the ratchet-wheel and allowing the wheel to reverse its motion.



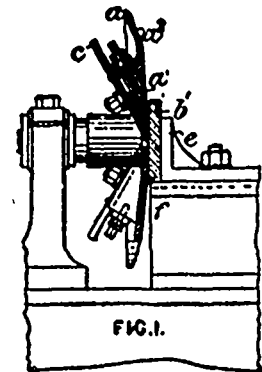
ATTACHABLE SAW-TOOTH.

Patentee: James E. Emerson, Beaver Falls, Pa., assignor of one-half to E. C. Atkins & Company, Indianapolis, Ind.; filed Sept. 17, 1894; serial No. 523,275. Dated May 28, 1895.

Claim.—1. An attachable saw-tooth whose entire thickness is in excess of the thickness of the body of a saw and provided with a groove in the back of the tooth and with flanges fitting the sides of a permanent tooth of a saw. 2. An attachable saw-tooth whose entire thickness is in excess of the thickness of the body of the saw and provided with flanges fitting the sides of a plain permanent tooth, in combination with suitable means for securing the tooth to a saw. 3. An attachable saw-tooth whose entire thickness is in excess of the thickness of the body of a saw and provided with a groove in its back equal in width to the thickness of the saw and

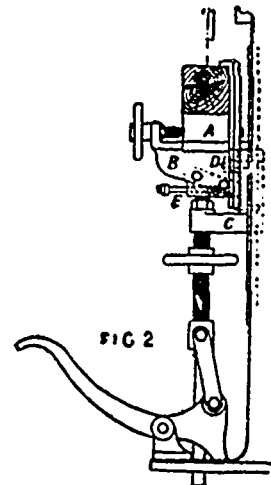
with flanges fitting the sides of a plain permanent tooth of a saw, in combination with an attachable throat-piece whose entire thickness is in excess of the thickness of the saw and provided with flanges to engage the sides of the saw.

NEW ENGLISH PATENTS.



RELATING TO ROTARY CUTTER.

The following patent has been granted to J. Wheel- don, Stockport, Cheshire. It relates to a rotary cutter for wood-planing machines, consisting of a disc *a*, Fig. 1, on which two or more plane irons *c* are mounted with their cutting edges projecting sufficiently from the face of the disc. In the case illustrated, the face of the disc has two bevels *a'* and *a''* with different inclinations. The rough cut is made by the iron on the bevel *a'*, and the finishing or smoothing cut by the iron on the bevel *a''*, which extends to near the centre of the disc. To secure uniform thickness, the wood *b* is fed between the disc and an adjustable guide *e* bolted to the table *f*. In a modification, separate narrow irons are fixed on the bevel *a'*. The rotary cutter may be driven by a lathe or in the usual manner, by manual or motive power.



MORTISING MACHINE.

Patentee: Nicholas, D., Laurel Villa, Stroud Road, Gloucester.

Relates to an attachment to enable the table of a mortising machine to be canted to any required angle. The table *a*, Fig. 2, on which the wood is carried, is mounted on a bracket *B*, on which it can slide for horizontal adjustment. The bracket *B* is pivoted at *D* to the side *C*, and the bracket with the table can be tilted at different angles and held in position by a spring peg *E* which is inserted into one of the several holes in the framework. The slide *C* can be raised or lowered by a pedal connected as shown.

DRIVING BELTS.

BELTS for driving woodworking machinery should by preference be made of leather, except when used out of doors, or where likely to be wetted, when the use of vulcanized india rubber or india rubber cloth is advantageous. Belts are sometimes made of cotton, and we have recently seen one made of paper, which after twelve months' wear appeared in capital order. It was of American manufacture. Leather, from its strength, pliability, and durability, is especially to be recommended for narrow belts, or those running at short centres and high velocities. In calculating the transmission of