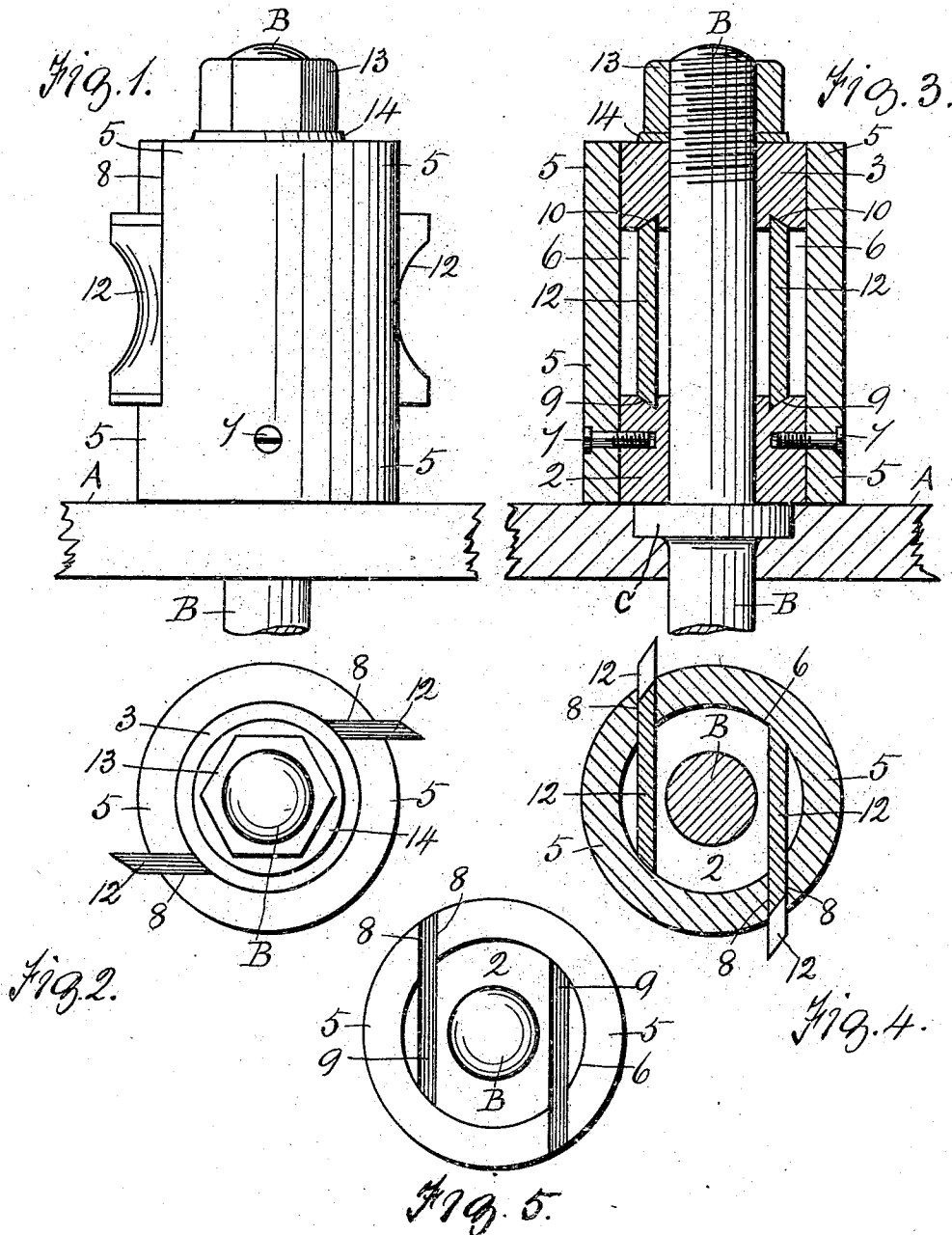


J. HAUSER.
WOODWORKING SHAPER.
APPLICATION FILED AUG. 18, 1909.

953,949.

Patented Apr. 5, 1910.



Witnesses.

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JOHN HAUSER, OF CHESLEY, ONTARIO, CANADA.

WOODWORKING-SHAPER.

953,949.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed August 18, 1909. Serial No. 513,437.

To all whom it may concern:

Be it known that I, JOHN HAUSER, a subject of the King of Great Britain, and residing at Chesley, in the county of Bruce and Province of Ontario, Canada, have invented new and useful Improvements in Woodworking-Shapers, of which the following is a specification.

My invention relates to improvements in wood-working shapers, in which similar lower and upper collars having a bore to fit on the upper part of a revolving spindle of a wood shaping machine, and a head, or shell, having slots for projecting knives, and inclosing said collars, the whole secured to said spindle.

The objects of my invention are, first, to provide a revolving shaper adapted to shape the edges of wood for furniture, sash, doors and other articles and finish the same in a smooth and regular form according to the design of the two knives; second, to provide means whereby knives of a larger, or of a smaller size may be easily inserted and secured in the head; third, to provide means for rigidly holding the sides and the edges of the knives in position in the head, and fourth, to afford facilities for smoothly guiding the article being shaped, and the advantage of having the guide of large extent, and without any projections, or indentations, on its periphery, other than the projection of the knives. I attain these objects by the mechanism illustrated in the accompanying drawing, in which:—

Figure 1 is an elevation of the shaper, extending above a table. Fig. 2 is a plan of the same. Fig. 3 is a sectional elevation of Fig. 1 of the drawing as viewed after revolving one fourth of a revolution. Fig. 4 is a sectional plan of Fig. 3 of the drawing, through the horizontal knives thereof. Fig. 5 is a plan of the outer shell, or head of Fig. 4 of the drawing, showing the slots in said head and also the beveled recesses in the top of the lower collar of the head.

Similar characters refer to similar parts throughout the several views.

In the drawing A is the outline of a level table of a wood-shaping machine, and B is an upright revoluble round spindle, having a collar C.

My invention consists of a lower collar 2, and a similar upper collar 3, of the same size and proportions, both bored out to fit

snugly the upright spindle B, and concentric with said spindle.

5, is the head, or outer shell, of the shaper, and has a smooth parallel bore 6, in which fit snugly the collars 2 and 3. The lower part of the head 5 is securely fastened to the lower collar 2, by means of two or more permanent screws 7. The lower collar 2 rests on the collar 3 of the spindle. The head 5 has parallel slots 8, through the sides thereof, and extend from the top of the head to the beveled recesses 9 in the upper side of the lower collar 2. Similar beveled recesses 10, are in the lower face of the upper collar 3, the recesses 9 and 10 are exactly similar to each other, and in vertical line and opposite to the slots 8 in the head. The slots 9 and 10 are preferably on either side of the central spindle B, in order to have the knives apart from each other and parallel one with the other. The upper collar 3 is adapted to slide in either direction in the head to suit the height of the steel knives 12. The upper and the lower edges of the knives 12 are beveled to conform to the recesses 9 in the collar 2, and to the recesses 10, in the collar 3. Said recesses extend transversely through the face of the collars without any interruption. The similar horizontal knives 12 are adapted to slide snugly through the parallel slots 8 of the head and the lower beveled edges of the knives fit in the beveled recesses 9 in the lower collar 2. The recesses 10 of the upper collar 3, are placed on the upper beveled edges of the knives, and the said collar 3 is then held in position by means of check nuts, or a nut 13, which is screwed on the upper end part of the spindle. 14 is a washer on the spindle and between said nut and collar. The nut 13 is secured and binds all the component parts of the shaper substantially together.

It will be noticed that according to the continuation of the thread on the upper part of the spindle, greater or lesser heights or breadths of knives may be used, and knives of various shaping designs may be used in this head without interfering with the existing mechanism. No matter how conveniently wide, or how conveniently narrow, or of what particular shape they may be for the device herein described, said knives must, of necessity snugly fit into the slots 8 and have beveled edges to fit the recesses 9 and 10. The ends of the knives protrud-

ing beyond the parallel periphery of the head, may be of suitable angle, or bevel, as the shaping of the wood demands. Moreover the angle of the protruding cutting ends of the knives may be reversed, if deemed desirable to suit a reverse motion of the shaper, or may protrude through opposite sides to those shown, but the elements of the invention are herein described and substantially set forth.

It will be noticed that the inner part of the cutting edge of the knife is set even, or flush, with the outer smooth face, or periphery of the shell or head, so that the wood being shaped, will come in contact with said periphery. The periphery of the head acts as a guide to the wood being shaped and prevents the knife from cutting farther, or deeper, in the wood, than said periphery, thereby dispensing with special forms, and forms fastened to the article being shaped.

What I claim as my invention and desire to secure by Letters Patent, is:—

1. In a shaper of the class described, the combination with a revolving spindle having a collar rigid therewith, and a stationary table, of removable collars on said spindle, and concentric therewith, a round parallel head fitting around said collars, one

said collar secured in said head, the opposite said collar adapted to slide therein and on said spindle, parallel slots in the head, parallel beveled recesses in the inner faces of the collars and opposite to each other and in line with said slots, knives having beveled edges to fit into said recesses and in said slots, and means on the spindle to secure the shaper to the spindle to revolve therewith.

2. In a shaper of the class described, the combination with a revolving spindle having a rigid collar, of separate collars having parallel beveled recesses opposite to each other, and on said spindle, and concentric therewith, a round parallel head fitting around said recessed collars, one said collar adapted to slide therein and on the spindle, parallel slots in the head, opposite to each other and to said recesses, knives having beveled edges to conform to said bevel recesses and fitting therein, and in said slots, the inner part of the cutting edge of the knife set even with the periphery of the head, and means on the spindle to secure the shaper thereto, to revolve therewith.

JOHN HAUSER.

Witnesses:

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JOHN MOFFAT.