

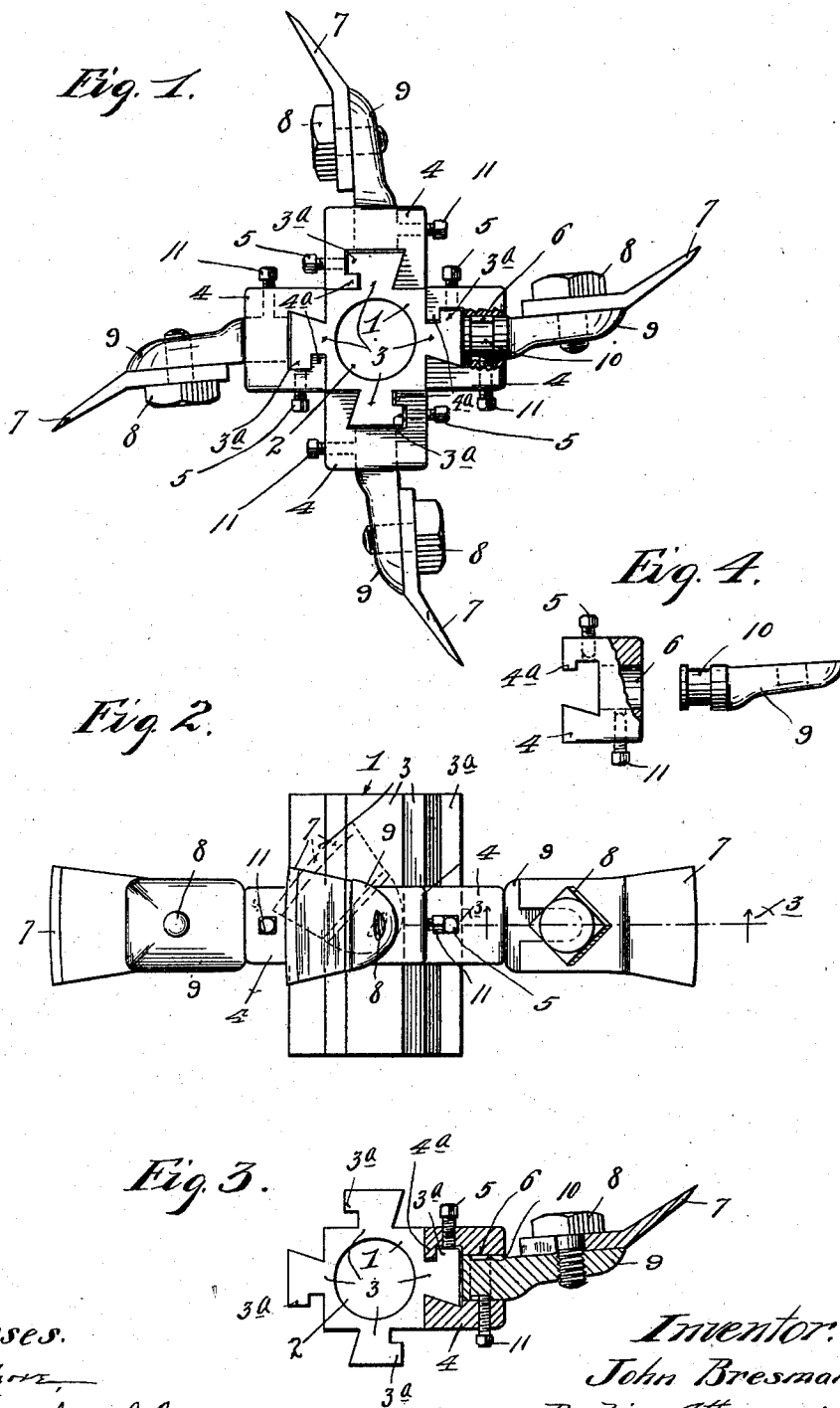
No. 743,374.

PATENTED NOV. 3, 1903.

J. BRESMAN.
CUTTER HEAD.

APPLICATION FILED APR. 23, 1903.

NO MODEL.



Witnesses.

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CUTTER-HEAD.

SPECIFICATION forming part of Letters Patent No. 743,374, dated November 3, 1903.

Application filed April 23, 1903. Serial No. 154,119. (No model.)

To all whom it may concern:

Be it known that I, JOHN BRESMAN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Cutter-Heads for Wood-Cutting and Woodworking Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an improved cutter-head for wood cutting or working machines; and to the above ends the invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 shows the complete cutter-head in side elevation, some parts being broken away. Fig. 2 is a plan view of the same. Fig. 3 is a view, partly in side elevation and partly in section, on the line x^3x^3 of Fig. 2, some parts being removed; and Fig. 4 is a detail in side elevation, some parts being broken away, showing one of the tool-stocks and cooperating sliding holding-block, the said parts being shown as separated.

The numeral 1 indicates the sleeve-like hub of the tool, which is provided with an axial bore or perforation 2, adapting it to be placed upon a mandrel or spindle in the usual way. The peripheral portion of the hub 1 is angular and is provided on its several faces with dovetailed ribs 3. The dovetailed ribs 3 on one side are beveled in the manner of an ordinary dovetail; but on their other sides they are grooved and formed with longitudinally-extended retaining-shoulders 3^a.

Mounted to work on each dovetailed rib 3 is one or more (as shown but one) sliding blocks 4, that are formed with channels corresponding in cross-section to the cross-section of the dovetailed rib 3. These blocks 4 interlock with but slide upon the said ribs 3 and are adapted to be securely held wherever set by means of set-screws 5, screwed through the sides of said blocks and impinging on the

flat outer faces of the shoulders 3^a of said ribs. When these set-screws 5 are tightened, they tightly draw together the beveled faces of said ribs 3 and blocks 4, and the shoulder 4^a on the opposite side of the said block 4, being interlocked with the channel formed in the corresponding ribs 3, securely holds the said blocks against wobbling movements. Each block 4 is provided with a perforation or seat 6, the axis of which radially intersects the axis of the hub 1.

The cutters 7 are held by set-screws 8 to the projecting ends of tool-stocks 9, which have grooved trunnions 10, that work pivotally in the seats 6 of the blocks 4. Set-screws 11 work through the side of the blocks 4 to impinge on the reduced portions of the trunnions 10 to thereby hold the tool-stocks in any adjustment in which they may be set. By reference to Figs. 1 and 3 it will be noted that the ends of the set-screws 11 are narrow as compared with the channels in the trunnions 10. This permits an endwise or axial adjustment of the tool-stocks. The flanges on the inner ends of the trunnions 10 serve to prevent the tool-stock from being thrown outward by centrifugal force in case the set-screws 11 should become slightly loose. This is of course important. The tool-stocks, with the attached cutters, may be very readily removed in order to sharpen the cutters, and they may be quickly replaced in working positions without releasing the cutters therefrom and without changing the adjustment of the cutter with respect to the tool-stock or with respect to position longitudinally of the hub 1. At the same time a great variation in adjustment with respect to angular position is made possible by rotary movements of the tool-stock.

The manner in which the various cutters are positioned with respect to each other longitudinally of the hub and spindle for performing various work is well understood.

It is of course evident that any desired number of sliding blocks 4, together with the tool-stocks and cutters carried thereby, may be applied to any one or more of the dovetail ribs 3. It will also be understood that the device described, with respect to details of

construction, is capable of modification within the scope of the invention herein set forth and claimed.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A cutter-head having lateral seats, and tool-stocks swiveled in said lateral seats and provided at their outer ends with cutters, substantially as described.
2. In a cutter-head, the combination with a hub, of blocks adjustable longitudinally thereon, and tool-stocks having cutters at their outer ends and having their inner ends swiveled in the said blocks, substantially as described.
3. In a cutter-head, the combination with a hub having the dovetailed flanges 3 formed at one side with the rectangular shoulders 3^a, the blocks 4 fitting and sliding on said ribs and interlocking with the shoulders 3^a thereof, set-screws working through the sides of

said blocks and impinging in said shoulders 3^a, and the tool-stocks 9 swiveled in said blocks and provided with cutters at their outer ends, substantially as described.

4. In a cutter-head, the combination with a hub, of blocks adjustable thereon, provided with seats 6 and set-screws 11 and the tool-stocks 9 having cutters at their outer ends and provided at their inner ends with channeled trunnions fitting said seats 6, the channels thereof being relatively wide as compared with said set-screws, whereby an axial adjustment of said tool-stock is permitted, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN BRESMAN.

Witnesses:

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