(Model.)

W. A. DECKER.

ROTARY CUTTER FOR MORTISING MACHINES.

No. 266,440. Patented Oct. 24, 1882.

Fig: 1.

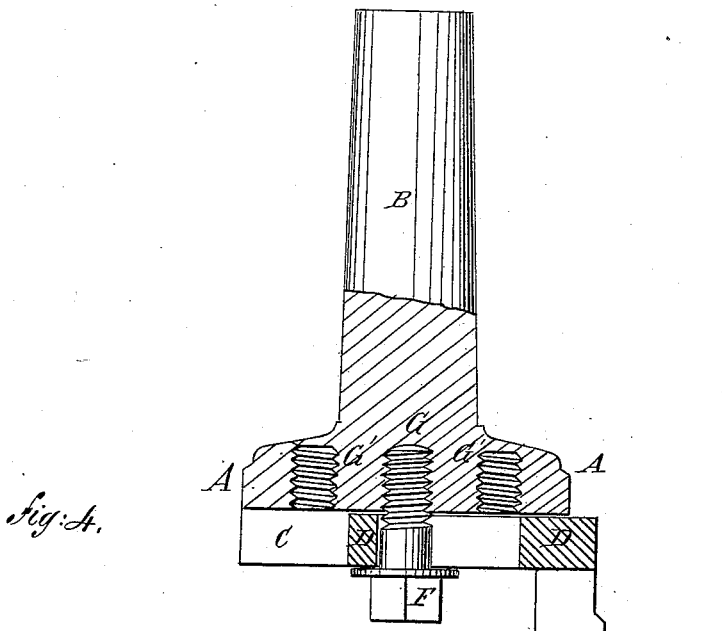


Fig: 4.

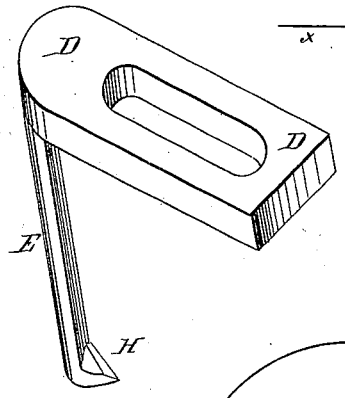
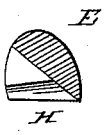
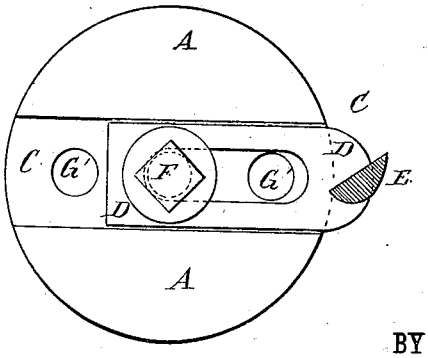


Fig: 2.

Fig: 3.





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ROTARY CUTTER FOR MORTISING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 266,440, dated October 24, 1882.

Application filed May 29, 1882. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM A. DECKER, of Huntington, in the county of Cabell and State of West Virginia, have invented a new and useful Improvement in Adjustable Rotary Bits and Heads for Mortising-Machines, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of my improvement. Fig. 2 is a face view of the same, the bit being shown in section. Fig. 3 is a sectional plan view of the bit, taken through the lines *x x*, Fig. 1. Fig. 4 is a perspective view of the bit.

The object of this invention is to facilitate the mortising of timber.

The invention consists in an adjustable rotary bit and head constructed with a circular head, a stem, a cross-groove, and one or more screw-holes at the bottom of the said groove. The bit is provided with a shank projecting at right angles and slotted to receive the fastening screw-bolt, and has a lip upon its forward end, whereby the bit will be securely held and can be readily adjusted to cut a large or a small mortise, as will be hereinafter fully described.

A represents the bit-head, the stem B of which is designed to be secured in the tool-holder of an ordinary rotary mortising-machine. The head A is made circular, and across its face is formed a groove, C, to receive the shank D of the bit E. The shank D is formed at right angles with the bit E; and is slotted longitudinally to receive the screw-bolt F, which screws into a hole, G, in the center of the bit-head A, so that by loosening the said screw-bolt F the bit E can be adjusted farther from or closer to the center of the said bit-head, according as a larger or smaller mortise is to be formed. In the head A, at the bottom of the groove C and upon the opposite sides of the screw-hole G, are formed other screw-holes, G′, to receive the screw-bolt F when a very wide or very narrow mortise is to be cut. The body of the bit E is made in the form of a section of a cylinder, as shown in Figs. 2, 3, and 4, and has a lip, H, upon its lower end, as shown in Figs. 1, 3, and 4, to adapt it to cut its way more readily into the wood and to cut the mortise with a smooth bottom.

With this construction the mortises will be cut very quickly and accurately, and will be left with smooth sides and bottom, so that all the labor necessary to finish the mortises will be to square their ends.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

An adjustable rotary bit and head for mortising-machines, constructed substantially as herein shown and described, and consisting of the head A, having stem B, groove C, and screw-holes G G′, the bit E, having slotted shank D and lip H, and the screw-bolt F, as set forth.

WILLIAM ANDREW DECKER.

Witnesses:
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