

(No Model.)

H. I. BERTERMANN.  
Cutter-Head.

No. 227,407.

Patented May 11, 1880.

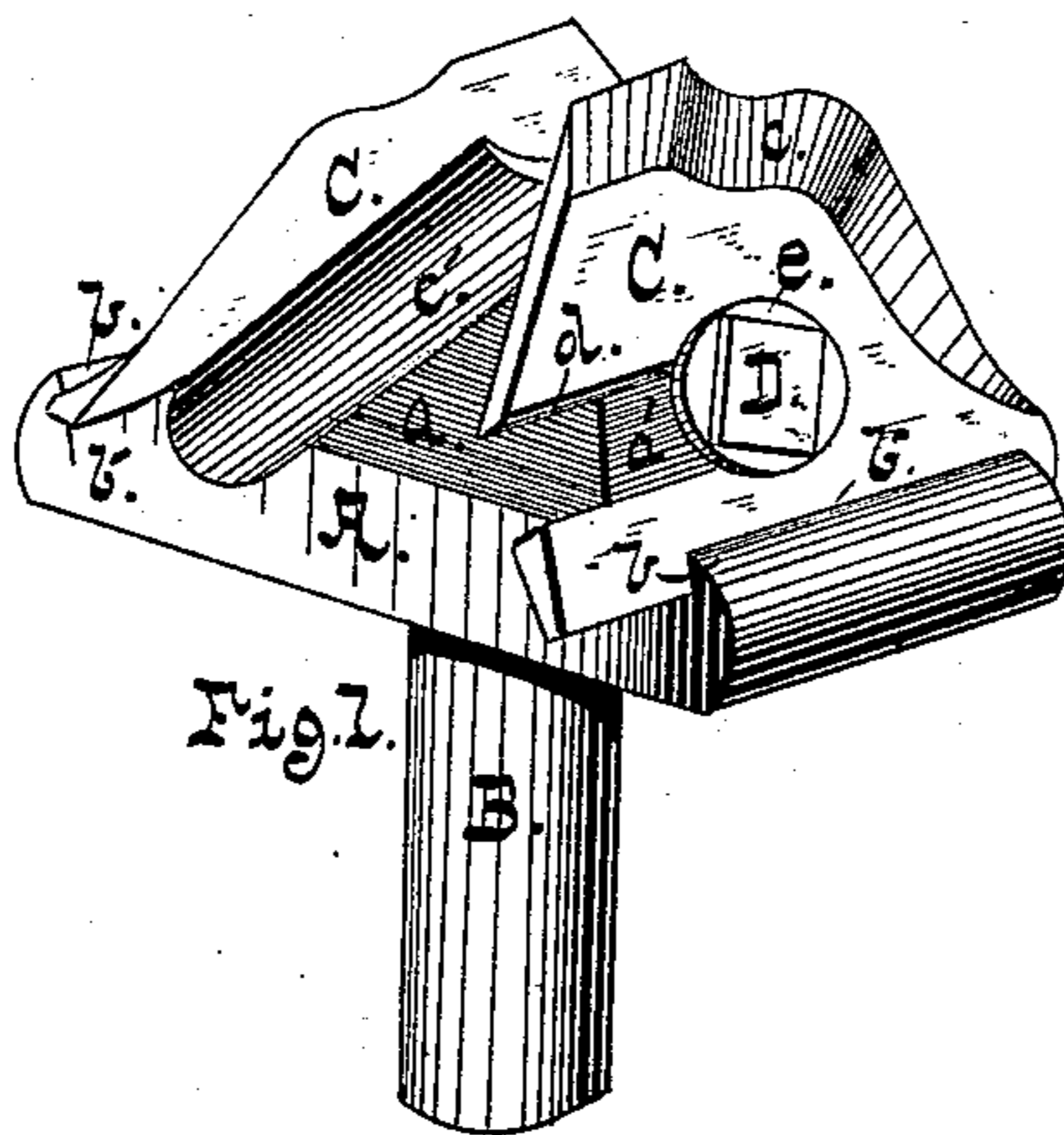


Fig. 1.

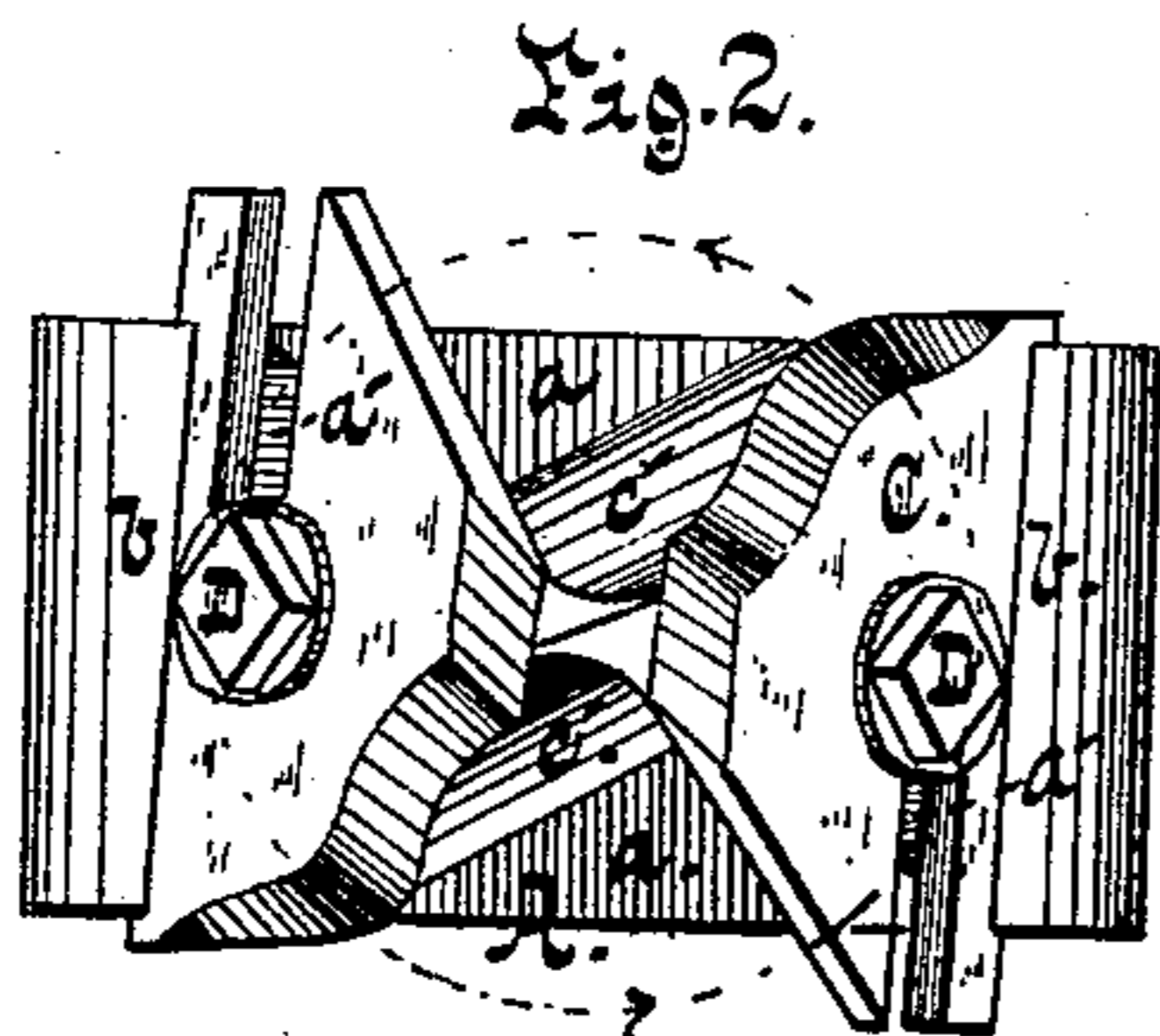


Fig. 2.

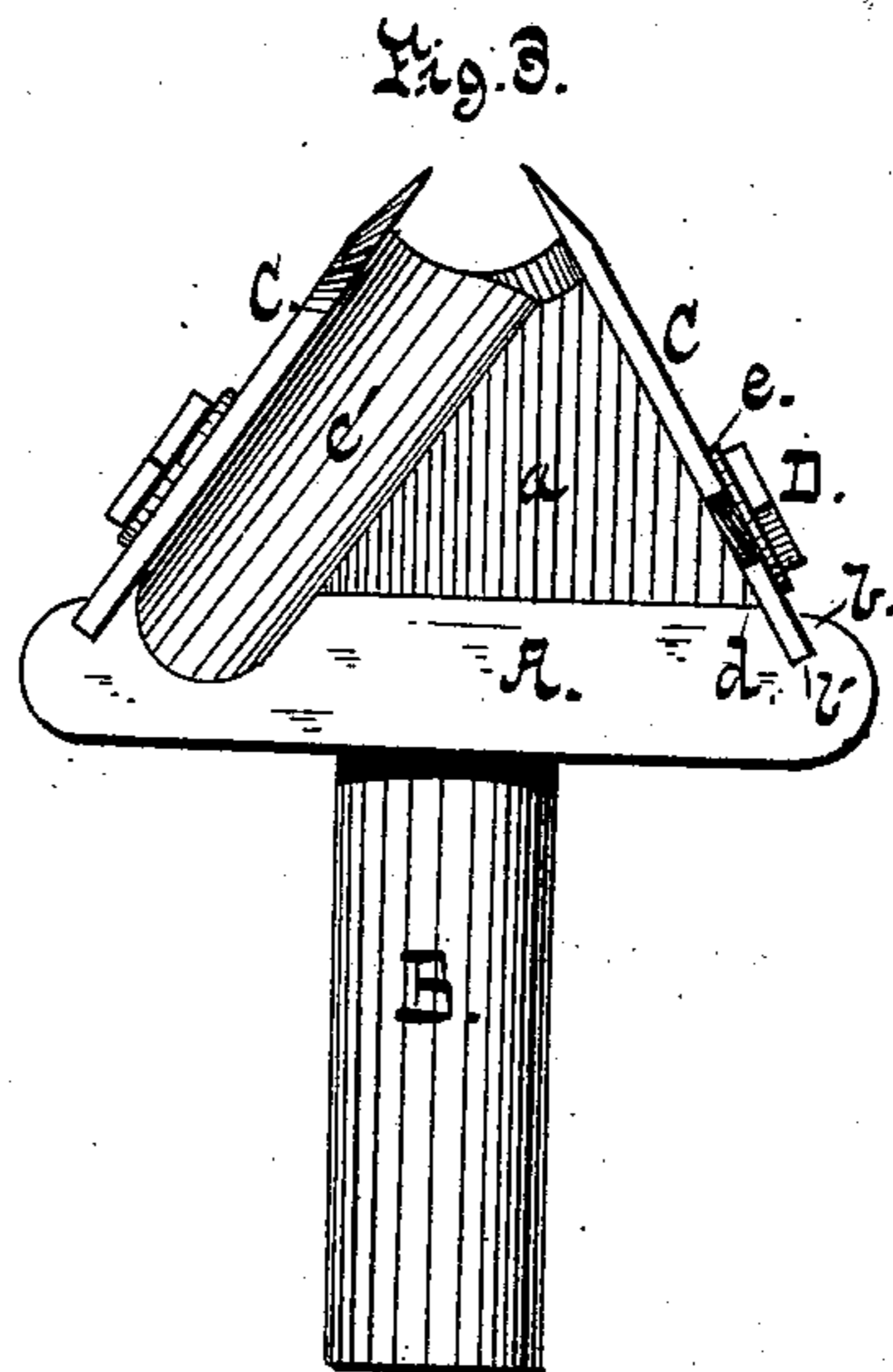


Fig. 3.



Fig. 4.

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# UNITED STATES PATENT OFFICE.

HERMAN I. BERTERMANN, OF BALTIMORE, MARYLAND.

## CUTTER-HEAD.

SPECIFICATION forming part of Letters Patent No. 227,407, dated May 11, 1880.

Application filed March 18, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, HERMAN I. BERTERMANN, of Baltimore city, State of Maryland, have invented certain new and useful Improvements in Cutter-Heads; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device; Fig. 2, a top plan of the same, and Fig. 3 a side elevation of the same. Fig. 4 is a sectional view, showing the form of groove routed by the particular cutters shown in the other figures.

My invention has reference to that class of cutter-heads used for forming wood rosettes or panel-beads; and it consists in a device of the class named, constructed and operating as hereinafter set forth, the specific points of novelty being indicated in the claim.

In the accompanying drawings, A is the boss, to which the cutters C C are secured, provided with a shank, B, that is attached to the shaft.

The boss is in the form of a truncated pyramid, its sides *a a'* tapering toward the top. The cutters are secured to the sides *a'*, the other sides being provided with grooves *c'* adjacent to the cutting-edges of the blades, for the discharge of the chips.

The cutting-edges *c* of the blades are of any desired outline according to the work to be

done, the form shown being that of a cyma-recta and adapted to form a double ogee groove, as illustrated in Fig. 4.

The blades are slotted, as shown at *d*, and are secured to the boss by means of screws D and washers *e*. The bases of the pyramidal sides to which the cutters are secured are provided with slots *b'*, the edges *b* overlapping the blades and preventing the possibility of their flying out or becoming displaced when the machine is in motion.

The apex of the pyramid is cut away (see Fig. 3) to prevent the choking of the cutters.

In operation, the device is secured to the revolving shaft of the machine, and the work is brought up to the cutters by any suitable means.

The peculiar disposition of the blades with reference to the axis of rotation produces a sort of shearing cut, which results in smooth and satisfactory work.

What I claim is—

The cutter-head herein described, consisting of a pyramidal boss having grooves at its base and slotted outwardly-converging blades C C stepped therein and secured by means of screws D, as set forth.

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Witnesses:

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