

G. MONTGOMERY.
Cutter-Heads.

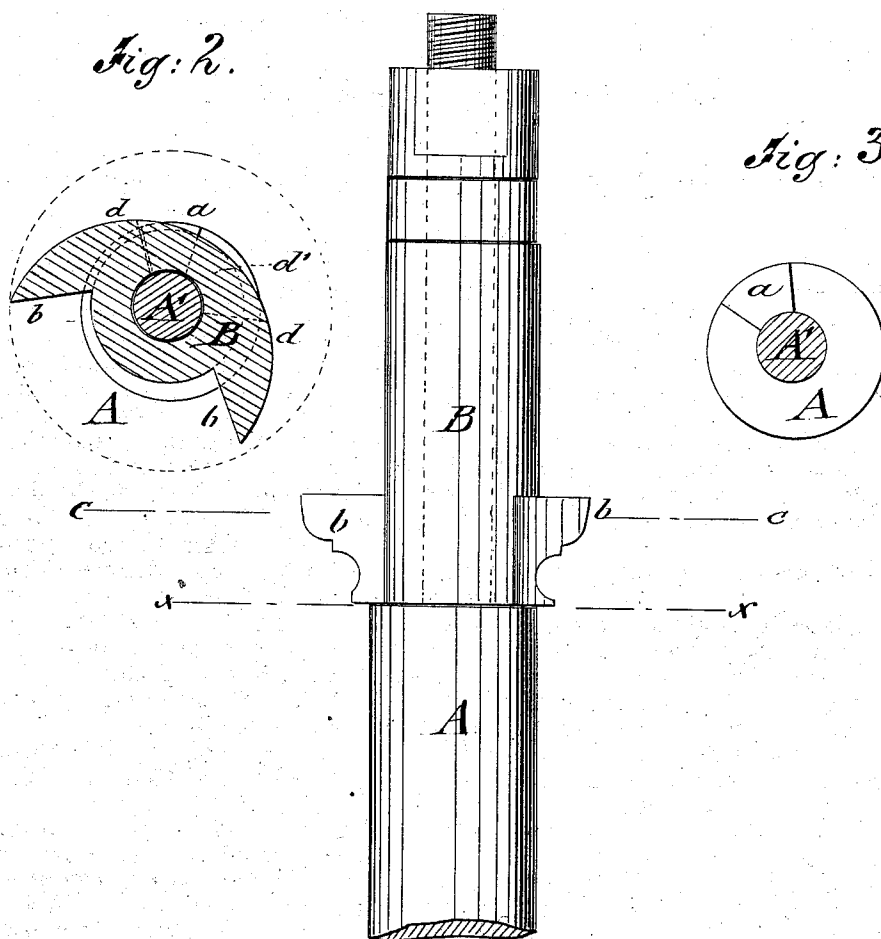
No. 155,039.

Patented Sept. 15, 1874.

Fig: 1.

Fig: 2.

Fig: 3.



WITNESSES:

Chas. Nida
Chidwick

INVENTOR:

G. Montgomery
BY *mm*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE MONTGOMERY, OF GALENA, ILLINOIS.

IMPROVEMENT IN CUTTER-HEADS.

Specification forming part of Letters Patent No. **155,039**, dated September 15, 1874; application filed June 27, 1874.

To all whom it may concern:

Be it known that I, GEORGE MONTGOMERY, of Galena, in the county of Jo Daviess and State of Illinois, have invented a new and Improved Cutter-Head, of which the following is a specification:

In the drawing, Figure 1 represents a side elevation of my improved reversible cutter-head. Figs. 2 and 3 are horizontal sections of the cutter-head on the lines *c c* and *x x*, respectively.

Similar letters of reference indicate corresponding parts.

My invention relates to an improvement in the class of reversible cutter-heads; and consists in a double cutter-head, in combination with the eccentric journal of a revolving shaft having a radial stop, as hereinafter described.

In the drawing, A represents the shaft, provided with a spindle or journal, A', placed slightly eccentric thereto. The solid cutter-head B, with two symmetrically-arranged bits or cutting-edges, *b*, swings on the eccentric spindle, and is stopped in either direction by a radial stop or shoulder, *a*, of shaft A, and the side shoulders *d* of the cutter-head, formed by a recess, *d'*, at the lower rear part of the same. The shoulder or stop *a* is arranged symmetrically to the point of greatest eccentricity of spindle A', producing thereby the throwing out of the cutting-edge to a greater distance from the axis of the shaft A, whose

shoulder is carried against the stop *a*. The other cutting-edge is thereby thrown within the circle formed by the revolving outer edge, so as to clear the work completely. By reversing the motion of the shaft the cutter-head is carried with its opposite shoulder *d* against the stop *a*, producing thereby the eccentricity of the other cutting-edge, and the clearing of the former. The cutter-head is secured by washer and lock-nut on the spindle, and automatically reversed by the reversing of the shaft-motion, forming thereby a strong, simple, and rapidly-operated cutting device for molding purposes.

I do not claim cutters having an eccentric connection with a revolving shaft, to adapt them to be set in or out, according as they are required or not required for use.

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

The combination, with shaft A, provided with the eccentric spindle A' and fixed radial stop *a*, of the reversible cutter-head B, having bits *b*, and a peripheral slot or recess for said stop, all constructed in the manner shown and described, for the purpose specified.

GEORGE MONTGOMERY.

Witnesses:

WM. A. DU BOIS,
CHARLES FLICK.