M. T. BOULT.

CUTTER-HEAD.

No. 188,771. Patented March 27, 1877.

Fig. 1.

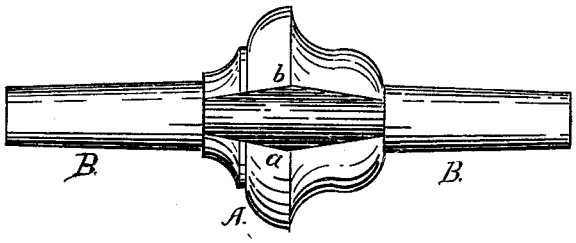


Fig. 3

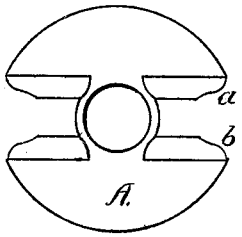


Fig. 4.

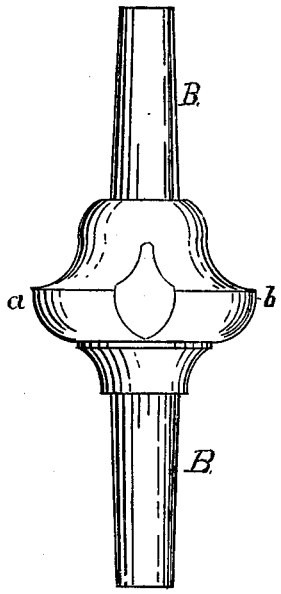
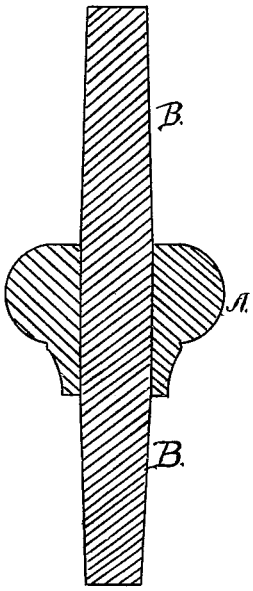


Fig. 2.



Attest.

M. Zanzyck

S. E. Chadwick

Inventor.

M. T. Boult

UNITED STATES PATENT OFFICE.

MYRON T. BOULT, OF BATTLE CREEK, MICHIGAN.

IMPROVEMENT IN CUTTER-HEADS.

Specification forming part of Letters Patent No. **188,771**, dated March 27, 1877; application filed December 27, 1876.

To all whom it may concern:

Be it known that I, MYRON T. BOULT, of Battle Creek, in the county of Calhoun and State of Michigan, have invented an Improvement in Cutter-Heads; and do hereby declare that the following is such a full, clear, and exact description thereof as will enable others skilled in the art to which it pertains to construct and use the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon, similar letters indicating corresponding parts in the different figures.

My invention relates to a cutter made of solid steel, having double cutting-edges, or edges which will cut while the tool is revolving in either direction, right or left, and which may also be reversed in the tool-stock, the cutting part of the tool being provided with a stem or shank at each end, one of which is inserted in the tool-stock and the other acts as a guide for the surface or edge of lumber; and the invention consists in the construction and arrangement of the different parts, as will be hereinafter fully set forth, and then specifically pointed out in the claim.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a perspective view of the cutter; Fig. 2, a longitudinal section; Fig. 3, an end view, and Fig. 4 a modification of the same.

A represents the cutter, made of a single solid piece of steel, turned to suit any desired configuration of molding, and having double cutting-edges, *a* and *b*, which allow it to cut while revolving in either direction, right or left. This method of construction is rendered necessary on account of the tool being made reversible in the tool-stock or mandrel, and is of great service in allowing the tool to cut with the grain of the wood at all times, as, by applying a reversing motion to the mandrel, the cutting or rotating movement of the tool may always be made to correspond with the direction of the grain of the wood acted upon, thus insuring smooth work. The method employed by me to give the proper form to the periphery of the tool, in order to insure perfect cutting-edges at both *a* and *b*, is to place it in a chuck for turning ovals attached to the mandrel of an ordinary engine-lathe, when the proper degree of eccentricity can be imparted to it without difficulty and at slight cost. It is then finished, tempered, and the cutting-edges sharpened and set for work before the tool is placed on sale, thus enabling the purchaser to put it to work at once without preliminary fitting.

In forming the cutter a stem or shank, B, is produced at both ends, either of which may be inserted in the tool stock or mandrel, the opposite end serving as a guide to the work. These stems are turned from centers in the ordinary manner, and are therefore concentric to the periphery of the cutter and circular in section, so as to fit them for entering the socket of the tool-stock, or to act as guides for the tool.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent of the United States, the following:

A molding-cutter constructed with a shank or stem on each end, either of which may be used to hold the cutter or guide the lumber to be molded, and provided with double cutting-edges, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature this 31st day of October, 1876, in presence of two witnesses.

MYRON T. BOULT.

Witnesses:

H. PHILLIPS, Jr.,

I. HAYS CARSON.