

M. W. Clark.

Cutter-Head for Tenoning Blind-Slat.

N<sup>o</sup> 76052

Patented Mar. 31, 1868.

Fig. 1.

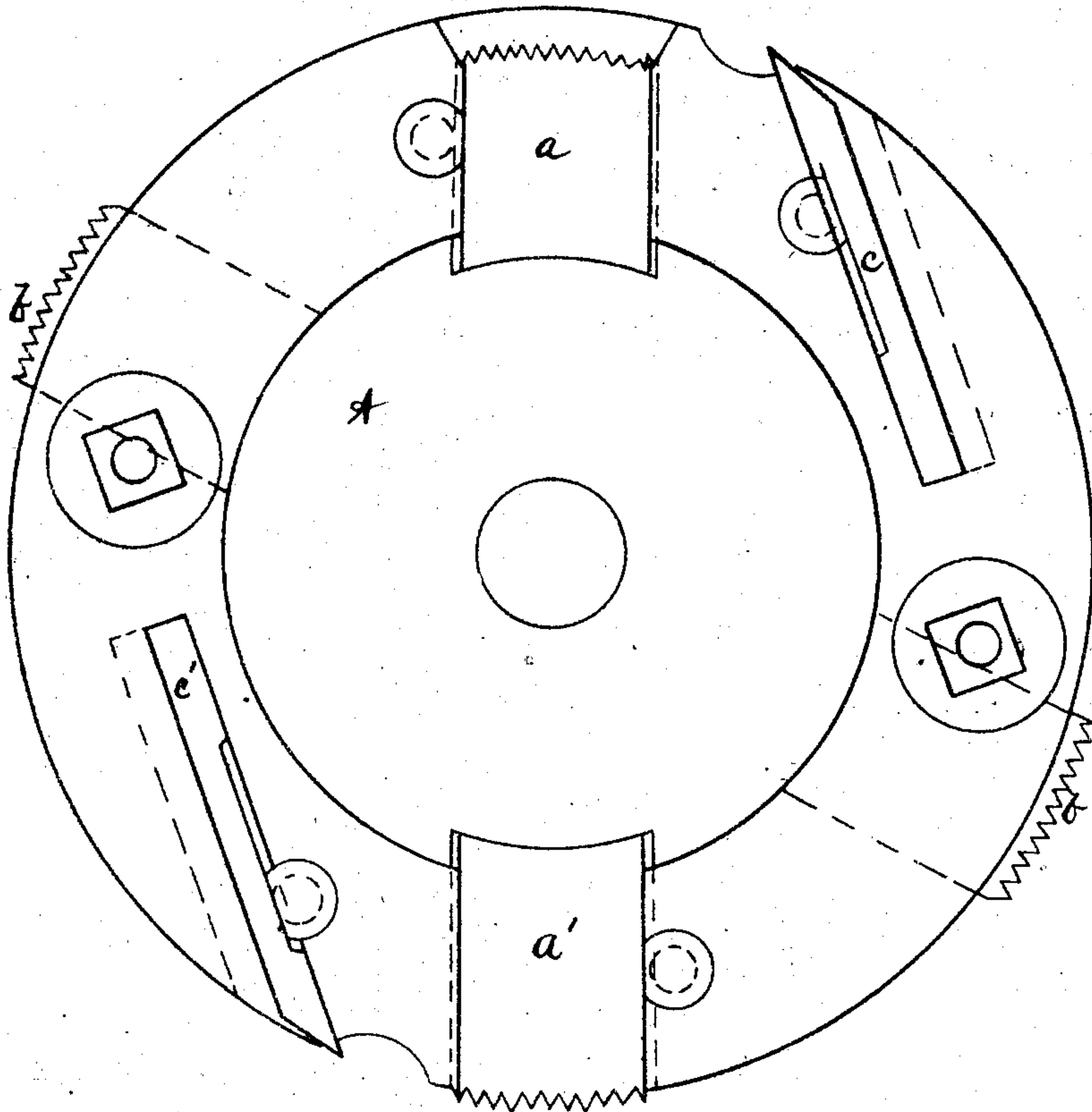


Fig. 2.

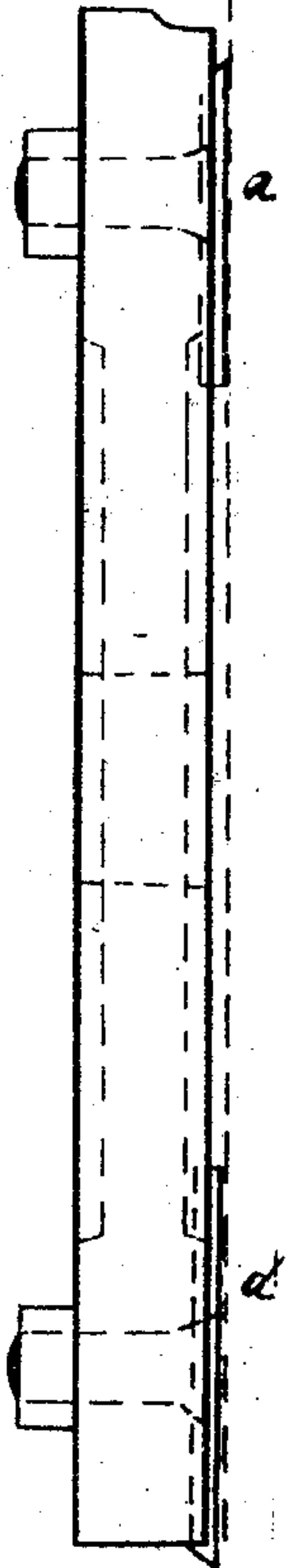


Fig. 3.

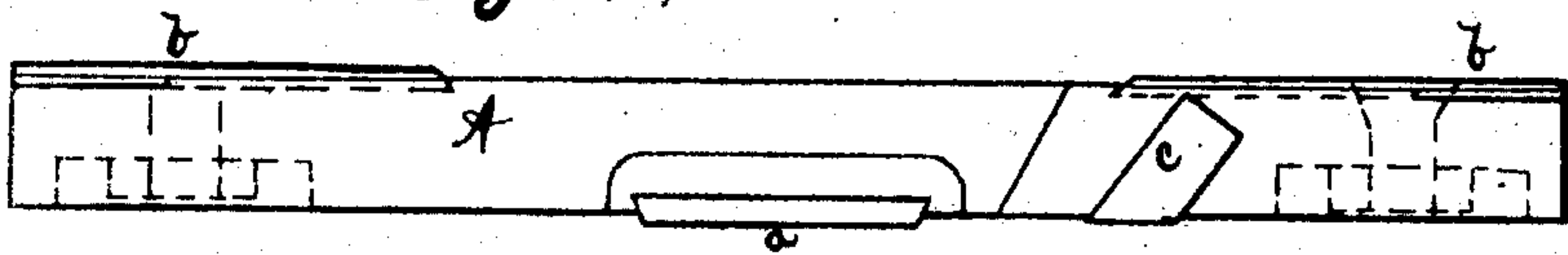
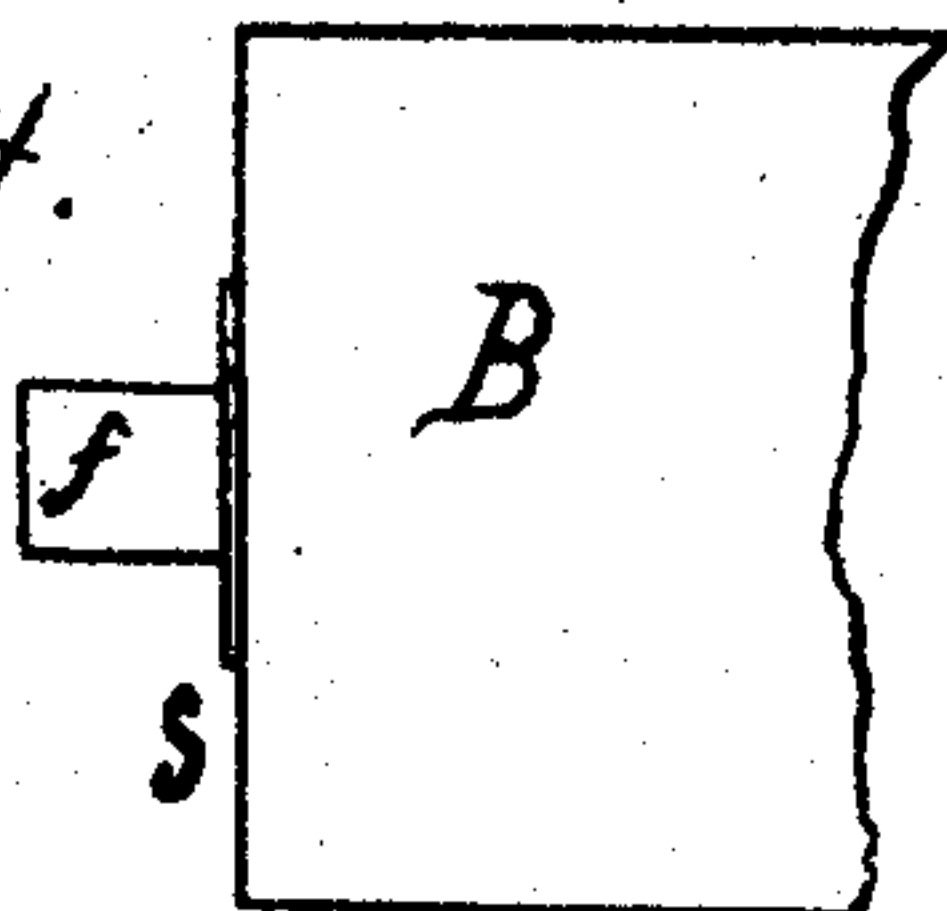


Fig. 4.



Witnesses.

H. Thompson.  
Frank J. Plummer.

Inventor.

Milton W. Clark.

# United States Patent Office.

MILTON W. CLARK, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO R. BALL AND COMPANY, OF SAME PLACE.

*Letters Patent No. 76,052, dated March 31, 1868.*

## IMPROVEMENT IN CUTTER-HEADS FOR TENONING BLIND-SLATS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, MILTON W. CLARK, of the city and county of Worcester, and State of Massachusetts, have invented new and useful Improvements in Revolving Cutter-Heads for Making Round Tenons; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure I is a vertical view of one side of the head, showing its form and the relative position of the several cutters.

Figure II is a vertical view of a section of the face of the head, showing the relative position of the toothed cutters *a a'*.

Figure III is a horizontal view of a section of the face, showing the ends of cutters *c* and *a*.

Figure IV is a section of a blind-slat, showing the work of the cutter-head.

The cutter-head is placed upon a revolving arbor. The piece to be tenoned is made to revolve as it passes by the revolving cutter-head. The toothed cutter *a'* cuts the shoulder to the tenon *f*, while the toothed cutter *a*, being set nearer the centre of the head *A*, and farther out on the side of the head adjacent to the piece to be tenoned, cuts the offset *S*, Fig. IV. The relative position of cutters *a a'* will be readily seen by comparing them with the red line in Fig. II. The toothed cutters *b b* cut the length of tenon *f*. The cutters *c c'* cut the tenon to its proper size.

That which I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the head *A*, of the cutters *a a'*, *b b*, and *c c'*, arranged to operate as described, so that, at the same time a tenon is formed by said cutters, an offset may be cut in the shoulder of said tenon, substantially as shown and set forth.

MILTON W. CLARK.

Witnesses:

H. THOMPSON,

FRANK J. PLUMMER.