(No Model.)

W. N. WEEDEN.

COLLET OR ARBOR FOR WATCHES.

No. 245,244.

Patented Aug. 2, 1881.

Fig.1.

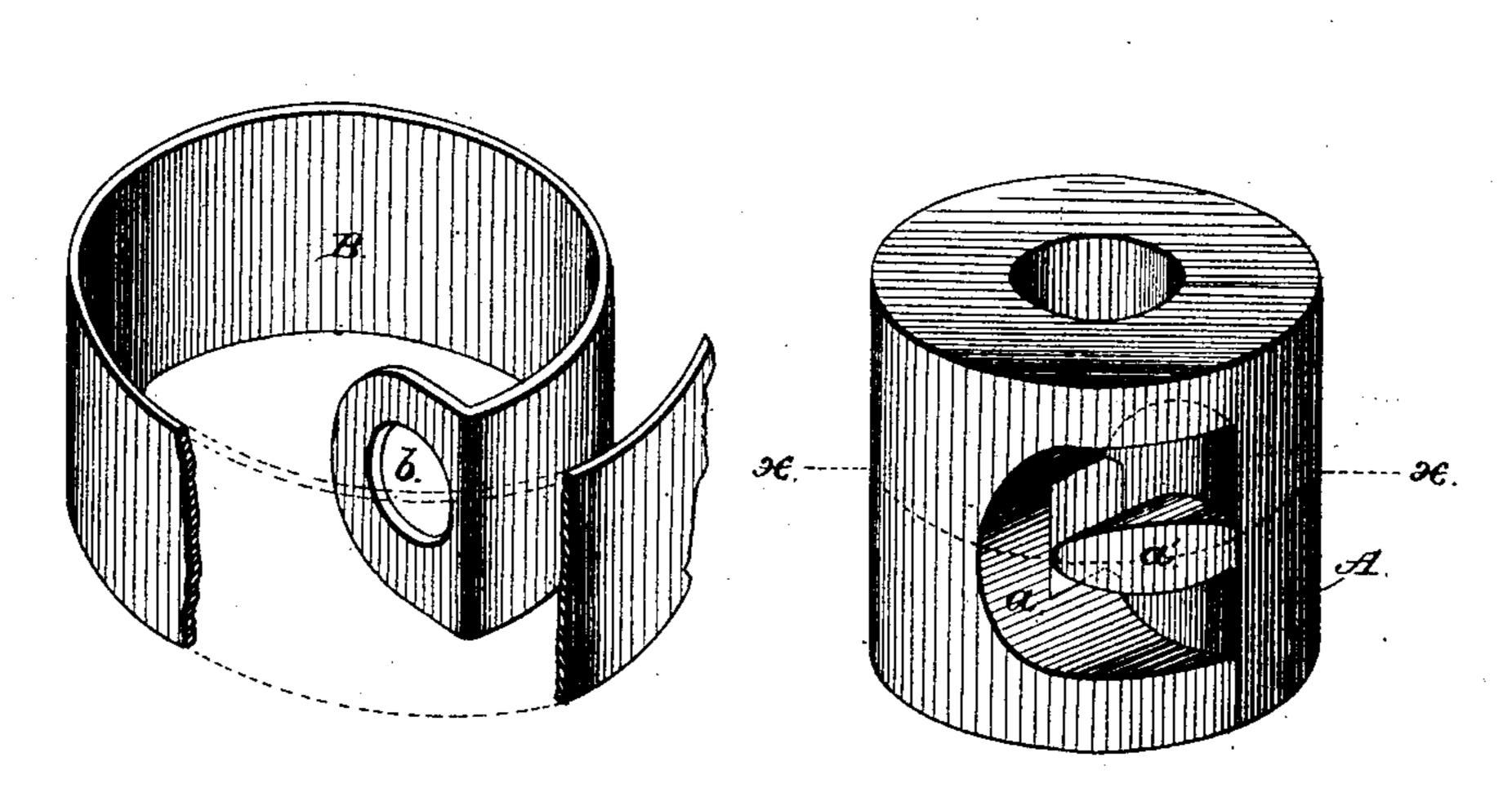


Fig. 2.

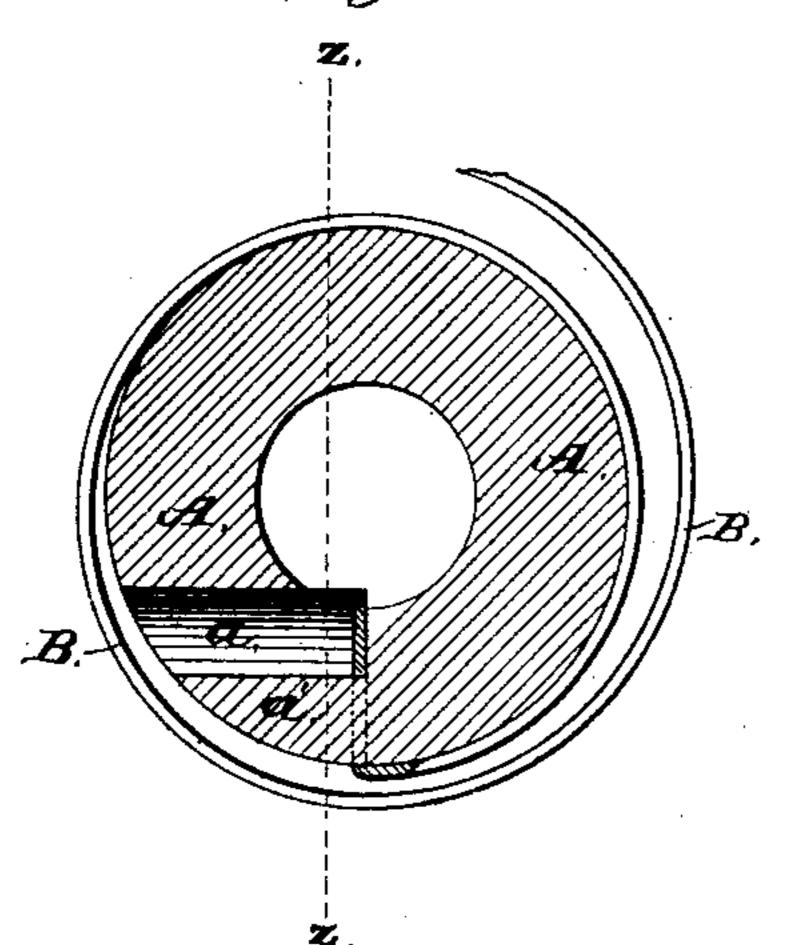
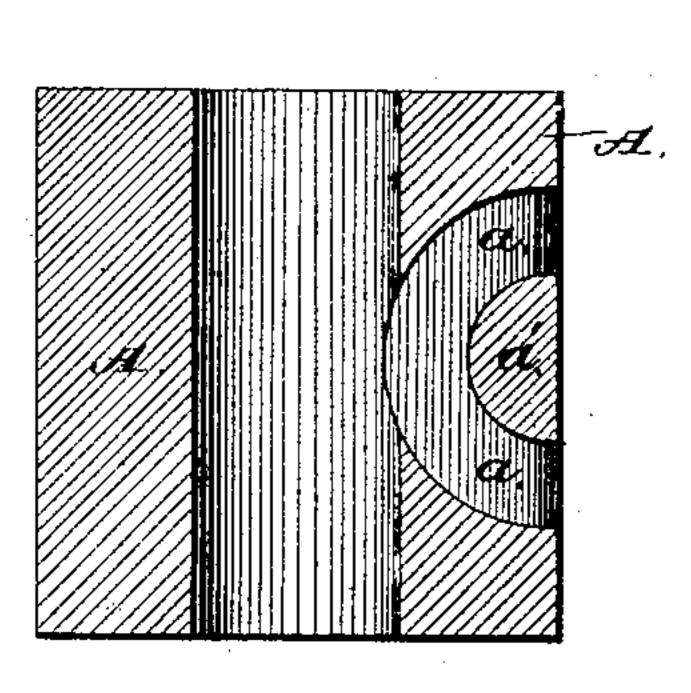


Fig. 3.



Witnesses.

Jas. E. Hutchinson. Henry b. Hazard.

Inventor.

2 M. W. Weeden, by Ises. S. Prindle, hie attig

United States Patent Office.

WILLIAM N. WEEDEN, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE WATERBURY WATCH COMPANY, OF SAME PLACE.

COLLET OR ARBOR FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 245,244, dated August 2, 1881.

Application filed June 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, WM. N. WEEDEN, of Waterbury, in the county of New Haven, and in the State of Connecticut, have invented certain new and useful Improvements in Mainspring Collets or Arbors for Watches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a mainspring and collet adapted for connection by my improved method, said parts being separated. Fig. 2 is a central cross-section of the 15 same upon line x x of Fig. 1, and Fig. 3 is a longitudinal section of said collet upon line

zz of Fig. 2.

Letters of like name and kind refer to like

parts in each of the figures.

watch - spring to be securely connected to or with a collet, so as to leave no peripheral projection about which to wind said spring; and to this end it consists in a spring-collet provided with a spring-stud that is formed by cutting an annular recess diagonally into the periphery of said collet, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents a spring-collet having the usual cylindrical form, within one side of which is an annular recess, a, formed by means of a hollow mill, which recess extends diagonally into said collet, and at its center is left a stud, a', that is nearly in a line with the periphery, as seen in Figs. 1 and 2. As the stud a' is formed from the body

of the collet A, no portion of the same projects beyond the periphery of said collet, which retains its cylindrical form and furnishes a round hub upon which to wind a spring.

The mainspring B has near its inner end a round opening, b, that is slightly larger than the stud a', while the end of said spring is cut away upon a line that is concentric with said opening, by which means precisely the same 45 width of metal is left at each side and at the end of said spring around said opening. The recess α is slightly larger in diameter than the width of the spring B, so that the end of the latter may be readily placed within said re- 50 cess around the stud a', in which position said spring-end is securely held, and is incapable of becoming accidentally detached or of moving out of a central position upon the collet. The stud a' is far stronger than any of 55 the usual form, and the spring B has such connection with the collet A as to enable the full strength of said spring to be utilized.

Having thus fully set forth the nature and merits of my invention, what I claim as new 60

is----

A spring-collet provided with a spring-stud that is formed by cutting an annular recess diagonally into the periphery of said collet, substantially as and for the purpose specified. 65

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of May, 1881.

WILLIAM N. WEEDEN.

Witnesses:

J. E. Johnson, W. F. Baldwin.