

J. C. DUEBER.  
Watch-Cases.

No. 139,779.

Patented June 10, 1873.

Fig. 1.

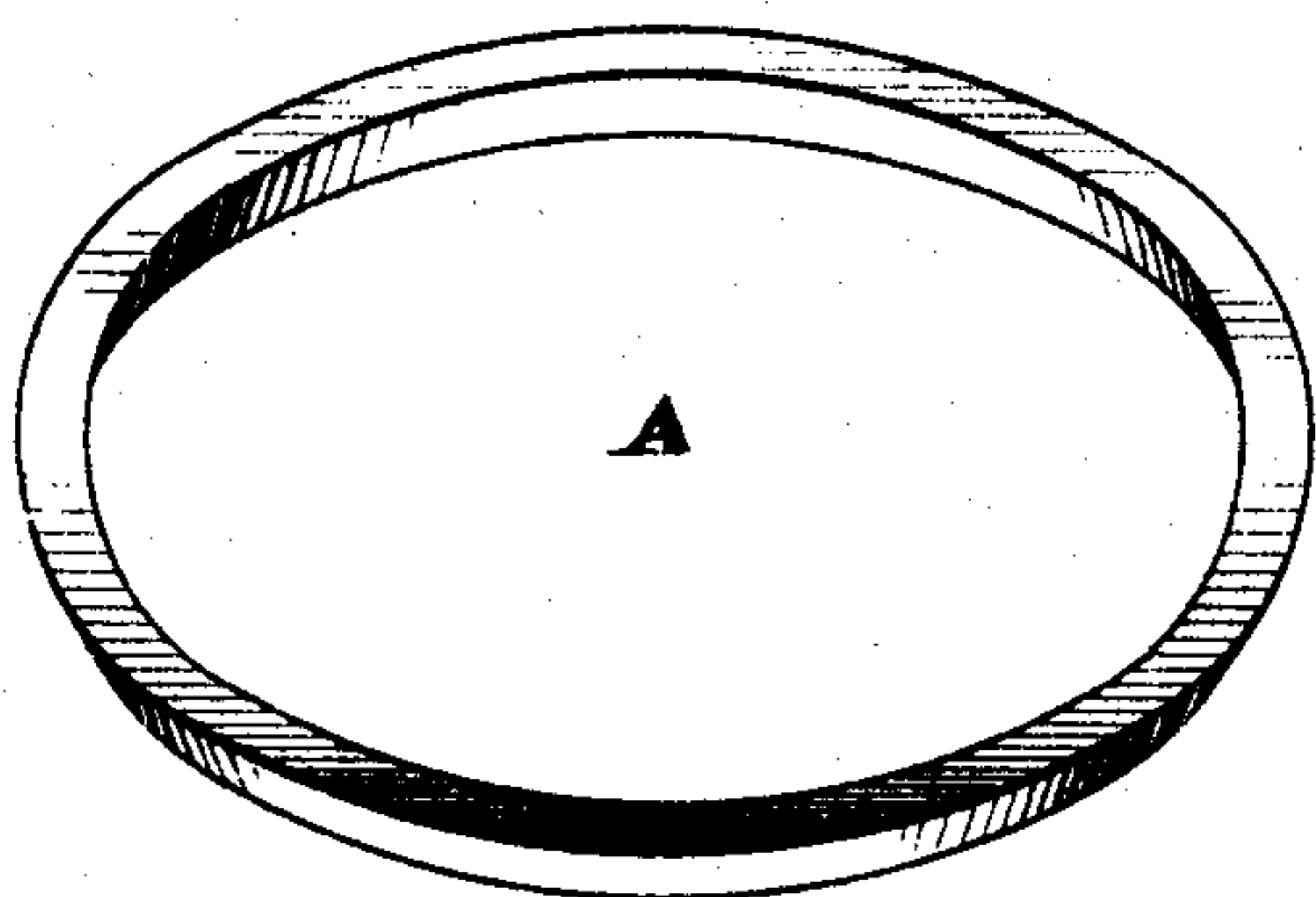


Fig. 2.

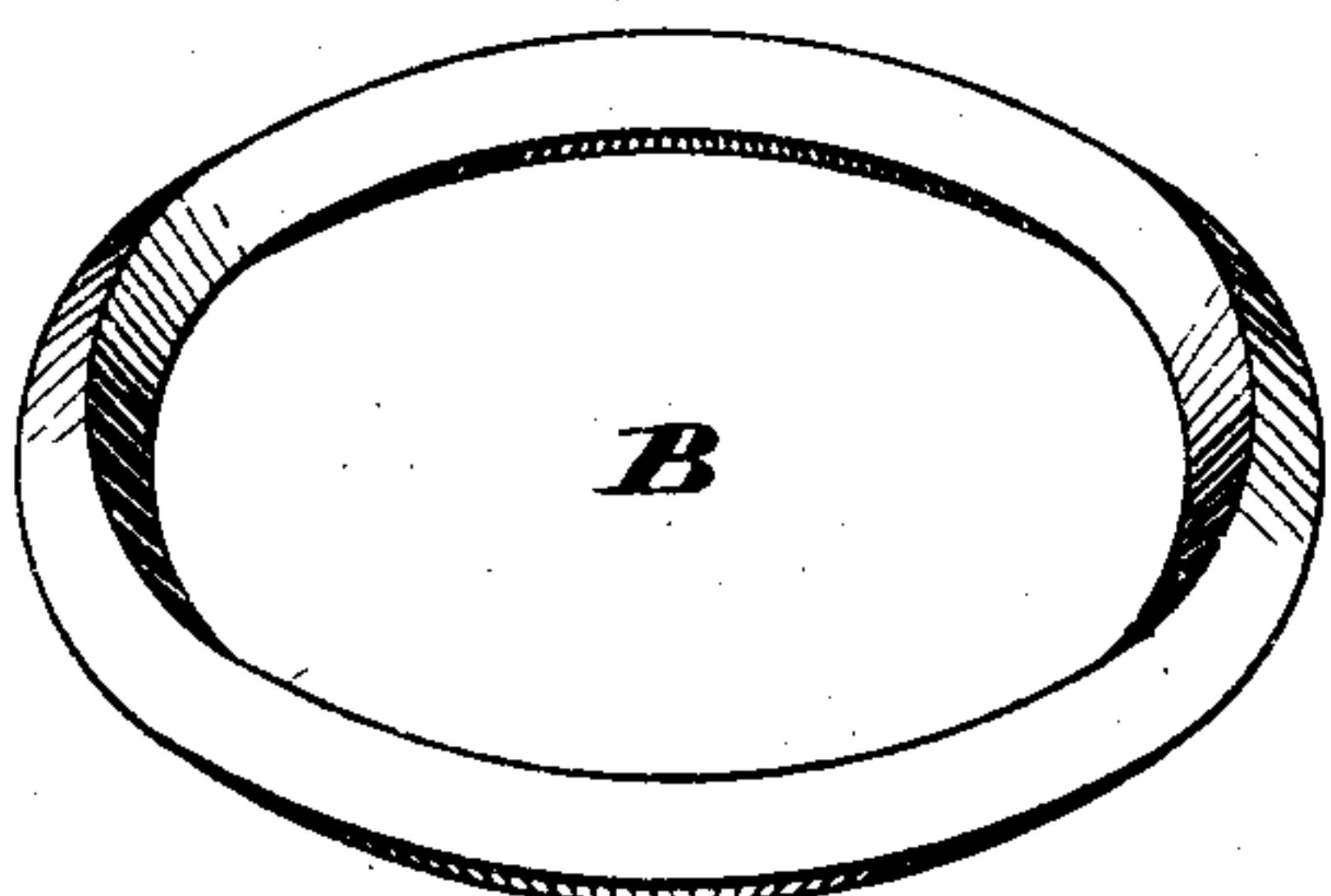


Fig. 3.

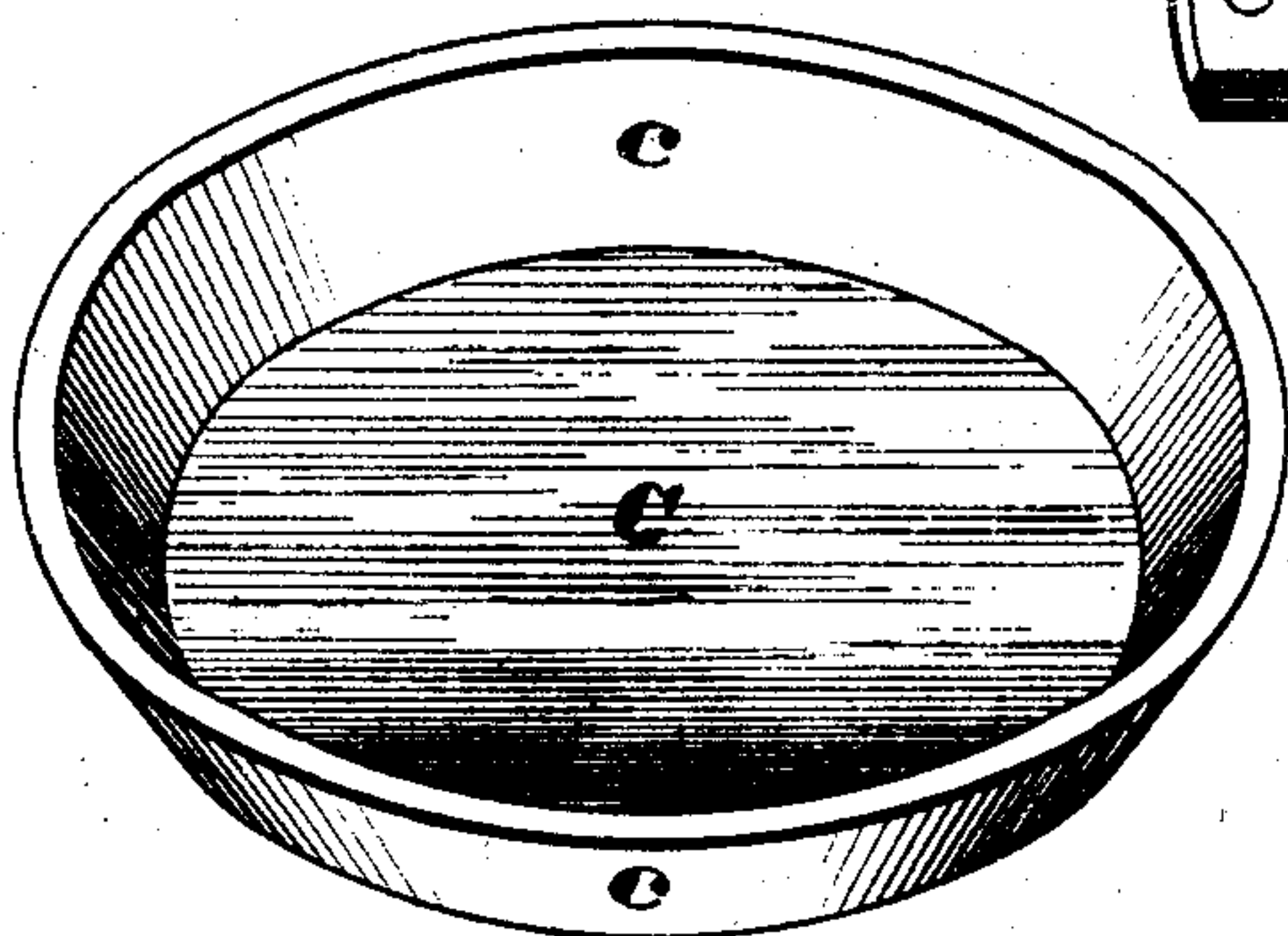


Fig. 4.

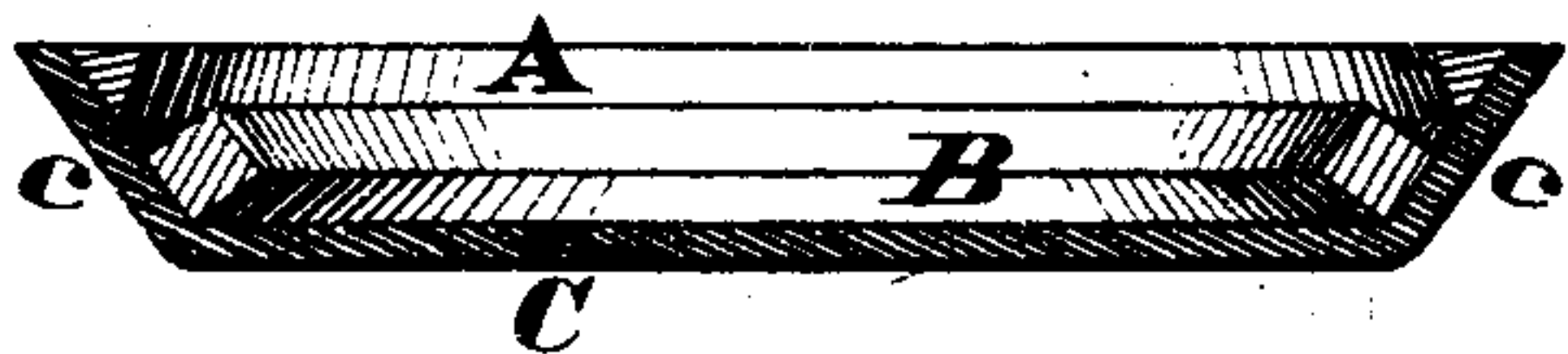


Fig. 5.

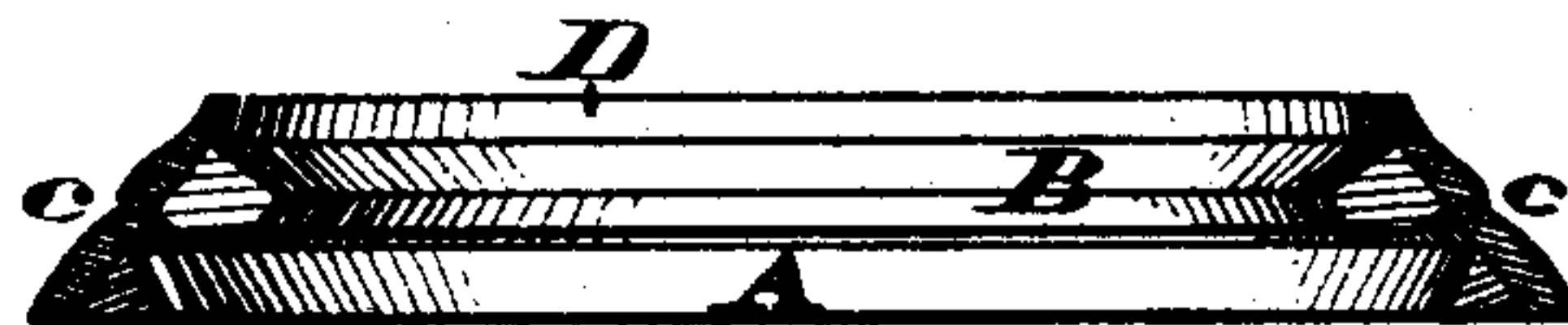


Fig. 6.

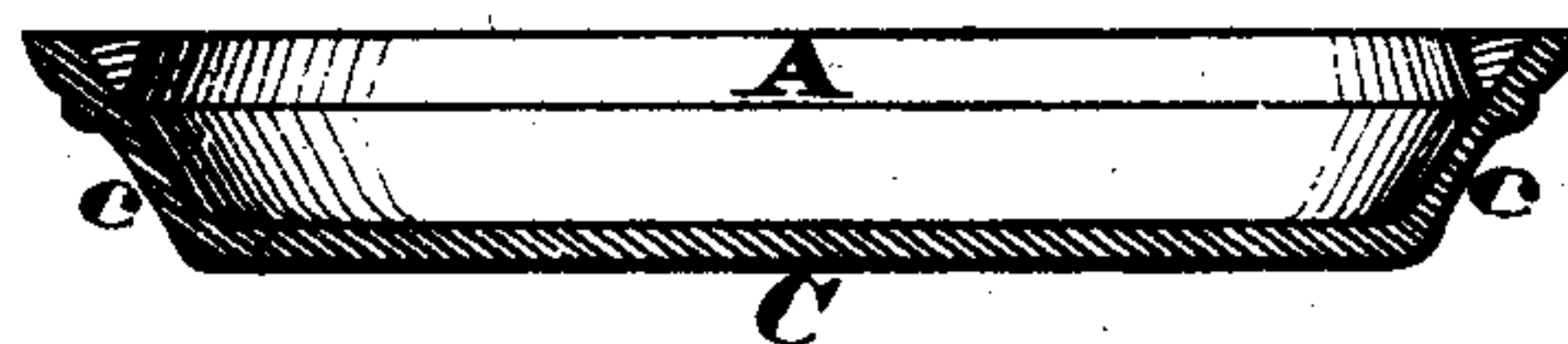


Fig. 7.

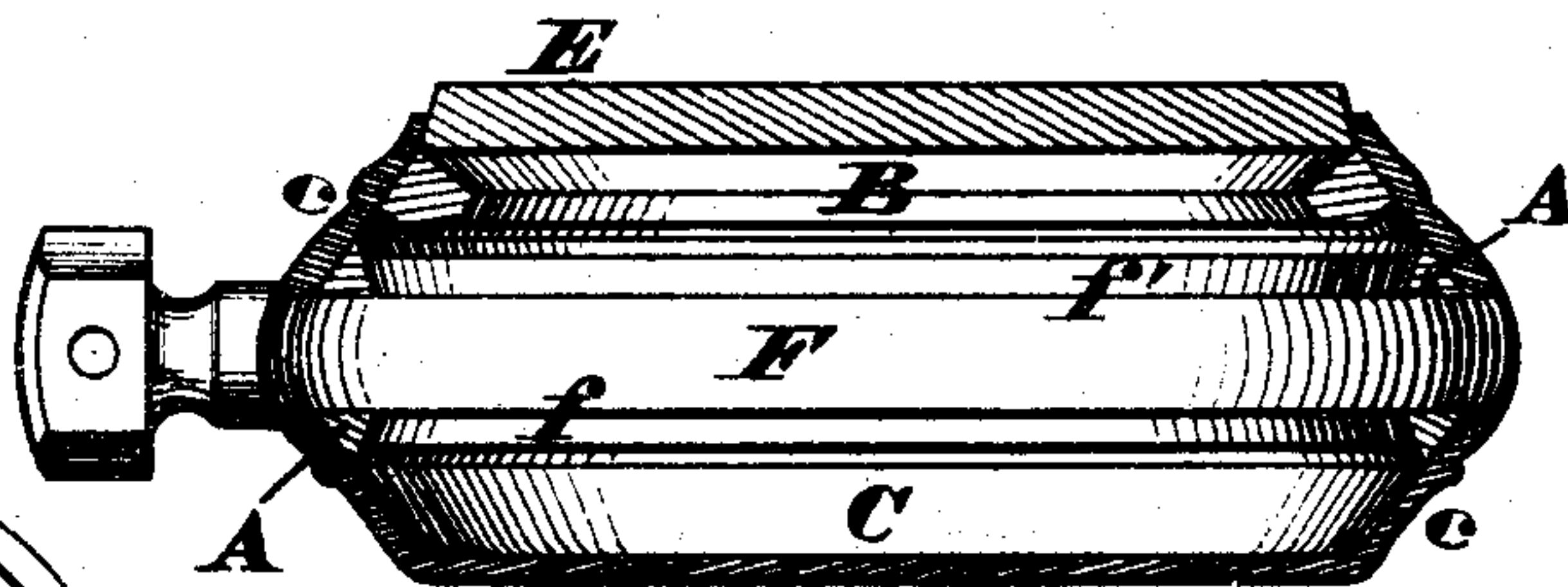
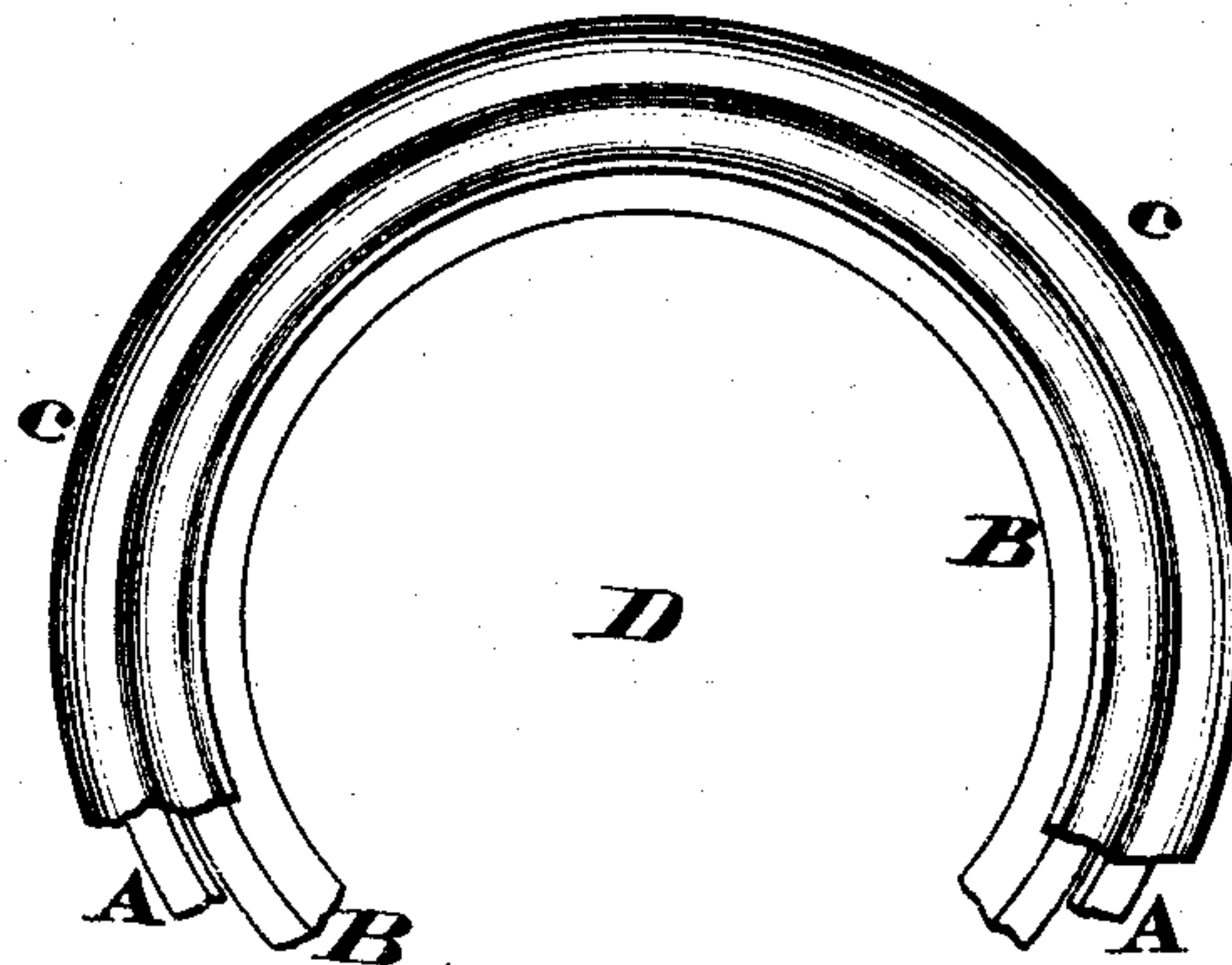


Fig. 8.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN WATCH-CASES.

Specification forming part of Letters Patent No. **139,779**, dated June 10, 1873; application filed November 23, 1872.

*To all whom it may concern:*

Be it known that I, JOHN C. DUEBER, of Cincinnati, Hamilton county, Ohio, have invented certain Improvements in Watch-Cases, of which the following is a specification:

My invention relates to the ring or annular member which constitutes the frame of the glass or crystal, and which is more specifically known as the bezel.

It is, as well known, usual to form this member of the case by turning the bezel proper, with its snap-ring or flange and retaining-ring, all out of a single annular piece of metal, an operation which requires the utmost care of a skillful workman. I render this part of the process a comparatively much more easy and, at the same time, a more accurate one, by simply taking one of the previously-described flat backs struck up on my plan, and soldering within it a square ring that serves as a seat for the crystal, and I also solder in said back a snap-ring. I then turn out (remove by the turning-tool) the central portion, and the bezel is complete, after which any desired finish may be imparted in the usual manner.

Figure 1 is a perspective view of the snap-ring. Fig. 2 is a perspective view of the square ring, which serves as a seat for the crystal. Fig. 3 is a perspective view of my struck-up flat back. Fig. 4 is a vertical section, showing the snap-ring and the square ring soldered within a flat back. Fig. 5 is a vertical section of the same parts, after the flat central portion has been removed by the turning-tool, so as to leave an opening for the reception of the crystal. Fig. 6 is a vertical section, showing the snap-ring soldered to the flat back. Fig. 7 represents the finished bezel and flat back attached to the center of the case, said bezel and back being sectioned, while the center is shown in elevation. Fig. 8 is a plan, showing a portion of my improved bezel without the glass.

A represents the snap-ring, the same being turned up so as to have the represented triangular shape in its transverse section. B is a ring of somewhat less diameter than A, and,

being square or nearly square in its transverse section, is known technically as the square ring. The back of the case, which is struck up from a single piece of metal of suitable shape, consists of a flat circular plate, C, having an outwardly-flaring marginal flange, c.

After the snap-ring A has been soldered to the inner or concave side of the flange c, and the exterior properly finished, as shown in Fig. 6, the flat back is complete, and no intense heat having been employed in this process, the consequence is that the thus finished back is never warped or sprung.

The bezel proper is constructed in the following manner: The triangular shaped snap-ring A is soldered to the flange c, so as to be flush with the outer edge thereof, and the square ring B is fitted snugly within the obtuse angle formed by said flange and the flat plate c, and then securely soldered. The flange c being during these soldering actions held perfectly rigid by the still intact central portion C no warping or springing can result. The process, down to this stage, is a complete repetition of that described for the back proper, represented in Fig. 4. The ring B is then turned off so as to assume the trapezoidal transverse section shown in Fig. 5, and the central portion of the back C having been removed by the turning-tool, so as to leave an opening, D, for insertion of the crystal E, the bezel is complete. (See Figs. 5, 7, and 8.) The ring B serves as a seat for the crystal, and as a screen to conceal the margin of the dial. The back and the bezel being secured by customary hinges to the center their snap-rings engage over the snaps *f f* of said center in the usual manner. The front and back backs C c, being struck up with a die in a screw or other suitable press, and not warped by soldering, are perfect fac-similes of one another, and consequently do not require so much time to fit them to the center.

My method of constructing the bezel enables boys to perform labor which has heretofore demanded the highest skill of the artisan, and, as already stated, with more perfect and uniform results; besides which it may be

stated that time and material are saved, and the cost of manufacture reduced accordingly.

My improved modes of construction can be applied to various forms of watches, such as flat back, round back, open face, or hunting-case.

I claim as new and of my invention—

The bezel, consisting of the three distinct members, to wit, the snap-ring A, the square

ring B, and flange c, when constructed and adapted to be employed in the manner herein explained.

In testimony of which invention I hereunto set my hand.

JOHN C. DUEBER.

Attest:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.