

G. W. LADD.  
Watch-Case.

No. 213,578.

Patented Mar. 25, 1879.

Fig. 1.

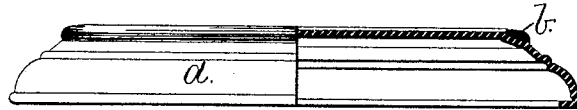


Fig. 2.



Fig. 3.

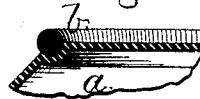


Fig. 4.



Fig. 5.



WITNESSES:

Charles E. Ladd  
William L. Coop.

INVENTOR:

George W. Ladd  
by Joseph A. Miller  
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# UNITED STATES PATENT OFFICE.

GEORGE W. LADD, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN A. BROWN, OF SAME PLACE.

## IMPROVEMENT IN WATCH-CASES.

Specification forming part of Letters Patent No. **213,578**, dated March 25, 1879; application filed January 29, 1879.

*To all whom it may concern:*

Be it known that I, GEORGE W. LADD, of the city and county of Providence and State of Rhode Island, have invented a new and useful Improvement in Watch-Cases; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

This invention has reference to an improvement in what is known as "mansard" or flat-sided watch-cases, and is particularly designed for plated watch-cases. It may, however, be used on solid cases and watch-cases of any form.

The invention consists in securing to the side of a watch-case a separate ring, so as to protect the edge of the flattened side and prevent the rapid wearing of that edge.

Figure 1 is a view, partly in section, of one side of a watch-case, showing the ring by which the corner formed at the intersection of the sloping side and flat top is protected. Fig. 2 is a section at the corner of a mansard watch-case, with a solid ring secured in the corner when the rest of the case is plated. Fig. 3 shows this extra ring of circular section raised above the flattened side, and arranged to protect both the corner and the flattened side. The ring may be knurled or carved. Fig. 4 is a raised ring, soldered on the edge, and Fig. 5 a raised ring secured within a groove to the side of the watch-case.

In the drawings, *a* represents one side of a watch-case, and *b* the ring secured so as to protect the edge or corner formed by the beveled side and flat top of the watch-case. This edge, if a corner, or even if made so as to form a rounded bead, is the portion of a watch-case subjected to the greatest wear, and when the watch-case is made of plated metal, or the case is plated after it is formed, both in the polishing and in the subsequent wear, is this edge subjected to much greater wear than any other portion of the watch-case, and the plating is soon worn through, exposing the inferior metal. To obviate this difficulty is the

main object of this invention; and for this purpose I secure the ring *b*, made in any form desired, to the edge in such a manner as to protect the edge and bring all the wear on the ring *b*, which, for this purpose, is made either of solid precious metal, of plated wire, or stock-plate, provided with a plate much thicker than the plating on the rest of the case.

The ring *b* may be of any desired section, and may be made so as to protect the flat sides from wear. The wearing of the smooth sides of such cases being a great objection to them, it may be carved or knurled, and form an ornamental portion of the case, while it materially strengthens the sides of a case, and prevents injury to the weaker flattened sides.

I prefer to secure the ring *b* in a groove, as shown in all the figures except Fig. 4, and solder the same; but the ring may be soldered to the edge, as is shown in Fig. 4, or secured in any other manner; and when such a ring is worn through the plate it may be easily taken off and a new ring secured.

Watch-cases that have become worn at the edges may be restored by cutting a slight groove and securing the ring *b* to the edge of the case, and the whole case will be restored, and will be able to stand more wear than it did originally.

In covers of watch-cases where more than one edge is exposed to excessive wear, all such edges may be made of rings of fine metal, or metal having a heavier plating; and very fine ornamental and durable watch-cases may be made by using a metal of greater hardness than the case for such wearing-edges, of the same color as the case, or of a color forming an agreeable contrast to the case.

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

1. The combination, with the cover of a watch-case, of a ring secured to the cover, and arranged to protect the edge of the flat portion of the same, substantially as and for the purpose set forth.

2. In a plated watch-case, the combination, with the cover, of a ring made of precious metal or covered with heavier plating than the case, and secured to such part of the cover as is exposed to the greatest wear.

3. A plated watch-case in which the wearing-edges of the cover are made of precious metal, or metal covered with heavier plate than the case, as a new article of manufacture.

4. The combination, with the cover *a*, of the ring *b*, of any desired sectional form, and secured to the cover, substantially as and for the purpose set forth.

GEO. W. LADD.

Witnesses:

JOSEPH A. MILLER,  
HARMON S. BABCOCK.