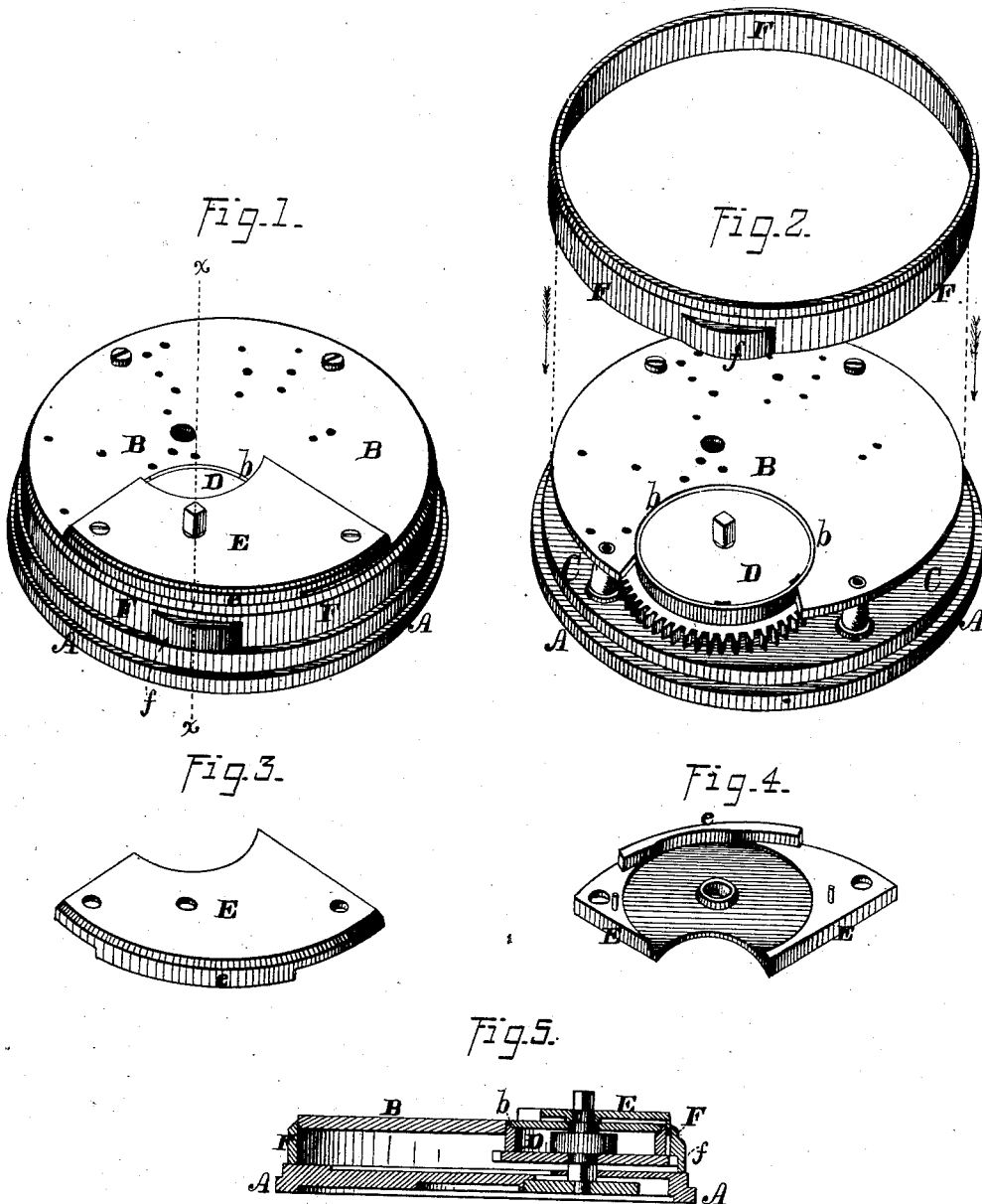


G. HUNTER.  
DUST-CAP FOR WATCHES.

No. 191,967.

Patented June 12, 1877.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

GEORGE HUNTER, OF ELGIN, ILLINOIS.

## IMPROVEMENT IN DUST-CAPS FOR WATCHES.

Specification forming part of Letters Patent No. **191,967**, dated June 12, 1877; application filed April 2, 1870.

*To all whom it may concern:*

Be it known that I, GEORGE HUNTER, of Elgin, in the county of Kane, and in the State of Illinois, have invented certain new and useful Improvements in Watches; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a perspective view of a watch-movement inclosed upon its edges by my improved dust-protector. Fig. 2 is a like view of said movement, the barrel-bridge and dust-ring being separated therefrom. Fig. 3 is a perspective view of the upper side of said barrel-bridge. Fig. 4 is a like view of the lower side of the same, and Fig. 5 is a section of said movement upon line *x x* of Fig. 1.

Letters of like name and kind refer to like parts in each of the figures.

In the construction of the class of watches known as "American" the top plate is recessed at one edge, so as to permit of the insertion or removal of the barrel without disturbance of other portions of the train, and said recess is inclosed at its upper side by means of a bridge, which rests upon and is secured to the outer face of said top plate.

By this construction the space between the pillar-plate and top plate is less in vertical dimensions by just the thickness of the latter than is the space between said pillar-plate and the barrel-bridge, so that a dust-ring which would embrace the edge of the movement and inclose the space between the edges of said plates would not inclose the open side of the barrel-recess in said top plate so as to form a dust-tight joint, for the reason that, if said dust-ring were extended upward over the edge of the latter to its upper face, the edge of said ring would but just meet the lower edge of said bridge, and it would be practically impossible to make as close a joint at such point as would be obtained if said parts overlapped.

To remedy this defect, and enable a solid dust ring or band to be employed, is the design of my invention, which consists, principally, in combining with the barrel-recess of the top plate of a watch a barrel-bridge, which extends across the outer side of said recess,

and is provided with a lip that incloses the outer edge of the same, and has its lower edge flush with the lower side of said top plate, substantially as and for the purpose hereinafter specified.

It consists, further, in combining with a recessed top plate a barrel-bridge and a pillar-plate, constructed and combined as described, a dust-band formed in one piece, and arranged to inclose the space between the contiguous edges of said part, substantially as and for the purpose hereinafter shown.

In the annexed drawing, A represents the pillar-plate, and B the top plate, of a watch, which are arranged with their inner faces parallel, and are connected together by means of three or more posts or pillars, C, all in the usual manner.

A barrel, D, is pivoted at its lower end within the pillar-plate A, and extending upward into a recess, *b*, that is provided in the top plate B, has its upper end pivoted within a bridge, E, which extends across said recess, and is secured to or upon the upper face of said top plate.

In consequence of the necessary position of the barrel D at one side of the movement, the recess *b* extends to and through the edge of the top plate B, and the opening thus formed is still further enlarged to permit of the more ready insertion and removal of said barrel, by which construction the space around the edge of the movement is not uniform in width vertically, but is greater at the point where said recess is located, so that a dust-band which would inclose the narrowest portion of said space would leave uncovered a portion or the whole of said recess.

To remedy such difficulty I provide upon the lower side at the outer edge of the bridge E a lip, *e*, which extends downward to, and has its lower edge flush with, the lower face of the top plate B, and circumferentially coincides with, and forms a continuation of, the line of the edge of said plate.

The edges of the top plate B and of the lip *e* of the barrel-bridge E are slightly beveled downward and outward, and over the same is fitted a circular band, F, which, having a correspondingly-tapered interior, fits closely over said edges, and extends from the

same downward to the pillar-plate A, the joint between the latter and the lower edge of said band being horizontal, while the joint between the upper portion of said band and said top plate and bridge is vertical, or what is known as a "lap-joint."

This construction of parts insures the exclusion of dust and dirt from the watch-movement by rendering practicable a tight joint between the dust-ring and plates.

If, as sometimes is the case, the gear-wheel *d* of the barrel D projects beyond the line of the top plate, the dust-ring F should be provided with a corresponding offset, *f*, so as to form upon its inner side a recess for containing said projecting portion of said barrel-wheel.

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

1. In combination with the open recess *b* of the top plate B, the barrel-bridge E, extend-

ing across said recess, and provided with a lip, *e*, which incloses the outer edge of the same, has its lower edge flush with the lower face of said plate, and forms a continuation of the line of the edge of the latter, substantially as and for the purpose specified.

2. In combination with the pillar-plate A, the recessed top plate B *b*, and with the barrel-bridge E, having the downward-projecting lip *e*, the dust-band F, arranged to extend from said pillar-plate to said top plate, and to embrace the edges of the latter and of said lip, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of March, 1870.

GEORGE HUNTER.

Witnesses:

CHAS. S. MOSELEY,  
E. A. WEST.