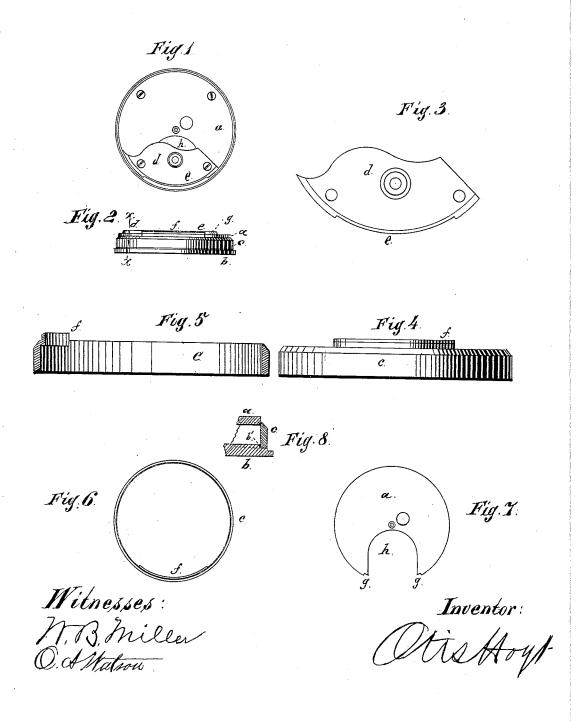
## O. HOYT. DUST-BAND FOR WATCHES.

No. 195,711.

Patented Oct. 2, 1877.



## UNITED STATES PATENT OFFICE.

OTIS HOYT, OF SPRINGFIELD, ILLINOIS.

## IMPROVEMENT IN DUST-BANDS FOR WATCHES.

Specification forming part of Letters Patent No. 195,711, dated October 2, 1877; application filed July 24, 1877.

To all whom it may concern:

Be it known that I, Otis Hoyt, of the city of Springfield, Sangamon county, State of Illinois, have invented a new and useful Improvement in Dust-Bands for Watches, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a top view; Fig. 2, an elevation; Fig. 3, a top view of the barrel-bridge; Fig. 4, an elevation of the dust-band detached; Fig. 5, a cross-section of the dust-band; Fig. 6, a top or plan view of the dust-band; Fig. 7, a plan view of the top plate with the bridge removed; and Fig. 8, a broken cross-section on line x x of Fig. 2. Figs. 3, 4, 5, and 8 are enlarged.

The object of this invention is to improve the construction of bands for excluding dust from watches, and their connection with the movement and with the barrel-bridge.

Its nature consists in providing a solid dust band or ring with an upward-projecting lip that passes up over, or partly over, the outer edge of the bridge, so as to form a lap-joint therewith; in recessing the bridge or setting it back from the circumferential line of the top plate, so that the projection from the dustband when in place will fill the receding, come out even with, and fill or complete the circle of the top plate; in providing notches or small recesses at the corners of the barrelopening in the top plate to support or partly support the ends of the dust-band projection; in forming the upward projection of the dustband in the arc of a smaller circle than that of the band; and in the several combinations of parts hereinafter more fully described.

In the drawings, a represents the top plate; b, the pillar-plate; b', an annular shoulder on the pillar-plate; c, the dust band or ring; d, the barrel-bridge; e, the recess or reduced portion of the outer edge of the bridge; f, the upward projection or lip of the dust-band; g, the notches or short recesses at the corners of the barrel-opening of the top plate; and h, barrel-opening in top plate.

The plates a b are made of the forms as shown, and the ring portion of the dust-band is made in the usual form of a solid ring, and has its upper edge beveled off, as shown, and

for ease of application it should be slightly beveled out on the inside, or its extreme upper edge slightly crowned over inward to make a close fit against the edge of the top plate.

The projection or  $\lim_{t \to \infty} f$  is made longer than the width of the barrel-opening, so as to fit into the notches g of the top plate, and give it a firm support at those points, and also to give it the operation of an arch to prevent its being crowded or sprung inward against the mainspring-barrel. This lip f is also made high or wide enough to pass over or partly over the outer edge of the recessed portion of the bridge, so as to form a lap-joint therewith, and to give itan additional support. For coarser or cheap watches the lapping over the bridge may be used as a sufficient support without the notches g; but these notches or recesses not only give a support to the ends of the lip, but they also enable me to form lap-joints at those points. Their use is, therefore, preferred.

The lip f is made in the arc of a smaller circle than the part c, so as to fit into the recess e and the notches g when used. It is most conveniently made by spinning or stamping a secondary ring of the desired width or height, and then cutting away the unused portion, leaving a lip, as shown at Fig. 4; but it may be formed in any other suitable manner.

The lower edge of the band c may be made to abut against the pillar-plate, but it will be preferable to form a shoulder, b', on said plate, so as to form a lap-joint at this line of contact instead of an abutting one.

The operation will be obvious from the construction.

By making the lip f on the arc of a smaller circle, as shown, recessing or receding the bridge and beveling off its upper edge uniformly with the edge of the bridge, it does not interfere with the insertion into an ordinary watch-case of a movement having this dust-excluding device applied to it; and by bringing the lip out flush with the circumferential line of the top plate the form and appearance of the top of the movement are preserved.

I do not claim, broadly, the application of a lip to a dust-band; but

What I claim as new, and desire to secure by Letters Patent, is—

1. The dust band or ring c, having a projec-

tion or lip, f, made in the arc of a smaller circle, substantially as specified.

2. The bridge d, having a recess, e, in its outer edge, substantially as and for the pur-

pose described.

3. The combination of the band c and lip f with the bridge d and top plate a, for forming a lap-joint over the outer edge of the bridge,

substantially as set forth.

4. The notches g, in combination with the lip f, band c, bridge d, and plate a, for sup-

porting the ends of the lip and forming a lap-

joint, substantially as specified.

5. The combination of the band c, having the lip f, with the bridge d, top plate a, and pillar-plate b, having the annular shoulder b', substantially as described.

OTIS HOYT.

Witnesses:

W. B. MILLER, O. A. WATSON.