

J. K. BIGELOW.

WATCH.

No. 169,512.

Patented Nov. 2, 1875.

Fig. 3.

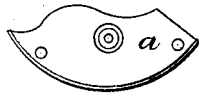


Fig. 2.



Fig. 1.

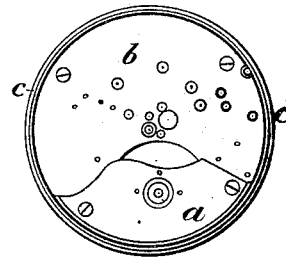


Fig. 4.

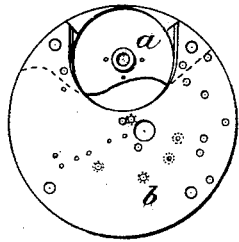


Fig. 5.

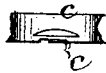


Fig. 7.

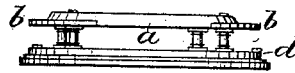


Fig. 6.

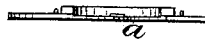
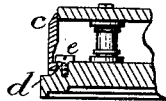


Fig. 8.



Witnesses;
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JOHN K. BIGELOW, OF SPRINGFIELD, ILLINOIS.

IMPROVEMENT IN WATCHES.

Specification forming part of Letters Patent No. **169,512**, dated November 2, 1875; application filed April 2, 1874.

To all whom it may concern:

Be it known that I, JOHN K. BIGELOW, of Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Watches, of which the following is a specification:

My invention consists of a new construction of barrel-bridge, dust-band, and fastening for the latter, which will be hereafter more fully explained.

One object of my invention is to cheapen the manufacture of watches by the use of more lathe-work, and by diminishing the number of operations in finishing the barrel-bridge and dust-band.

In the accompanying drawings, Figure 1 is a plan view of the top plate and barrel-bridge of my watch. Fig. 2 is a vertical section of the top plate, pillar-plate, and dust-band. Fig. 3 is a detached view of the barrel-bridge. Fig. 4 is bottom view of the top plate, showing the barrel-bridge in place. Fig. 5 is a detached view of a portion of the dust-ring, showing the recess in the ring. Fig. 6 is a side or edge view of the barrel-bridge, showing the lip thereon, but in an inverted position. Fig. 7 shows the pillar-plate and top plate, with the dust-ring removed. Fig. 8 is a detached and enlarged section, showing the recess and screw for locking the dust-ring.

My improved barrel-bridge *a* is made from a thick piece of plate metal. The inner border of this bridge is made with a neat curve to improve its appearance, and the outer border is turned with a bevel to correspond with a bevel upon the top-plate, thus forming a complete circular bevel to receive the dust-ring, as will hereafter be described. After the ends of the barrel-bridge are fitted to the top plate, as shown in Fig. 6, and the under side of the bridge has been milled out for the barrel, the bridge yet has substance enough to make it firm, and when put in place the under side of the barrel-bridge comes down flush with the under side of the top plate *b*, as shown in Fig. 7.

My dust-ring *c* is made without any irregular projections on the outside, in order to facilitate turning the same upon a lathe. Both the inside and the outside of this dust-ring are slightly beveled to correspond with the

bevel of the top plate and the outer border of the barrel-bridge, already described, and also to correspond with the bevel-shoulder *d* upon the pillar-plate, Fig. 7; or, in other words, the upper edge of the dust-ring has a smaller diameter than the lower edge of the same. In putting the dust-ring in place the inner diameter does not come in contact with the top plate and barrel-bridge until the last moment, when the ring is brought home, and this prevents rubbing off the gilding, and in removing the ring it is, from the first, instantly freed from contact with the top plate on account of the bevel-joint. Two or more screws, *e*, Fig. 8, or other equivalent devices, are inserted into the pillar-plate, and then a small recess, *e'*, Fig. 5, is made on the inner diameter of the lower edge of the dust-ring. By these devices the ring is fastened in place, one edge of the ring being first slipped over the head of one screw, and then the other slipped on and caught in like manner. By this arrangement the lower edge of the dust-ring is brought down and held in place to form a close joint upon the horizontal surface of the pillar-plate outside of the shoulder *d*, which closes the small recesses in the edge of the ring. Said recesses are made for inserting the tool in removing the ring in the usual way.

The screws above described are adjustable, and therefore the joint itself may always be made tight by giving a turn to the screws after long wear, which is not the case with the common snap-joint.

By this manner of making a dust-ring it can be left much heavier—consequently much firmer—and not liable to get out of shape. No openings are left in the dust-ring for the barrel or main wheel, as in the usual manner, but all openings are closed.

I claim—

1. The above-described barrel-bridge *a*, with its lower edge coming down flush with the under side of the top plate, and having a beveled outer edge corresponding with the beveled outer edge of said top plate, thus forming a complete annular and bevel bearing for the inside bevel of the dust-ring *c*, substantially as set forth.

2. The combination of a dust-ring, having

a bevel inside surface extending from top to bottom, as above described, with a corresponding shoulder on the pillar-plate, substantially as set forth.

3. The dust-ring *e*, provided with an inside bevel for the purpose of forming a close joint or joints, and for easy removal of said ring, substantially as set forth.

4. The screws or catches *e* in combination with the milled recesses on the inside of the dust-ring, for holding said ring in place, substantially as set forth.

JOHN K. BIGELOW.

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