

(No Model.)

E. C. FITCH.
WATCH MOVEMENT BOX.

No. 517,647.

Patented Apr. 3, 1894.

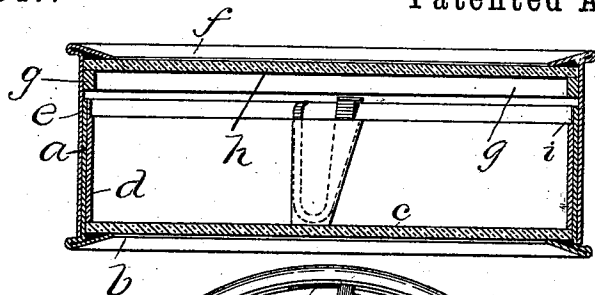


FIG. 1.

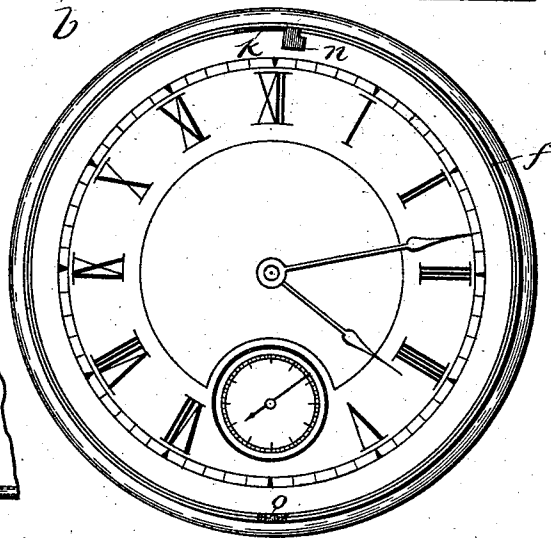


FIG. 2.

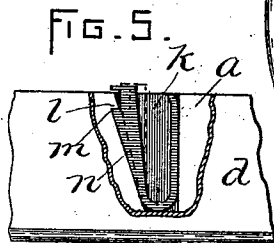


FIG. 5.

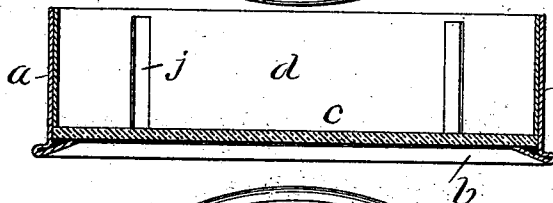


FIG. 3.

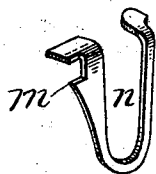


FIG. 7.

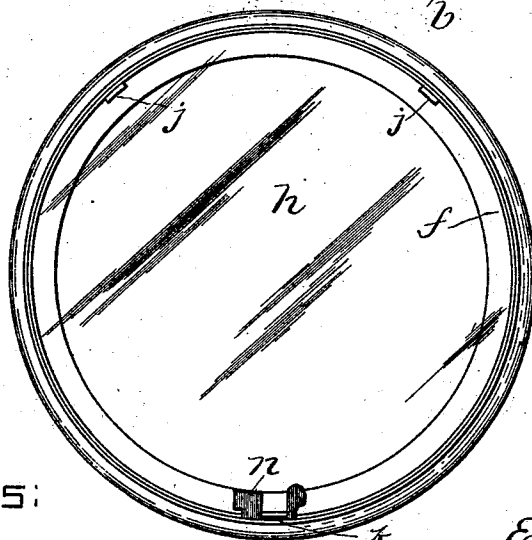


FIG. 4.

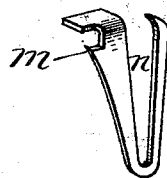


FIG. 6.

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UNITED STATES PATENT OFFICE.

EZRA C. FITCH, OF NEWTON, MASSACHUSETTS.

WATCH-MOVEMENT BOX.

SPECIFICATION forming part of Letters Patent No. 517,647, dated April 3, 1894.

Application filed September 19, 1892. Serial No. 446,295. (No model.)

To all whom it may concern:

Be it known that I, EZRA C. FITCH, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Boxes for the Protection and Display of Watch-Movements, of which the following is a specification.

In preparing watch movements for shipment from the factory, and providing for safety in subsequent transportation, it has been customary to inclose each individual movement in a box of suitable size. And as a means of additional safety the box has been made of paper with an inclosed cup of tin of a diameter to fit, and make a seat for the watch plate. Within the cover to this box was a shoulder serving to bear upon the dial of the watch movement so as to insure against any injurious looseness of the movement. As a further protection, the above mentioned paper box is inclosed in a close fitting tin box. For the examination, or display of the watch movement, so packed, it is of course, necessary to move the paper box from its inclosing tin box and also to take the movement from the inner box in order to inspect the back side of it.

The object of my invention is to provide a box or case to contain a watch movement, so constructed as to readily display both the front and back sides of the watch, and at the same time to carefully protect it from injury, either from dust, or violent concussion. To this end I provide a flanged box or case of metal with a transparent bottom, preferably of thin glass. Over this box slides a close fitting cover of a similar form and provided with a transparent top, thus allowing the inspection of both sides of the inclosed movement. The making of boxes provided with transparent bottoms and tops is not entirely new; as they have been made with covers held to the boxes by means of internal and external screw threads; and in some cases by its equivalent of a bayonet joint, so called. But in all such cases the glass covers and bottoms have been made by the use of bevel edged watch glasses, snapped into internal annular grooves, like the glasses in ordinary watch case bezels. To this plan there exists two serious objections, first the cost of the glasses, and second the difficulty

of fitting them tightly to the metal boxes by reason of their rigidity. In the box of my design I obviate the first objection by the use of disks of glass cut from ordinary thin window glass. The difficulty of fitting is obviated by holding the glass between an inwardly projecting flange on the box or cover and a ring of metal fitting the inside of the box or cover and held in place by friction, as shown in the accompanying drawings. This form of construction serves both to secure a close fitting glass and a reduction of cost in construction.

Other features of novelty and excellence will be made plain by further explanation together with reference to the accompanying drawings and the letters marked thereon forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a vertical sectional view of the box complete, there being no watch movement represented in the box. Fig. 2 is a top plan view of the invention showing a movement in place in the box. Fig. 3 is a vertical sectional view of the body of the box representing a slightly modified form of means for supporting the movement. Fig. 4 is a top plan view of a box complete, the body being constructed as is shown in Fig. 3. Fig. 5 is a sectional view showing the manner in which the spring latch engages the box and holds the movement in place. Figs. 6 and 7 are perspective views of forms of spring latches which may be employed.

In the drawings *a* designates the body of the box having its base bent to form an inwardly extending flange *b* upon which rests the edge of the transparent bottom *c*, preferably of glass.

d is a ring which is made to closely fit the body *a* and rest upon the edge of the bottom *c* and hold the latter in place between said ring and the flange *b*.

e is the cover of the box having its upper edge bent to form an inwardly extending flange *f*, between which and a narrow ring *g*, the edge of the transparent top *h* is held similar to the manner of holding the bottom *c* in place. The sides of the cover fit over the body *a*, as usual in the construction of boxes.

In the ordinary box, what is known as the

"case shoulder" of the watch movement rests upon the top edge of the tin cup which is enclosed within the paper box, as before explained. In the box of my invention, I may make the ring sufficiently wide to extend to near the top of the body *a*, and form, as it were, a shoulder *i*, on the inner surface of the body *a* near its upper edge, as shown in Fig. 1, which shoulder or upper edge of the ring *d* may afford a rest for the shoulder of the watch movement. Or I may provide the ring *d* which serves to hold the glass bottom in place with three or more inwardly projecting ribs *j* (see Figs. 3 and 4), which ribs may extend from the bottom to nearly the top, and upon the top of these ribs the case shoulder of the watch movement may be supported, so that the surface of the dial may come about even with the top of the box. It is to be noted that simple bosses or a bead formed on the ring *d* at or near its top would also answer for the support of the watch movement.

Another advantage of my improved box consists in the device and mode of locking the movement in the box, and which also is a means of avoiding injury to the dial through accidental dislodgment of the movement from or its displacement in the box. In carrying out this feature of the invention I may form a recess *k* between the ring *d* and body *a* by pressing inward a portion of the latter, or in any other convenient way, providing a catch *l* in the recess to engage a catch *m* formed on a spring latch *n*, which latch is provided at its upper end with a lip which, when the latch is down in place, projects over the upper edge of the dial and holds the latter down in place at that point.

Opposite or nearly opposite the point of arrangement of the spring latch I may provide the box with a hole *o* into which the case-pin may be inserted, and which, with the latch above mentioned may serve to hold the movement safely in the box against accidental dislodgment or displacement.

To take the movement from the box it is only required to press the spring to one side with the thumb nail sufficiently to release the catch *m* from the catch *l* when the catch and the movement can easily be taken out. The upper ends of both arms of the spring latch may be provided with lips to extend over the edge of the dial, as shown in Figs. 4 and 7, or but one of said arms may be provided with such lip, as shown in Figs. 5 and 6.

At the proper position a hole may be formed

through the box for the insertion of the winding arbor, which hole is protected by the sides of the cover, so that dirt cannot find its way to the movement.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its employment, I declare that what I claim is—

1. A box for the protection and display of watch movements comprising in its construction a body portion having its base bent to form an inwardly projecting flange, a cover fitting closely over the body portion and having its upper edge bent to form an inwardly projecting flange, transparent top and bottom plates resting against said flanges, and internal rings adapted to hold the top and bottom plates against said flanges, the said box being adapted to confine the case shoulder of a watch between internal projections carried by the body portion and cover substantially as described.

2. A box for the protection and display of watch movements comprising in its construction a body portion having its base bent to form an inwardly projecting flange, a cover fitting closely over the body portion and having its upper edge bent to form an inwardly projecting flange, transparent top and bottom plates resting against said flanges, and internal rings adapted to hold the top and bottom plates against said flanges, the ring in the body portion being adapted to form an internal shoulder near its upper edge to form a rest for the shoulder of a watch movement, substantially as described.

3. A box for the protection and display of watch movements comprising in its construction a body portion and a cover having transparent top and bottom, the body portion having a recess in one side and a spring latch removably fitted to said recess and constructed and arranged to engage the box and a watch movement therein to hold the latter in the box, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 9th day of September, A. D. 1892.

EZRA C. FITCH.

Witnesses:

D. W. ELDRIDGE,
E. A. MARSH.