(No Model.)

R. M. HUNTER.

WATCH BOW FASTENER.

No. 540,739. Patented June 11, 1895.

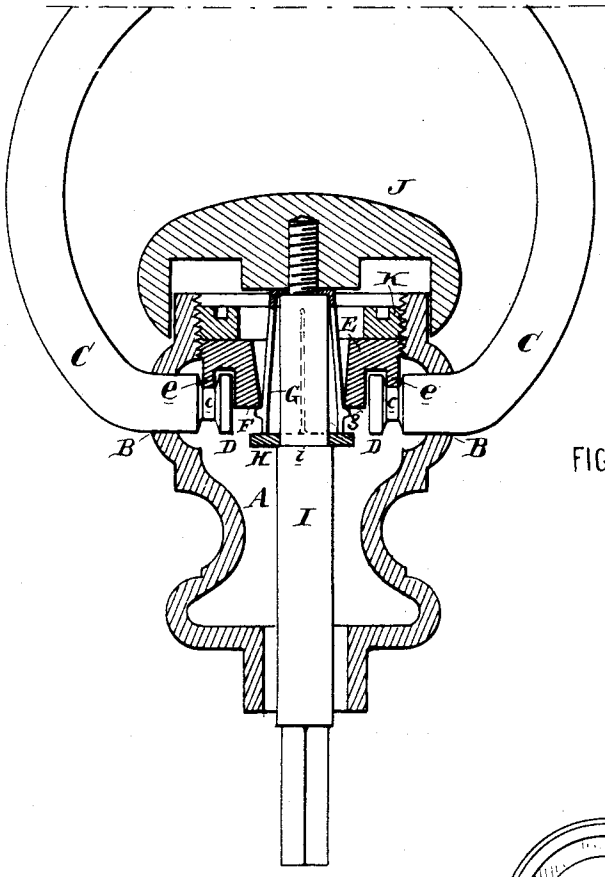

FIG. 1

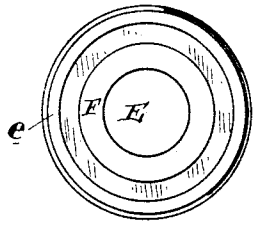

FIG. 2

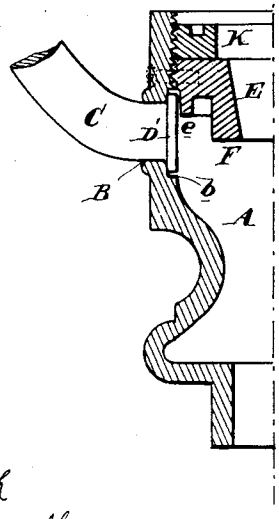

FIG. 3

Attest

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RUDOLPH M. HUNTER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE KEYSTONE WATCH CASE COMPANY, OF SAME PLACE.

WATCH-BOW FASTENER.

SPECIFICATION forming part of Letters Patent No. 540,739, dated June 11, 1895.

Application filed December 31, 1892. Serial No. 456,872. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH M. HUNTER, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improvement in Watch-Bow Fasteners, of which the following is a specification.

My invention has reference to watch bow fasteners, and consists of certain improvements which are fully set forth in the following specification, and shown in the accompanying drawings which form a part thereof.

This application, Case No. 236, has particular reference to means for securing the bow to the pendant whereby it is prevented from unintentionally disconnected from the pendant, and at the same time is permitted to swivel in its bearings; and also to means for holding the push pin in two positions, one for setting and the other for winding the watch.

In carrying out my invention I provide one or both bow ends with flanges and insert said ends through suitable holes in the pendant. Into the interior of the pendant I introduce an annular sleeve having a projecting part which fits back of one or both of the flanges to prevent them being pulled out, and also preferably provided with an annular flange which projects back of one or both of the annular flanges of the bow to prevent them being pushed inward. The interior sleeve has a shoulder over which the spring of the push pin snaps when pulled or pushed longitudinally as in setting or winding the watch.

The construction will be more clearly understood by reference to the accompanying drawings, in which--

Figure 1 is a sectional elevation of a pendant and its connections embodying my invention. Fig. 2 is an inverted plan view of the internal sleeve; and Fig. 3 is a sectional elevation of one-half of the pendant and its connections, showing one arrangement of the end of the bow, which differs somewhat from that shown in Fig. 1, but also embodying my invention.

A is the pendant and is provided on opposite sides with transverse holes B which act as bearings for the bow C. The inner ends of the bow are formed with collars or flanges D which may have the same diameter as the cross section of the bow and be formed by recessing the bow to form annular grooves *c* near the ends of the bow. The interior of the upper part of the pendant may be screw threaded. A sleeve E is screwed or otherwise fastened into the pendant and has a downwardly projecting part or annular flange *e* which fits into the grooves *c* of the bow ends back of the collars D, thus locking the bow ends against being pulled out, while the main strain comes upon the bearings B. The sleeve E may be also provided with an inverted tapering hole at the center and with a downwardly extending annular flange F which fits back of the ends D of the bow and prevents the said bow ends being pushed inward, thereby making a strong construction and one not likely to get out of order. An annular locking nut K may be screwed into the top of the pendant to lock the sleeve E in its proper position. By this construction the sleeve E may be adjusted vertically so that the lower edge of the annular flange F may be brought to the desired height for the proper operation of the push pin. The sleeve E may be secured in the pendant by any suitable means other than the screw threads and nut, as for instance a screw indicated in dotted lines.

I is a push pin and is provided at the top with the usual crown J. A spring sleeve G having the projection *g* near its bottom is secured to the top of the push pin between it and the crown and is adapted to have its projection *g* snap over the lower edge of the sleeve E. Between the extreme lower end of the spring sleeve G and the shoulder *i* on the push pin is a washer H which is received against the bottom of the projection F of the sleeve E when the crown is pulled out, and thus limit the upward movement of the push pin. It will be observed from the construction of the spring sleeve G that the push pin will require greater force to pull it out and set the hands than to push it in to put it in winding condition, which is as it should be.

In the construction shown in Fig. 3 we have the same general structure of the parts A, E, and K as in Fig. 1 but in this case the bow has its end flange D′ enlarged to a greater diameter than the cross section of the bow, and this may fit it in a recess *b* in the side of the pendant back of the journal bearing or

opening B. The sleeve E has its projecting part *e* adapted to fit back of this flange D′. It is also evident that if desired one end of the bow may have a flange of greater diameter, as at D′, and the other end of the same diameter, as at D in Fig. 1. In this case the end of the bow having the flange D would be inserted through the bearing at one side of the bow and after it was threaded upon the pendant the smaller end would be inserted through the other bearing and then the sleeve E inserted to lock it in place.

The details may be modified without departing from the principle of my invention.

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

1. The combination of a pendant having holes upon opposite sides, a bow adapted to the pendant and fitting through the holes therein and having its ends provided with flanges, and an annular sleeve secured upon the inside of the pendant and having downwardly projecting parts unobstructed from above fitting in front of the flanges to prevent them being pulled outward and also upon the inside of the flanges and prevent them being pushed inward and adapted to be adjusted into position after the bow ends are inserted into the pendant.

2. The combination of a pendant having holes upon opposite sides, a bow adapted to the pendant and fitting through the holes therein and having its end provided with flanges, an annular sleeve secured upon the inside of the pendant and having parts fitting in front of the flanges of the bow to prevent them being pulled outward and also upon the inside of the flanges to prevent them being pushed inward, a push pin, and a spring carried by the push pin having a projection adapted to snap over the edge of the annular sleeve.

3. The combination of a pendant having holes upon opposite sides, a bow adapted to the pendant and fitting through the holes therein and having its ends provided with flanges, an annular sleeve secured upon the inside of the pendant and having projecting parts fitting in front of the flanges to prevent them being pulled outward and also upon the inside of the flanges to prevent them being pushed inward, a push pin, and a spring carried by the push pin having a projection adapted to snap over the edge of the annular sleeve, and a washer carried upon the push pin below the spring adapted to strike the lower part of the annular sleeve to limit the upward movement of the push pin.

4. The combination of a solid pendant having holes or apertures upon opposite sides, a watch bow of a diameter less than the holes or apertures in the pendant on its parts exterior to the pendant and journaled in said apertures of the pendant, and an annular sleeve secured within the pendant and projecting back of the ends of the bow to prevent them being thrust inward.

5. The combination of a solid pendant having holes or apertures upon opposite sides, a watch bow of a diameter less than the holes or apertures in the pendant on its parts exterior to the pendant and journaled in said apertures of the pendant, and an annular sleeve secured within the pendant and projecting back of the ends of the bow to prevent them being thrust inward, and means to lock the bow to the pendant arranged upon the interior thereof.

6. The combination of a pendant having holes upon opposite sides, a bow having its ends provided with an annular shoulder journaled in said holes and projecting into the interior of the pendant, a locking device for locking the ends of the bow within the pendant, and a push pin having a spring provided with a projecting part adapted to snap over the shoulder of the locking device so that the push pin may be held in position for setting or winding the watch.

7. The combination of a pendant having holes upon opposite sides, a bow having its ends journaled in said holes, and projecting into the interior of the pendant, a locking device for locking the ends of the bow within the pendant having an annular shoulder, a push pin having a spring provided with a projecting part adapted to snap over the shoulder of the locking device so that the push pin may be held in position for setting or winding the watch, and adjusting devices for adjusting the position of the shoulder within the pendant.

8. The combination of a pendant having holes upon opposite sides, a bow having its ends journaled in the holes and provided with flanges upon its ends, and a locking sleeve secured to the interior of the pendant and having downwardly extending parts unobstructed from below fitting in front of the flanges upon one end of the bow and back of the flange upon the other end of the bow.

9. The combination of a pendant, a push pin having a shoulder, a washer supported upon the shoulder, a spring having a projection carried by the push pin, and an annular sleeve secured to the interior of the pendant and having a shoulder over which the projection of the spring snaps for setting or winding the watch.

10. The combination of a pendant, a push pin having a shoulder, a washer supported upon the shoulder, a spring having a projection carried by the push pin, an annular sleeve secured to the interior of the pendant and having a shoulder over which the projection of the spring snaps for setting or winding the watch, and means to adjust the sleeve to different depths within the pendant.

In testimony of which invention I have hereunto set my hand.

R. M. HUNTER.

Witnesses:
ERNEST HOWARD HUNTER,
H. L. MOTHERWELL.