(No Model.)

R. M. HUNTER.

WATCH BOW FASTENER.

No. 496,830. Patented May 2, 1893.

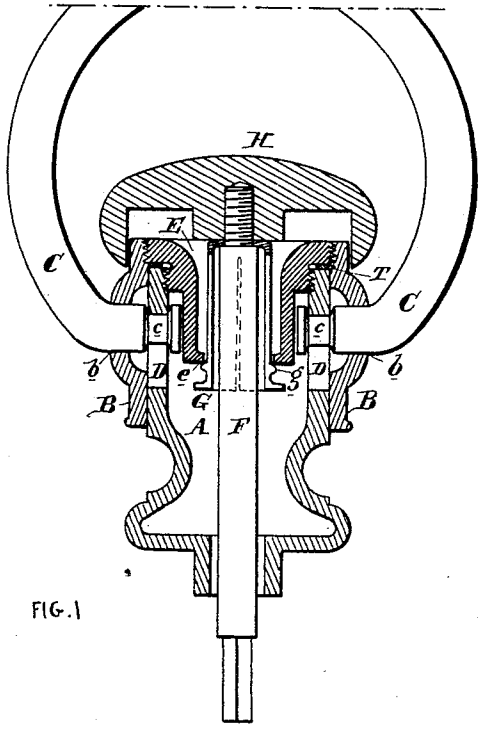


FIG. 1

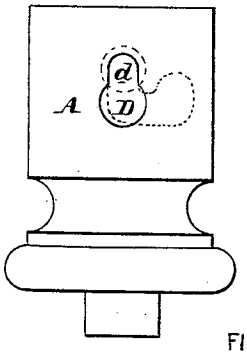


FIG. 2

FIG. 4

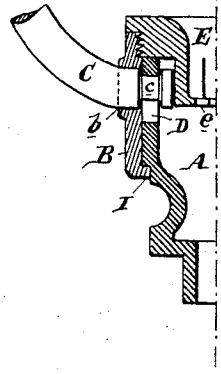


FIG. 3

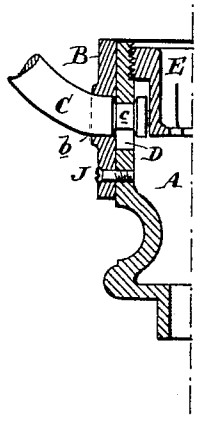
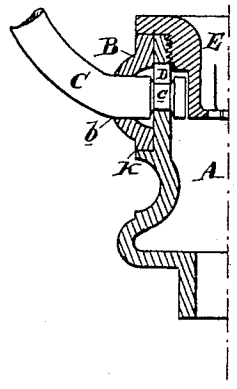


FIG. 5



Attest

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UNITED STATES PATENT OFFICE.

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. 496,830, dated May 2, 1893.

Application filed January 14, 1893. Serial No. 458,345. (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. 237, has particular reference to the means employed for fastening the watch bow to the pendant, and also to the means for holding the push pin in an outward or inward position such as required in winding or setting the watch.

In carrying out my invention I provide the pendant with slotted openings upon its sides, a portion of which openings is of larger diameter than the remaining part. The watch bow has its ends provided with annular collars or flanges which are adapted to pass through the large parts of the slotted openings and be moved so that the narrow part of the opening receives the neck or small diameter of the watch bow end. The watch bow is supported in this position by means of an external sleeve fitted to the outside of the pendant and in which it is journaled. This outside sleeve is secured to the pendant in any suitable manner. An internal sleeve is adapted to fit within the pendant and preferably be the means for holding the external sleeve in position upon the pendant, and at the same time form a shoulder over which a spring carried by the push pin snaps to hold the said push pin in an outward or inward position as required in setting or winding the watch.

My invention will be better understood by reference to the accompanying drawings, in which—

Figure 1 is a sectional elevation of a watch pendant and its connections embodying my invention. Fig. 2 is a side elevation of the pendant removed; and Figs. 3, 4 and 5 are sectional elevations of structures illustrating different forms of my invention.

A is the pendant and is provided upon the outside with a sleeve B having its sides pressed outward to form ears having apertures *b* as bearings in which the ends of the watch bow C are journaled. The free ends of the watch bow are provided with annular grooves *c* or are so shaped as to form collars or flanges upon the ends. The opposite sides of the pendant A are provided with slotted openings having the large portions D and the narrow portions *d*, the former being of sufficient size to receive the end of the bow, and the latter being adapted to fit the neck *c* or smaller diameter so as to prevent the collar on the end of the bow from being pulled outward.

In Figs. 1, 2, 3 and 4 the slotted openings in the pendant are shown with the large part D at the bottom and the small part *d* at the top, so that after the ends of the watch bow are inserted, the sleeve B is pushed upward to lock the ends of the bow in the small parts of the slotted openings of the pendant. The sleeves B are then secured in any suitable manner, several ways being shown. The watch bow will then be free to swing on the bearings *b* as journals, and also against the upper parts *d*, of the openings and the collars on the end of the bow will prevent it being pulled outward. The shoulder upon the inner side of the annular groove *c* will also prevent the bow being thrust inward, and this is further provided for by arranging upon the inside of the pendant an annular ring shaped part E against which the ends of the bow would strike if thrust inward.

In Fig. 1 the part E is provided with screw threads which simultaneously screw into the internal surface of the pendant A and the sleeve B so that the sleeve B is locked to the pendant. The ends of the watch bow prevent the sleeve B from revolving upon the pendant and consequently the parts A and B maintain a fixed relation once the internal piece E is screwed into place.

F is the push pin and is provided at the top with the usual crown H. Clamped between the push pin and the crown is a spring sleeve G which is provided with a projection *g* adapted to snap over the shoulder *e* of the internal sleeve or cylindrical piece E. The push pin may be pulled outward or pushed inward as required for setting or winding the

watch, and the spring G in connection with the shoulder will hold the push pin in position and yet will permit it to be freely rotated. The lower end of the spring G is flanged outward so as to catch upon the bottom of the shoulder and thus prevent the push pin being completely pulled out. To adjust the position of the shoulder within the pendant, one or more washers T may be employed between the top of the pendant and the shoulder of the cylindrical piece E, or a single spring washer may be employed.

In the construction shown in Fig. 3 the internal sleeve or cylindrical piece E is shown as having no direct connection with the sleeve B which is screwed upon the inside of the pendant A alone. The sleeve is held in position on the pendant by a small screw J.

In the construction shown in Fig. 4 the sleeve B has a flange I at its bottom. The sleeve is pushed up from the bottom of the pendant so that the inward flange I comes against the shoulder on the pendant. The internal sleeve E is then screwed upon the inside of the external sleeve B and presses upon the upper part of the pendant thus acting as a nut to hold the sleeve to the pendant.

In the construction shown in Fig. 5 the pendant A is provided with a projecting shoulder K near its lower part. The sleeve B is fitted down upon the shoulder K and the internal sleeve or cylinder E is screwed upon the interior of the pendant A and provided with a flange which fits over the upper part of the sleeve B and clamps it in position upon the pendant. In this construction the slotted openings *d*, D, are inverted so that the larger part D comes at the top. After the watch bow ends are inserted the sleeve B is pushed downward and locks the ends of the bow to the pendant, and the locking internal piece or cylinder E is screwed into place.

It will thus be seen that in Figs. 1, 4 and 5 the sleeve E performs the dual duty of locking the external sleeve B in position upon the pendant, and also forms a shoulder with which the spring G works for holding the push pin in either position.

It is quite evident that the slotted openings *d* D may be of any irregular shape in place of the shape shown in solid lines in Fig. 2; for instance, the irregular shape indicated in dotted lines in Fig. 2 may be employed so that after the bow ends are inserted they may be turned horizontally and then longitudinally in the pendant to lock them in position. It is also evident that while I prefer to make the external sleeve B in one piece, it might be made in two pieces joined longitudinally on the pendant, and the said parts secured by screws J similarly to the manner shown in Fig. 3. These details are immaterial to the general structure of the invention.

I do not confine myself to the mere details of construction as they may be modified without departing from the principles of my invention.

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

1. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is sufficiently large to receive the end of the bow, with an external sleeve fitted to the outside of the pendant and having apertures upon opposite sides forming bearings for the ends of the bow, and a bow fitted through the holes of the external sleeve and having its ends extending through the slots in the pendant and provided with flanges upon its ends arranged within the pendant and back of the smaller parts of the slotted openings therein.

2. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is sufficiently large to receive the end of the bow, with an external sleeve fitted to the outside of the pendant and having apertures upon opposite sides forming bearings for the ends of the bow, a bow fitted through the holes of the external sleeves and having its ends extending through the slots in the pendant and provided with flanges upon its ends arranged within the pendant and back of the smaller parts of the slotted openings therein, and means substantially as described for securing the sleeve to the pendant.

3. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is sufficiently large to receive the end of the bow, with an external sleeve fitted to the outside of the pendant and having apertures upon opposite sides forming bearings for the ends of the bow, a bow fitted through the holes of the external sleeve and having its ends extending through the slots in the pendant and provided with flanges upon its ends arranged within the pendant and back of the smaller parts of the slotted openings therein, and means substantially as described for securing the sleeve to the pendant consisting of an internal sleeve or part forming a connection between the pendant and external sleeve to prevent longitudinal movement of the parts relatively to each other.

4. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is sufficiently large to receive the end of the bow, with an external sleeve fitted to the outside of the pendant and having apertures upon opposite sides forming bearings for the ends of the bow, a bow fitted through the holes of the external sleeve and having its ends extending through the slots in the pendant and provided with flanges upon its ends arranged within the pendant and back of the smaller parts of the slotted openings therein, and means substantially as described for securing the sleeve to the pendant consisting of an internal sleeve or part forming a connection between the pendant and external sleeve to prevent longitudinal movement of the parts relatively to each other and provided with a downwardly extending part

which fits down between the two ends of the bow to prevent their inward movement.

5. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is sufficiently large to receive the end of the bow, with an external sleeve fitted to the outside of the pendant and having apertures upon opposite sides forming bearings for the ends of the bow, a bow fitted through the holes of the external sleeve and having its ends extending through the slots in the pendant and provided with flanges upon its ends arranged within the pendant and back of the smaller parts of the slotted openings therein, means substantially as described for securing the sleeve to the pendant consisting of an internal sleeve or part forming a connection between the pendant and external sleeve to prevent longitudinal movement of the parts relatively to each other, the said internal sleeve being provided with a downwardly extending part which fits down between the two ends of the bow to prevent their inward movement and also forming a shoulder at the bottom, a push pin, and a spring carried by the push pin and having a projection adapted to snap over the shoulder of the internal sleeve to hold the push pin in an outward or inward position for the purpose of setting or winding the watch.

6. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is larger than another, a sleeve fitted to the outside of the pendant and provided with openings upon opposite sides adapted to receive the ends of the bow, a bow having its ends provided with annular grooves to form a neck adapted to fit the smallest parts of the slotted apertures in the pendant and fitted to the openings in the sleeve, and means to secure the sleeve in position so as to permanently hold the apertures of the external sleeve in line with the smallest parts of the slots in the pendant.

7. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is larger than another, a sleeve fitted to the outside of the pendant and provided with openings upon opposite sides adapted to receive the ends of the bow, a bow having its ends provided with annular grooves to form a neck adapted to fit the smallest parts of the slotted apertures in the pendant and fitted to the openings in the sleeve, means to secure the sleeve in position so as to permanently hold the apertures of the external sleeve in line with the smallest parts of the slots in the pendant, and an internal sleeve carried by the pendant fitting between the ends of the bow to prevent their inward movement.

8. The combination of a pendant having slotted openings upon opposite sides one portion of which openings is larger than another, a sleeve fitted to the outside of the pendant and provided with openings upon opposite sides and having the metal about said openings pressed outward to form ears adapted to receive the ends of the bow and form bearings at a distance from the pendant, a bow having its ends provided with annular grooves to form a neck adapted to fit the smallest part of the slotted apertures in the pendant and fitted to the openings in the sleeve, and means to secure the sleeve in position so as to permanently hold the apertures of the external sleeve in line with the smallest parts of the slots in the pendant.

9. The combination of a pendant having a slotted opening one part of which openings is larger than another, a bow having its end provided with a flange adapted to fit through a larger part of the opening and then be moved into the smaller portion thereof so that its flange is secured upon the interior of the pendant through which the bow passes for the purpose of holding the bow end in the smaller part of the slot of the pendant, and a locking piece carried by the pendant for holding the end of the bow in the smaller part of the opening.

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

R. M. HUNTER.

Witnesses:
ERNEST HOWARD HUNTER,
C. M. DIETTERICH.