

(No Model.)

E. C. FITCH.
WATCH CASE PENDANT.

No. 319,691.

Patented June 9, 1885.

Fig. 1.

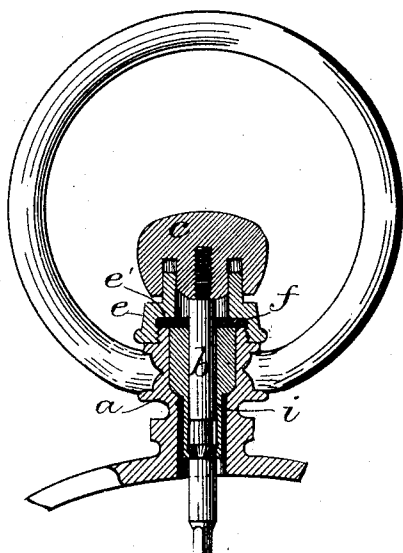
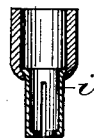


Fig. 2.



Fig. 3.



WITNESSES:

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EZRA C. FITCH, OF NEWTON, MASSACHUSETTS.

WATCH-CASE PENDANT.

SPECIFICATION forming part of Letters Patent No. 319,691, dated June 9, 1885.

Application filed April 2, 1885. (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 Watch-Cases, of which the following is a specification.

This invention is an improvement on that class of pendants for the cases of stem-winding watches in which a nut or screw-cap is applied to the threaded outer end of the pendant, and is designed and arranged to hold a washer or disk against the end of the pendant, and thereby exclude dust, the winding arbor or bar passing through the center of said washer.

The invention consists, first, in the combination, with the threaded pendant-nut and winding-bar, of a washer clamped at its margin between said nut and the end of the pendant, and having a central orifice which closely fits the periphery of the winding-bar, the latter being adapted to move endwise and rotate independently of the washer, so that the freedom of its movements is not interfered with by the washer, while the close fit of the washer against the periphery of the bar excludes dust.

The invention consists, secondly, in the combination, with the pendant and nut, of a spring-sleeve inserted in a cavity in the pendant and held therein by the nut, so that it can be withdrawn from the pendant when the nut is removed, said sleeve being split at its inner end to form spring-fingers, which engage with annular grooves formed in the winding-arbor to hold the latter in either its winding or its hand-setting position, all of which I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a longitudinal section of a watch-case pendant having my improvements. Fig. 2 represents a side view of the spring-sleeve removed from the pendant. Fig. 3 represents a sectional view of the spring-sleeve constructed in another form.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the externally screw-threaded pendant of a stem winding and setting watch-case.

b represents the winding and hand-setting arbor or stem, passing through the pendant, as

usual, and having the crown *c* screwed upon its outer end.

e represents the nut screwed upon the pendant, and provided with an inwardly-projecting shoulder, *e'*.

f represents a disk or washer, preferably of leather or other yielding material, interposed at its margin between the outer end of the pendant and the shoulder *e'* of the nut. Said washer has a central aperture, through which the winding arbor or stem passes, the aperture being of such size that the arbor or stem fills it closely, a dust-proof joint being thus provided. The arbor or stem is free to rotate, and also to move endwise independently of the washer, so that it can be moved to adapt it either for winding or hand-setting purposes. It will be seen that the washer, pressed against the end of the pendant by the nut and fitting closely against the periphery of the winding-arbor, constitutes a diaphragm or packing which effectually prevents the admission of dust through the pendant, while the freedom of the arbor or stem from positive connection with the washer enables it to be freely manipulated without the necessity of first loosening the nut and washer.

I am aware that a disk or washer has been positively secured to the arbor or stem of a stem winding and setting watch-case, and pressed toward the end of the pendant by a nut screwed upon the threaded end of the pendant; hence I do not claim, broadly, the combination of the arbor, washer, threaded pendant, and nut.

i represents a collar or sleeve inserted in a cavity formed in the pendant, and surrounding the winding-arbor. The inner end of said collar or sleeve is reduced in diameter and split lengthwise to form spring-fingers, the ends of which are formed with inwardly-projecting lips, so that they will engage with annular grooves formed in the periphery of the arbor, and thus hold the arbor in different positions, the engagement of the fingers with the one groove holding the arbor in position for winding, while the engagement of the fingers with the other groove holds the arbor in position for hand-setting. If preferred, the spring portion of the sleeve may be made distinct from the larger portion or body and

staked or riveted to it, as shown in Fig. 3. The outer end of the collar or sleeve *i* is flush with the outer end of the pendant, and the shoulder *e'* of the nut projects inwardly over the margin of the collar or sleeve, as shown in Fig. 1. It will be seen, therefore, that the collar or sleeve *i* is held in place by the nut, and can be freely withdrawn from the pendant when the nut is removed, the operation of applying and removing the collar or sleeve and its spring-fingers being, therefore, easily effected.

I claim—

1. In a watch-case, the combination of the threaded pendant, the shouldered nut screwed thereon, the disk or washer confined at its margin between the pendant and nut, and the

winding arbor or stem passing through a central orifice in the washer without a positive connection therewith, as set forth.

2. The combination of the recessed and externally-threaded pendant, the nut screwed thereon, the grooved arbor or stem, and the arbor-holding collar or sleeve inserted in the pendant and held in place by the nut, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 28th day of March, 1885.

EZRA C. FITCH.

Witnesses:

EDWARD A. MARSH,
DUANE H. CHURCH.