J. C. DUEBER.

Watch-Key.

No. 164,819. Patented June 22, 1875.

FIG. 1.

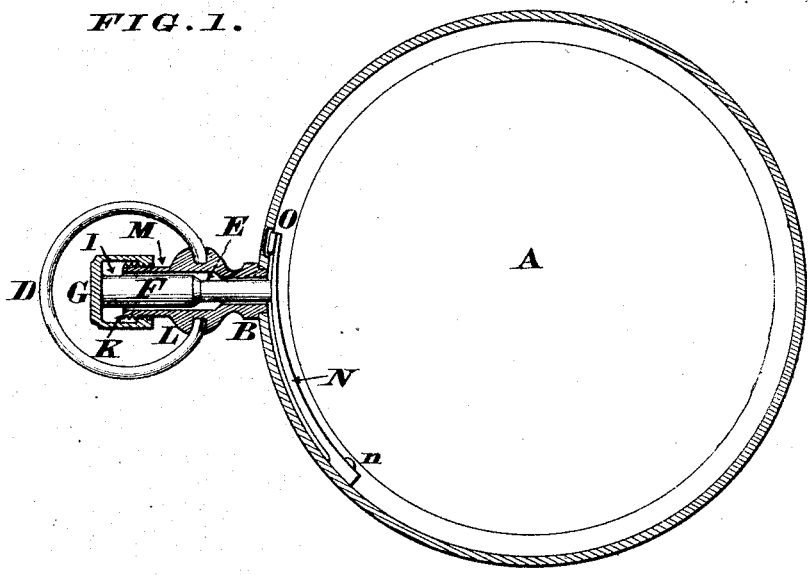
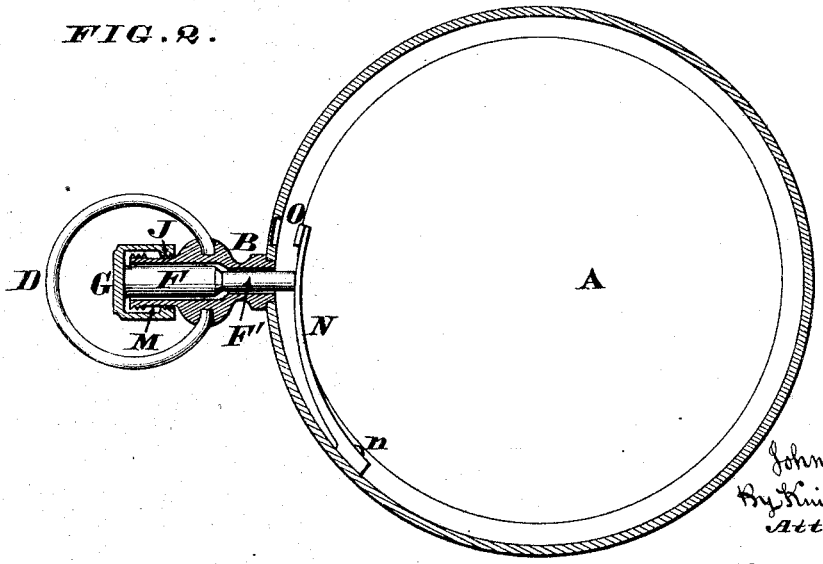


FIG. 2.



John C. Dueber
By Knight Bros.
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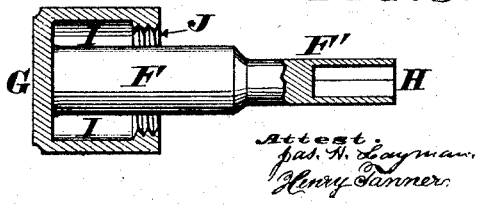
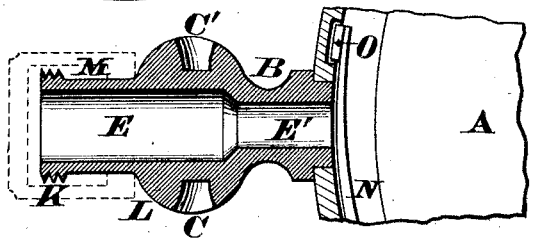
FIG. 3.



Attest:
Jas. H. Layman.
Henry Tanner.



UNITED STATES PATENT OFFICE.

JOHN C. DUEBER, OF CINCINNATI, OHIO.

IMPROVEMENT IN WATCH-KEYS.

Specification forming part of Letters Patent No. **164,819**, dated June 22, 1875; application filed April 28, 1875.

To all whom it may concern:

Be it known that I, JOHN C. DUEBER, of Cincinnati, Hamilton County, Ohio, have invented a new and useful Improvement in Watches, of which the following is a specification:

This invention is an improvement in that class of watches whose winding-key, when not in use, is capable of being pocketed within the pendant, and my invention comprises a cheap, simple, and secure manner of coupling such key to the pendant, so as to prevent it becoming accidentally detached therefrom. My invention further comprises a construction whereby such key is made capable of doing duty as a push-pin.

In the accompanying drawing Figure 1 is a section through a watch in the plane of the case-spring, the improved key being shown in its normal or protruded position. Fig. 2 is a similar section, but showing the key pressed inward so as to act upon the case-spring in the capacity of a push-piece. Fig. 3 is an enlarged axial section through the pendant and its accessories, the key being shown withdrawn.

A represents a watch-case, to which is secured in the usual manner a pendant, B, whose swell L has the customary sockets C C′ for the ends of the bow D. The key G is so formed as to be capable of being inserted in the socket of the pendant, and has a neck or stem, F F′, to enable it to have a slight longitudinal movement within the pendant. The stem F F′ terminates in the customary "key-pipe" or socket H, of suitable shape interiorly to engage with the arbor of the mainspring. The crown of the key is chambered out at I, and is furnished with a female screw, J, which is capable of engaging with the male screw K of the pendant whenever said key is to be coupled to the watch. The cylindrical neck M is of sufficient length to allow the key to move as far as may be necessary for the operation of the case-spring N.

To secure the key to the pendant, it is only necessary to engage the screw J with the one K, and to then rotate the key two or three times until the female thread emerges from the male thread at the inner end of the same. This act having been accomplished, leaves the key loosely but securely coupled to the pendant. Should it now be desired to open the watch, the wearer has simply to depress the key in the manner familiar in the use of push-pieces, when the back at once flies open in the usual way.

As the nut or female thread J rides loosely upon the neck M, and as the chamber I prevents the thread K coming in contact with the interior of the crown G, it will be seen that the pin F F′ is free to move in either direction without producing any perceptible friction or wearing either the male or female threads of the couplings.

When it is desired to wind the watch, the key is simply unscrewed from the pendant, and used in the ordinary manner.

From the above description it will be seen that although the key can be uncoupled from the pendant in a few moments, when desired, yet that it is an impossibility for it to become accidentally detached therefrom, which is a serious objection to those push-pin keys that are united to the pendant by means of a spring.

It will also be noticed that all of my coupling devices are external with reference to the pendant, and that consequently the device is much simpler and cheaper than if the pin F screwed into a nut located in the pendant-socket; such an arrangement, besides its cost and complexity, would either seriously weaken the pendant or necessitate such ungainly bulk thereof as would affect its market value. My improvement is also preferable to those forms in which a pin in the back engages in a groove on the outside of the key-pipe, because it avoids the weakening of the pipe incident to such a groove. My improvement is also preferable to the form in which the key is locked within the pendant by the snapping of the back, because the key is not liable to be dropped out and lost by the opening of the back, as is the case with such form.

A modification of my invention is practicable, in which ribs or flanges capable of snapping over the head of the pendant might be substituted for the screw-threads J and K.

For watches without spring-backs such a key, fastened in like manner to the pendant, might be employed without being used as a

push-piece; as in this form no sliding motion is required, the neck M might be shorter.

I claim as new and of my invention—

The combination of pendant B E M with exterior screw K, and removable key or push-pin F G H with interior screw J, substantially as set forth.

In testimony of which invention I hereunto set my hand.

JOHN C. DUEBER.

Attest:

GEO. H. KNIGHT,

JAMES H. LAYMAN.