C. L. DEPOLLIER.

WATCH.

APPLICATION FILED MAR. 18, 1918.

1,292,441. Patented Jan. 28, 1919.

Fig. 1.

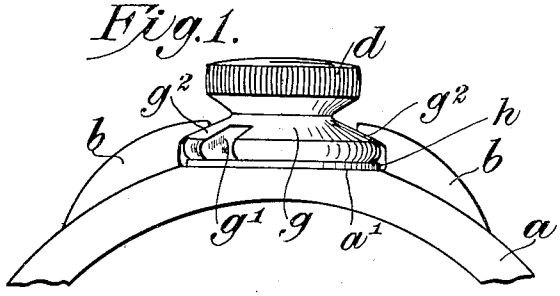


Fig. 2.

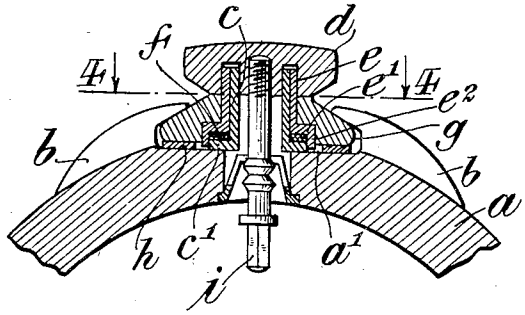


Fig. 3.

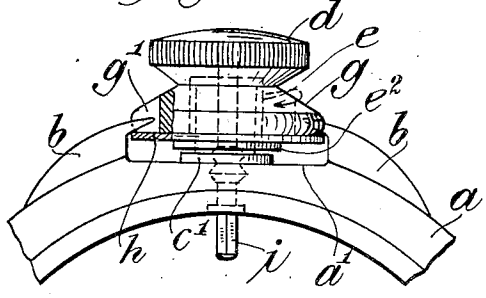


Fig. 4.

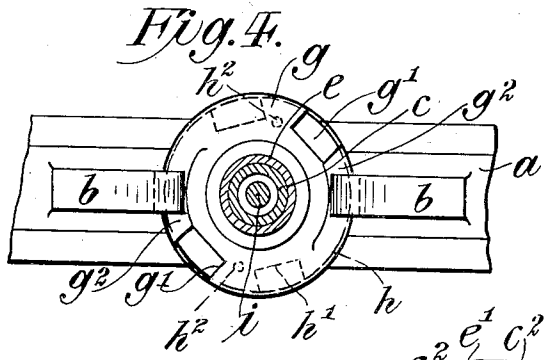
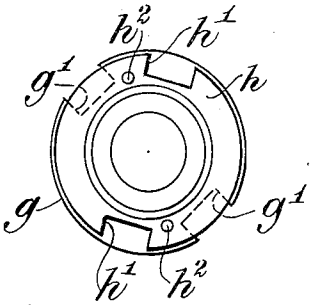


Fig. 5.



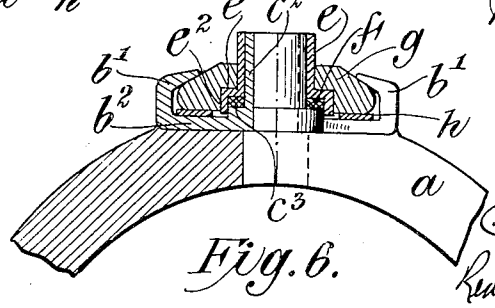


Fig. 6.

WITNESS

INVENTOR

Charles L. Depollier

BY

Redding, Greeley & Woodlett

ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES L. DEPOLLIER, OF BROOKLYN, NEW YORK.

WATCH.

1,292,441. Specification of Letters Patent. Patented Jan. 28, 1919.

Application filed March 18, 1918. Serial No. 223,048.

To all whom it may concern:

Be it known that I, CHARLES L. DEPOLLIER, a citizen of the United States, residing in the borough of Brooklyn of the city of New York, in the State of New York, have invented certain new and useful Improvements in Watches, of which the following is a specification, reference being had to the accompanying drawing, forming a part hereof.

This invention relates to means for making a water-tight joint between a watchcase and the crown which carries the winding and setting stem and it has for its object to provide simple and effective means for making the joint sufficiently tight to prevent the penetration of moisture within the watchcase about the winding and setting stem while permitting the crown to be released readily for winding and setting. The invention will be more fully explained hereinafter with reference to the accompanying drawing in which it is illustrated, and in which—

Figure 1 is a view in side elevation showing a portion of a watchcase with the crown locked to the watchcase.

Fig. 2 is a view of the same in longitudinal section.

Fig. 3 is a view similar to Fig. 1, but partly in section and showing the crown as rotated and released.

Fig. 4 is a view in section on the plane indicated by the line 4—4 of Fig. 2.

Fig. 5 is a view of the locking ring or disk and washer as seen from below.

Fig. 6 is a detail view in section illustrating a modification.

The watchcase center a is shown as having secured thereto, in any suitable manner, overhanging lugs or ears b, one at each side of the winding arbor and as being formed with a flat seat a'. Also secured to the center is a sleeve c formed with a flange c', adapted to make a tight joint as hereinafter described, and extended up within the crown d, to prevent the introduction of dust or moisture when the crown is released for winding or setting. Secured to the crown d is a sleeve e which has a working fit on the sleeve c and has a flange e' to coöperate with the flange c' of the sleeve c, a ring f of suitable packing material being preferably interposed between the two flanges. The flange e' may also have a depending skirt e^2 to overlap the flange c'. Placed loosely on the sleeve e and formed to fit against the flange e' is a locking ring or disk g which is notched at diametrically opposed points, as at g', to receive the overhanging lugs or ears b. The upper surface of the locking ring or disk g is beveled or tapered, as at g^2, for coöperation with the overhanging lugs or ears b. A retaining disk h, also notched at diametrically opposed points, as at h', is secured to the underside of the locking ring or disk g, as by rivets or screws h^2.

The crown has secured therein, in any suitable manner, the usual winding and setting stem i.

In assembling the parts referred to, the sleeve c is first secured to the watchcase center by soldering, or in any other suitable manner; the locking ring g is slipped upon the sleeve e and the latter is secured to the crown d by soldering, or in any suitable manner; the retaining washer h is placed against the underside of the locking ring g, with its notches h' in registration with the notches g' of the locking ring or disk g and the crown d with its sleeve e and the locking ring and washer are applied to the watchcase center, the overhanging lugs or ears b passing through the alined notches; the retaining washer h is then rotated to place the notches out of alinement and the screws or rivets h^2 are applied, where the retaining washer overhangs the watchcase center, to hold the washer with its notches out of alinement.

In use the locking ring is turned to the position indicated in Fig. 1 with its tapered edge in engagement with the overhanging lugs or ears b, thereby drawing the flanged sleeve e tightly down against the packing ring f supported by the flange c' and thereby making a tight joint which will effectually prevent the entrance of moisture. When the watch is to be wound the locking ring or disk g is backed off to bring the notches g' in alinement with the overhanging lugs or ears b, thereby releasing the sleeve e and the crown so that the latter may be turned for the purpose of winding the watch. For the purpose of setting the watch, the locking ring having been brought to the position just described, the crown is pulled out, so as to pull out the stem i in the usual manner, and the crown may then be rotated for setting.

The retaining washer h, if used, coöper-

ates with the overhanging lugs or ears b, as shown in Fig. 3, to prevent the crown from being pulled too far out, but as this function is commonly served by the stem i and its coöperating stop, the provision of the retaining washer is not essential.

In the modification shown in Fig. 6, the overhanging lugs or ears b' are carried by a plate b^2 which is secured to the watchcase center a and has the sleeve c^2, with its shoulder or seat c^3 for the packing ring f, formed integral with itself. The sleeve e has a snug working fit about the sleeve c^2, as before, and is secured to the crown, which is not shown. The sleeve e also receives loosely, as before, the notched ring or disk g. Other modifications will readily suggest themselves.

I claim as my invention:

1. In a watch, the combination of a watchcase center, a sleeve secured thereto, a crown, a second sleeve secured to the crown and surrounding and adapted to form a tight joint with the first named sleeve, a locking ring mounted on the second named sleeve to coöperate therewith, and devices carried by the watchcase center independent of said first named sleeve to coöperate with the locking ring.

2. In a watch, the combination of a watchcase center, a sleeve secured thereto, a crown, a second sleeve secured to the crown and adapted to form a tight joint with the first named sleeve, a locking ring mounted loosely on the second named sleeve and having a tapered flange, and overhanging lugs or ears secured to the watchcase center and adapted to coöperate with the locking ring.

3. In a watch, the combination of a watchcase center, a crown, a sleeve secured to the crown, a notched locking ring mounted on the sleeve, overhanging lugs or ears on the watchcase center to coöperate with the locking ring, and a retaining washer secured to the under surface of the locking ring to cooperate with the overhanging lugs or ears.

This specification signed this 14th day of March, A. D. 1918.

CHARLES L. DEPOLLIER.