A. JAQUES & C. L. DEPOLLIER.

WATCH.

APPLICATION FILED NOV. 9, 1915.

1,172,601. Patented Feb. 22, 1916.

Fig. 1.

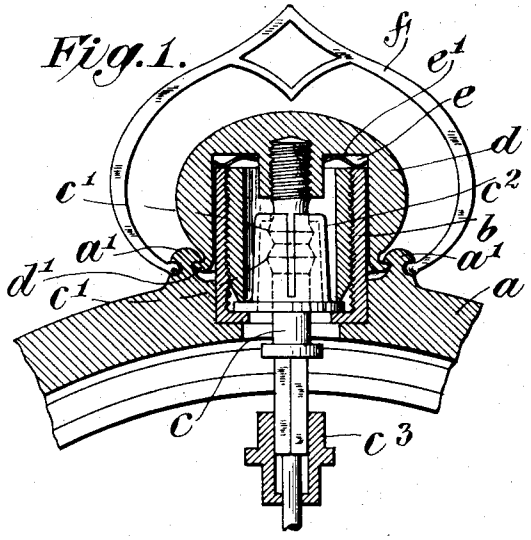


Fig. 2.

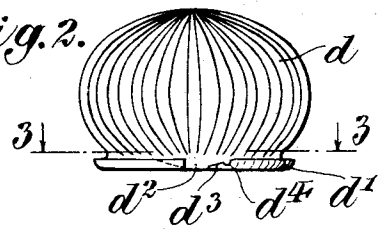
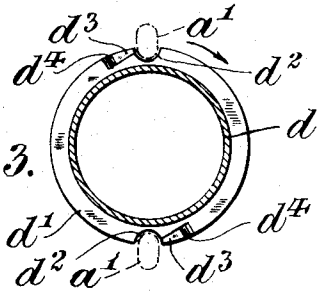


Fig. 3.



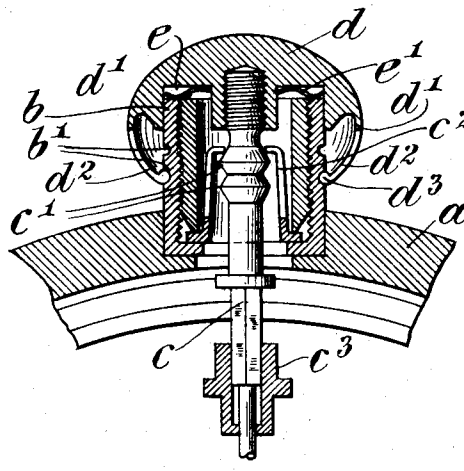


Fig. 4.

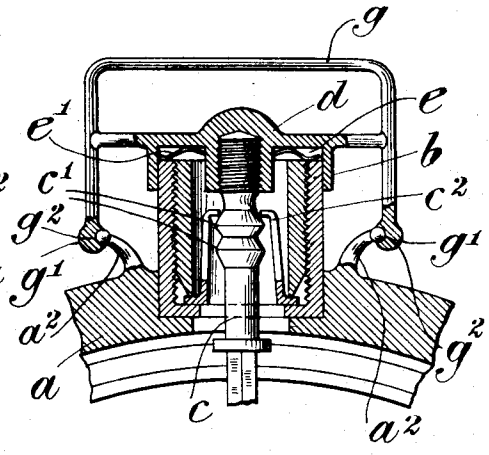


Fig. 5.

WITNESS
Geo. Schwarz.

INVENTORS
Charles L. Depollier
and Auguste Jaques
BY
Redding, Ives & Goodlett
ATTORNEYS

THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AUGUSTE JAQUES, OF CHAUX DE FONDS, SWITZERLAND, AND CHARLES L. DEPOLLIER, OF NEW YORK, N. Y.

WATCH.

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To all whom it may concern:

Be it known that we, AUGUSTE JAQUES, a citizen of the Swiss Republic, residing in Chaux de Fonds, Canton Neuchâtel, Switzerland, and CHARLES L. DEPOLLIER, a citizen of the United States, residing in the city of New York, in the borough of Brooklyn, county of Kings, 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 drawings, forming a part hereof.

The object of this invention is to prevent the unintended movement of the spindle which transmits the movement of the crown or winding bow to the winding mechanism and is pulled out to effect operative engagement between the crown or bow and the setting mechanism, and to hold the crown or bow tightly against its seat on the pendant, except when winding or setting is to be effected, for the purpose of preventing the ingress of moisture or dust. To enable the desired result to be accomplished the crown or bow is adapted to be engaged within the watch-case in such manner as to prevent accidental movement and to hold it tightly to its seat.

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 detail view, partly in section, showing so much of a watch as is necessary to enable the application of the invention thereto to be understood. Fig. 2 is a detail view in elevation of the crown shown in Fig. 1. Fig. 3 is a detail view in section on the plane indicated on the line 3—3 in Fig. 2 looking in the direction of the arrows. Figs. 4 and 5 are views similar to Fig. 1 but showing slightly different embodiments of the invention.

Reference is made above to both crown and bow, while the invention is illustrated in the drawings as embodied in connection with what is commonly called in the art a crown, and that name alone will be employed hereinafter, but it will be understood that the name is intended to designate that part, whether a crown strictly so called or a bow, which is rotated to effect the winding or the setting of the watch.

In each of the embodiments of the invention shown in Figs. 1, 4 and 5, the watch-case center a is shown as having secured thereto a pendant b, which may be of any usual or suitable construction, receiving centrally therein the usual spindle c which serves to transmit the rotary motion of the crown d to the winding or setting mechanism through devices of usual or suitable construction which need not be shown or described herein. The spindle c may be provided with the usual tapered shoulders c' for coöperation as usual with the detent c^2. Such tapered shoulders and detent serve to hold the gear usually carried by the spindle in engagement with the winding or the setting devices, as the case may be, but they do not hold the crown to its seat in or on the pendant with such tightness as to prevent the possible entrance of moisture or fine dust into the works of the watch, nor do they prevent, especially after considerable use, the possibility of an accidental pulling out of the spindle from winding position to setting position, with the subsequent movement of the setting devices. This invention therefore aims to provide a positive locking device to hold the spindle in its inward position and to hold the crown tightly against its seat.

In the construction shown in Figs. 1, 2 and 3 the watch-case center a is provided with headed studs a', one at each side of the pendant b. The skirt of the crown d is provided with an annular flange d' which is notched as at d^2 to permit the passage of the heads of the studs a' and is provided at one side of each notch, with an inclined bearing surface d^3 and a depression d^4. It will be observed that the tapered shoulders c' on the spindle c are so positioned and the engagement of the spindle with the winding socket c^3 is such that when the crown has been engaged with the studs a' by being pressed inward as far as possible and rotated slightly, a slight outward movement of the crown, sufficient to disengage it from the studs a', is permitted without disengaging the spindle c from the winding socket c^3, while a further outward movement of the crown d, to effect disengagement of the winding mechanism and engagement of the setting mechanism, is permitted in the usual manner. The seat of the crown on the

pendant when the crown is in its extreme inward position, may be formed at any convenient point and in any suitable manner to permit a tight joint to be made. As shown in the several figures of the drawings the seat is formed at *e* between the outer end of the sleevelike pendant *b* and the inner surface of the head of the crown. An elastic washer *e'*, preferably of metal, is inserted between the two parts of the seat so as to permit a tight joint to be effected without binding or wear.

In the construction shown in Fig. 1 the usual bow *f* is swiveled in the studs *a'* in an ordinary manner. In the construction shown in Fig. 4 the bow and the studs *a'* are dispensed with altogether, the outside of the pendant *b* is provided with circumferential grooves or recesses *b'* and the skirt of the crown *d* is made thin, as at *d'* and is slitted, as indicated at d^2, to give elasticity and is suitably formed at its edge, as at d^3, with a bead to engage the inner groove *b'* to lock the crown in its extreme inward position, or to engage the outer groove *b'* to hold the crown in winding position. In the construction shown in Fig. 5, the crown *d* is formed with a winding bow, which carries balls *g'*, formed with slots g^2 for engagement with studs a^2, which are secured to the watch-case center *a;* the slight rotary movement of the bow *g* suffices to disengage it from the studs a^2, when the bow may then be rotated, carrying with it the crown *d* for winding. A further outward movement permits the engagement of the spindle for setting. When the bow is in its extreme inward position, as indicated, the crown is held tightly against the pendant.

Other embodiments of the invention will suggest themselves in view of the foregoing and it will be understood, therefore, that the invention is not to be restricted to the precise construction shown and described herein.

We claim as our invention:

1. In a watch, the combination of a pendant, a crown with a winding and setting arbor, and means to lock the crown positively against outward movement on the pendant.

2. In a watch, the combination of a pendant, a crown with a winding and setting arbor, and means to lock the crown positively against outward movement on the pendant, the crown and pendant having coöperating portions to form a tight seat when the crown is locked to the pendant.

3. In a watch, the combination of a watch-case center, a pendant, a crown adapted to form a tight joint with the pendant, and means to effect a locking engagement between the crown and the center to hold the crown against outward movement.

4. In a watch, the combination of a watch-case center, a pendant, a crown adapted to form a tight joint with the pendant, and headed studs secured to the center, the crown having a notched flange to engage said studs.

This specification signed this 15th day of October, A. D. 1915.

AUGUSTE JAQUES.
CHARLES L. DEPOLLIER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."