

(No Model.)

T. MUELLER.
Watch Crown.

No. 243,392.

Patented June 28, 1881.

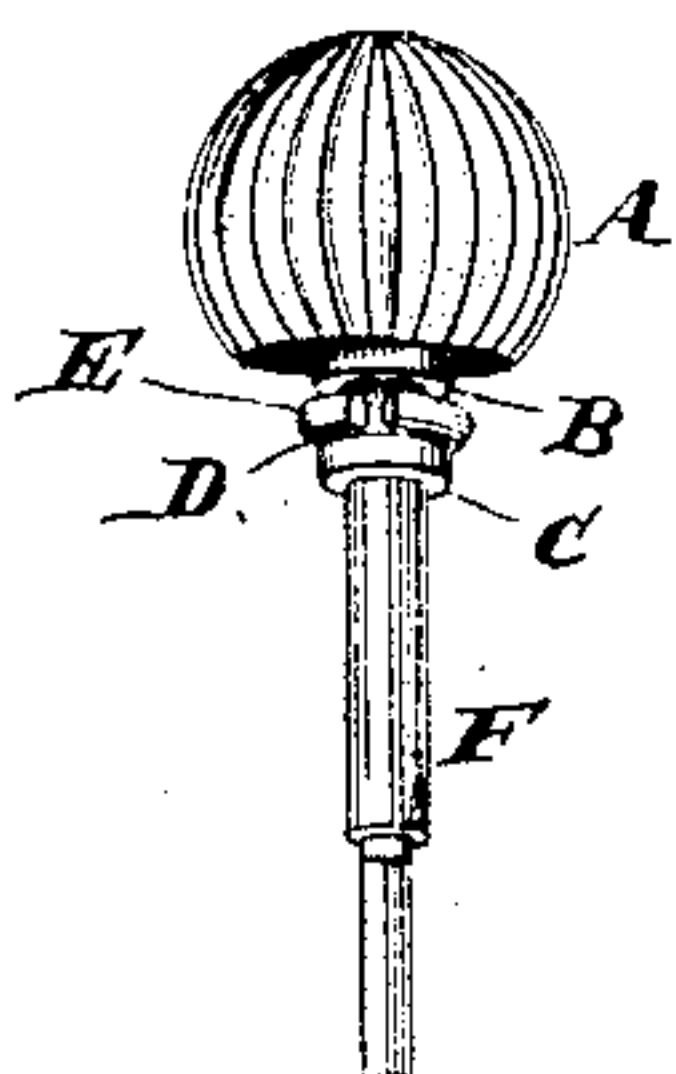


Fig. 1

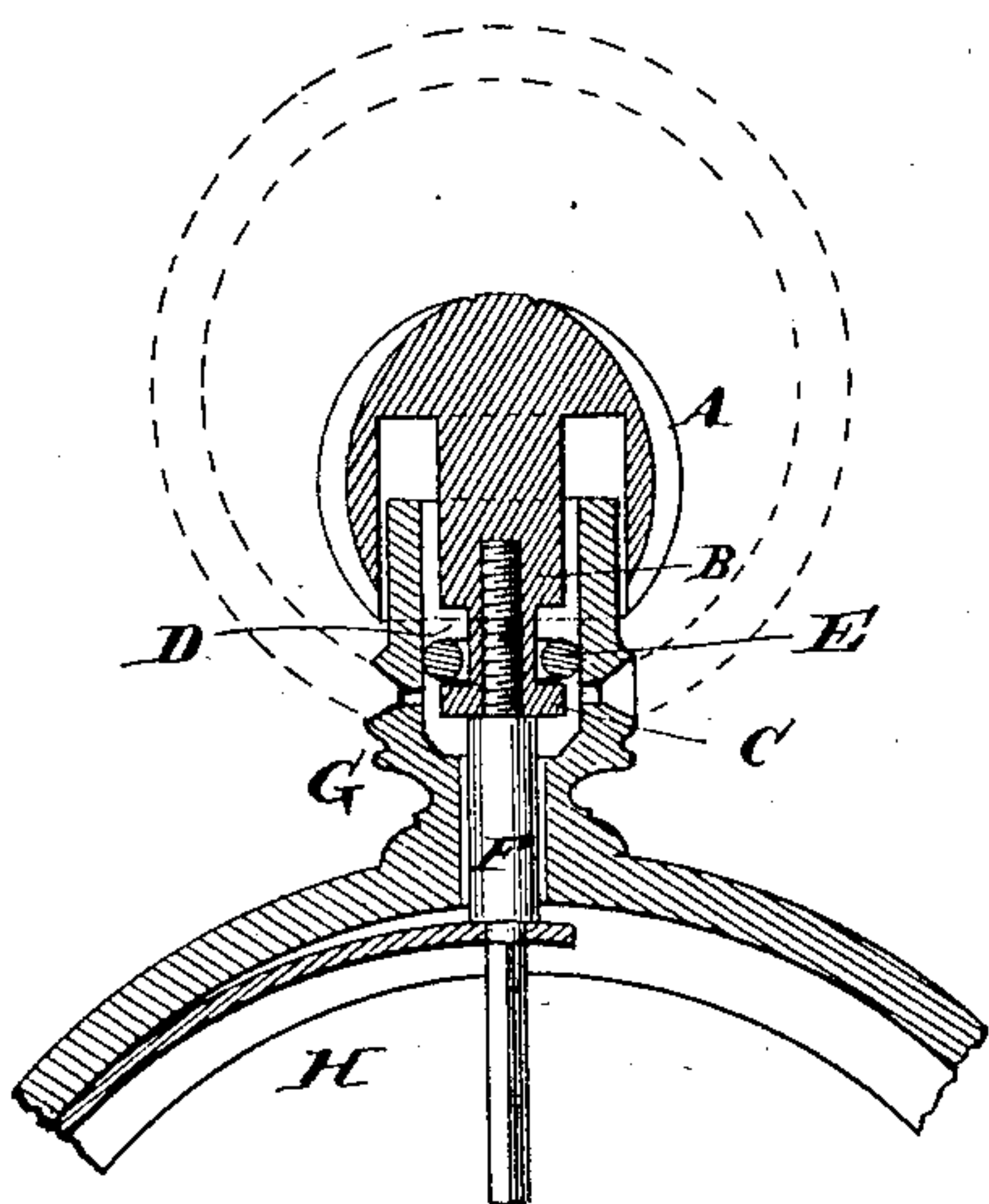


Fig. 2

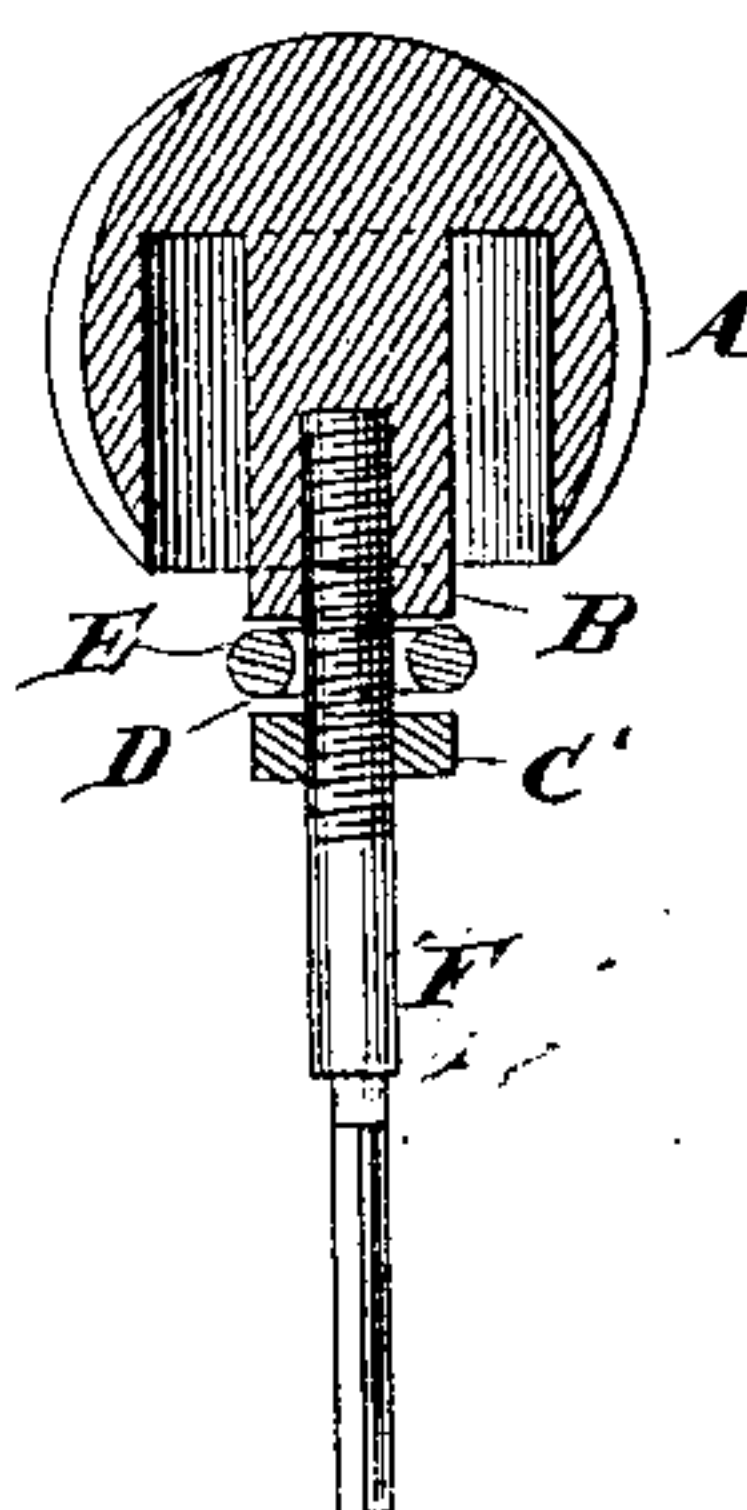


Fig. 5

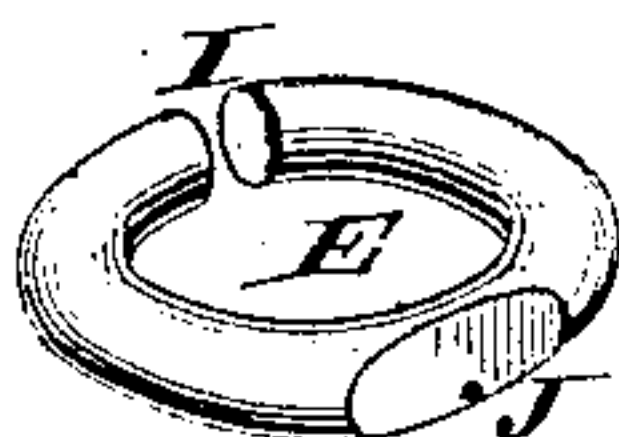


Fig. 3

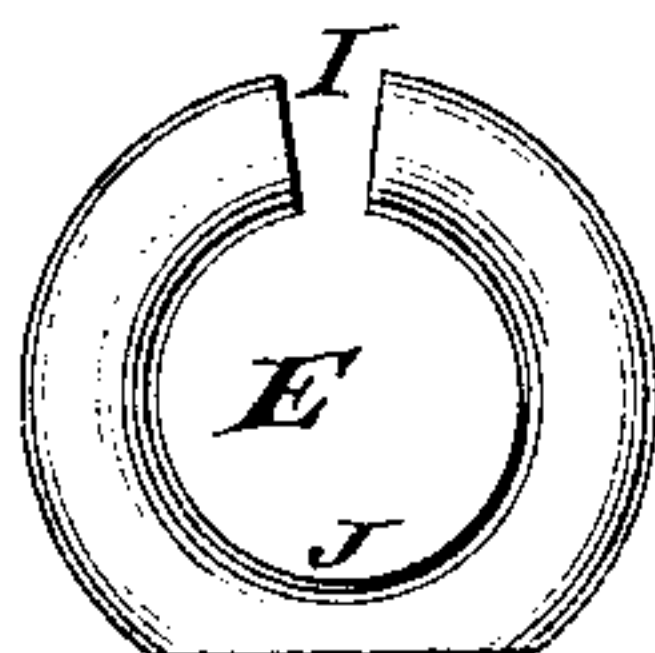


Fig. 4

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L. J. Mator
Carver

Inventor
Theodor Mueller
By his atty
Theodor Mueller

UNITED STATES PATENT OFFICE.

THEODORE MUELLER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
THOMAS B. HAGSTOZ AND CHAS. N. THORPE, OF SAME PLACE.

WATCH-CROWN.

SPECIFICATION forming part of Letters Patent No. 243,392, dated June 28, 1881.

Application filed March 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, THEODORE MUELLER, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Watch-Crowns, of which the following is a specification.

My invention has reference to stem-winding watches, but more particularly relates to the watch-crown; and it consists in forming the hub of the watch-crown so as to extend somewhat into the pendant, and forming thereon and near the bottom a circumferential groove, into which fits a loose split steel or other spring metallic retention-ring of peculiar construction; in the combination of said parts with the watch-pendant; and in other details of construction, all of which will be more fully set forth hereinafter, and are shown in the accompanying drawings, which form part of this specification.

Heretofore watch-crowns of this class have been secured to the pendant by screws or by means of a spring-bushing mounted on a flanged sleeve, which is screwed upon the push-pin secured to the watch-crown, said spring-bushing being made of a complete brass ring. The former construction is very objectionable, and in the latter construction the bushing has been found objectionable in practice, soon loses its elasticity, allowing easy removal of the watch-crown, and is unnecessarily complicated and expensive.

My object is to construct a watch-crown for stem-winding watches in such a manner that greater durability is obtained, and simplicity and cheapness the result.

In the drawings, Figure 1 is a perspective view of my improved watch-crown and push-pin. Fig. 2 is a vertical section of same when attached to a watch-pendant. Fig. 3 is a perspective view of my improved split retention-spring. Fig. 4 is a plan of same. Fig. 5 is a vertical section of a modified form of watch-crown and push-pin.

A is the watch-crown, and is provided with a projecting hub, B, having a circumferential groove, D, near its bottom. The ordinary push-pin F is secured to the hub by being screwed in, soldered, or otherwise fastened to it. The groove D supports and carries loosely a split retention-ring, E, which is preferably made of

steel. The ring E is split at I, the ends being somewhat separated, and the outside of the ring directly opposite is filed or hammered flat, to reduce the metal at this point, to induce a more perfect springing action. This ring, which is clearly shown in Figs. 3 and 4, is placed in the groove D, and encircles the hub B, and is free to slide vertically thereon, or the hub is adapted to slide in the ring in the act of opening the case. After the ring E has been placed around the hub, as shown in Fig. 1, the watch-crown and push-pin are forced down into the pendant G. The spring E, becoming compressed during its insertion, tends to expand itself with much force, and holds the watch-crown securely in position, as shown in Fig. 2. The lower or flanged edge, C, of the hub B prevents the watch-crown from being removed without also pulling out the split retention-ring E; but this would require considerable more power than would ever be put upon it by any conceivable natural cause, and yet allows its removal for repairs without trouble or waste of time.

For opened-faced watches the width of the groove D need not more than slightly exceed the thickness of the split retention-ring E, as in this case the watch crown and pin have only to rotate.

In the modification shown in Fig. 5, instead of cutting a groove on the hub B, a nut, C', is screwed upon the push-pin F, and the split ring is placed between said nut and the hub B. As shown, it is arranged for an open-faced watch.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A retention-ring for stem-winding watch-crowns, which consists of a steel or other metallic spring-ring, split through at one place in its circumference, having its two ends separated, and being flattened or reduced on the side opposite the split, substantially as shown and described.

In testimony of which invention I hereunto set my hand.

THEODORE MUELLER.

Witnesses:

GEO. C. PATTERSON,
HENRY F. WALTON.