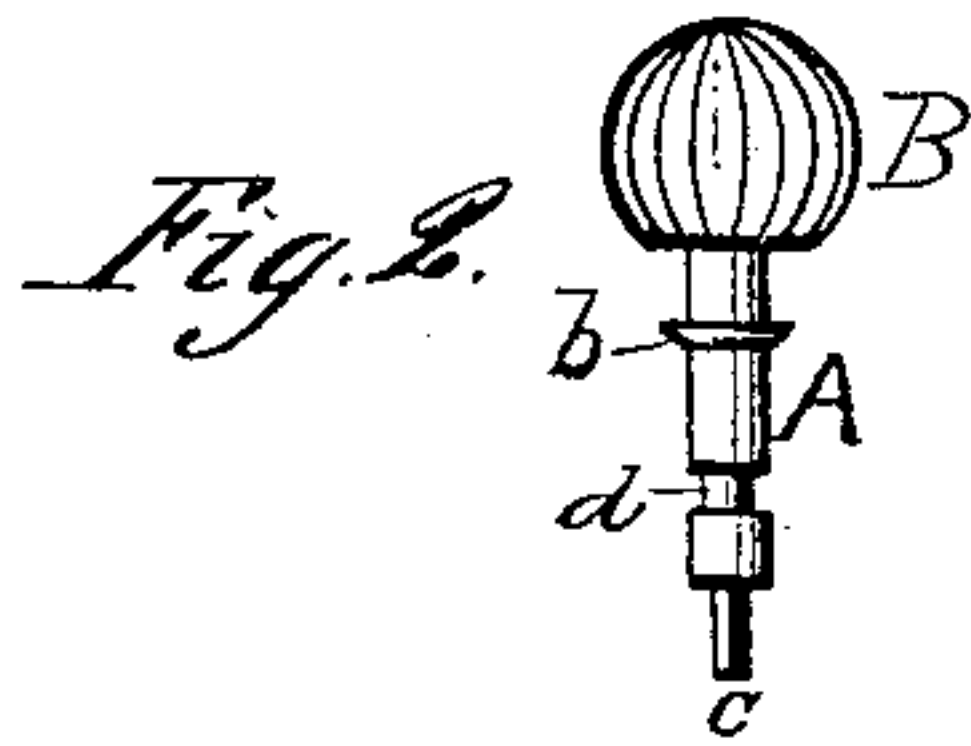
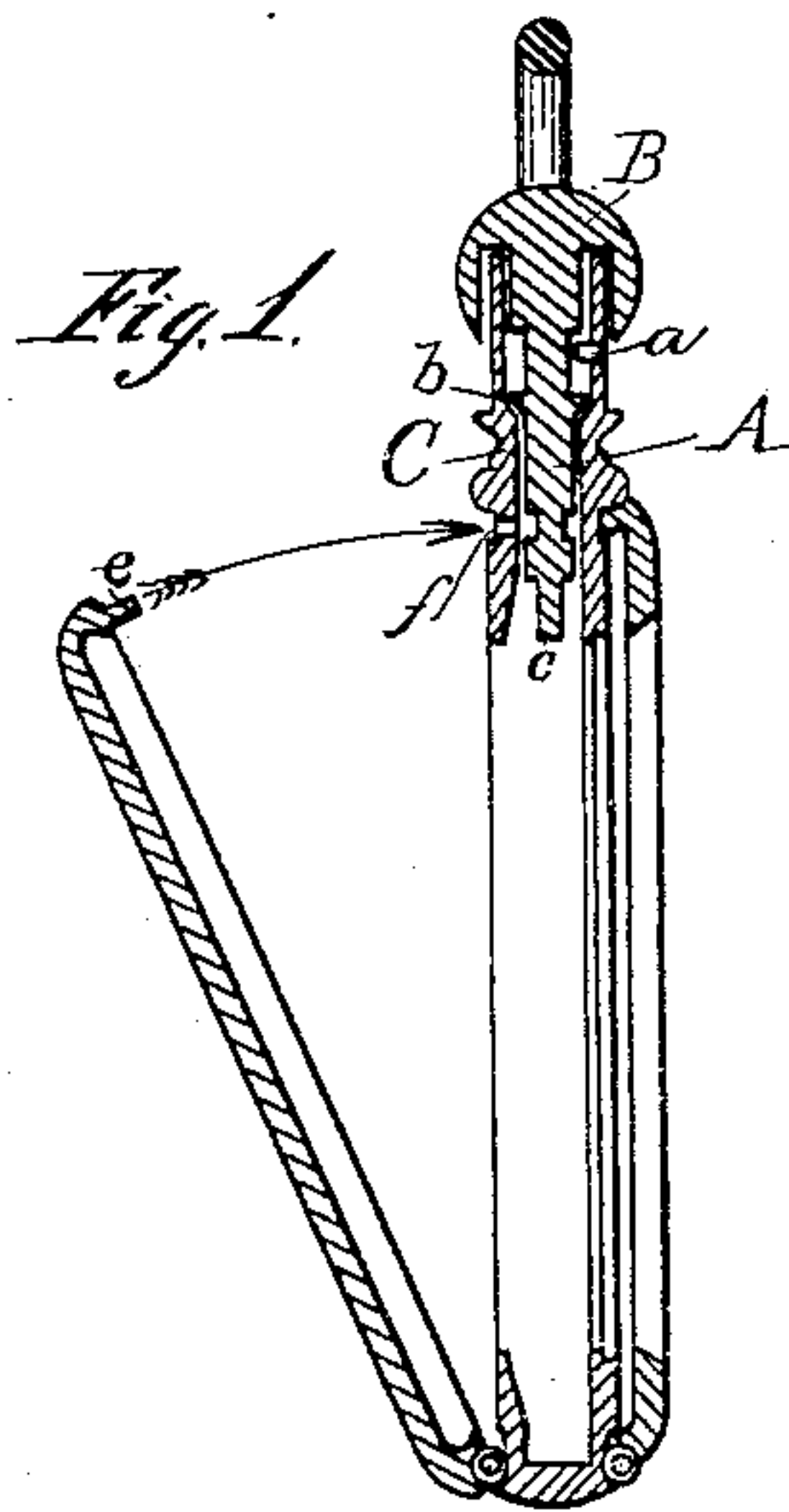


F. BLAUER.
Stem-Winding Attachment for Watches.

No. 230,995.

Patented Aug. 10, 1880.



Witnesses:
F. B. Loomeend,
Rich. A. Dyer.

Inventor:
Fredrick Blauer.
per *Wm. H. Lotz,*

Attorney.

UNITED STATES PATENT OFFICE.

FREDRICK BLAUER, OF CHICAGO, ILLINOIS.

STEM-WINDING ATTACHMENT FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 230,995, dated August 10, 1880.

Application filed February 16, 1880.

To all whom it may concern:

Be it known that I, FREDRICK BLAUER, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Stem-Winding Attachments for Watches, of which the following is a specification.

The object I have in view is to produce a stem-winding attachment for watches which will be simple and strong and not liable to get out of order, can be readily connected with or disconnected from the movement, and can be applied to movements having either a male or female coupling for receiving the stem; and my invention therein consists in the combination of the parts, as pointed out by the claim.

In the accompanying drawings, forming a part hereof, Figure 1 is a section of a watch-case having my improved stem-winding attachment, and Fig. 2 a separate elevation of the stem and crown.

The stem A of the watch is connected with the crown B, which crown is of the usual construction and covers the end of the pendant C. The stem has a sliding movement in the pendant, which is limited by a screw, *a*, turned through the pendant above a collar, *b*, on the stem, preventing the withdrawal of the stem from the pendant until said screw is loosened. The stem projects into the case of the watch, where it is provided with a squared end, *c*, or a socket to engage with a socket or stud in the movement for winding the same. After the movement is put in the case the stem is pushed forward to couple with the same, and is drawn backward when it is desired to remove the movement for any purpose.

To hold the stem forward in connection with the movement it is provided with an annular groove, *d*, near its inner end, with which engages a pin, *e*, on either the back or front cover of the case. When such cover is closed the pin *e* passes through a hole, *f*, in the rim of the case, with which hole the groove *d* coincides when the stem is pushed in.

When the cover carrying the pin *e* is open the stem can be drawn back and the movement taken out.

The watch is wound up by simply turning the crown. If this attachment were applied to watches having cases with seamless backs the pin *e* would be on the front cover.

The advantages arising from the simplicity, strength, and convenience of my device will be readily understood without further explanation.

What I claim as my invention is—

In a stem-winding attachment for watches, the sliding and revolving stem, held forward in connection with the movement by a pin on the cover, and adapted to be moved back and forth out of and into connection with the movement when the cover is open, in combination with a screw in the pendant, which allows the stem to be moved out of and into connection with the movement, but prevents its withdrawal from the pendant, substantially as described and shown.

FREDRICK BLAUER.

Witnesses:

RICHD. N. DYER,
OLIVER W. MARBLE.