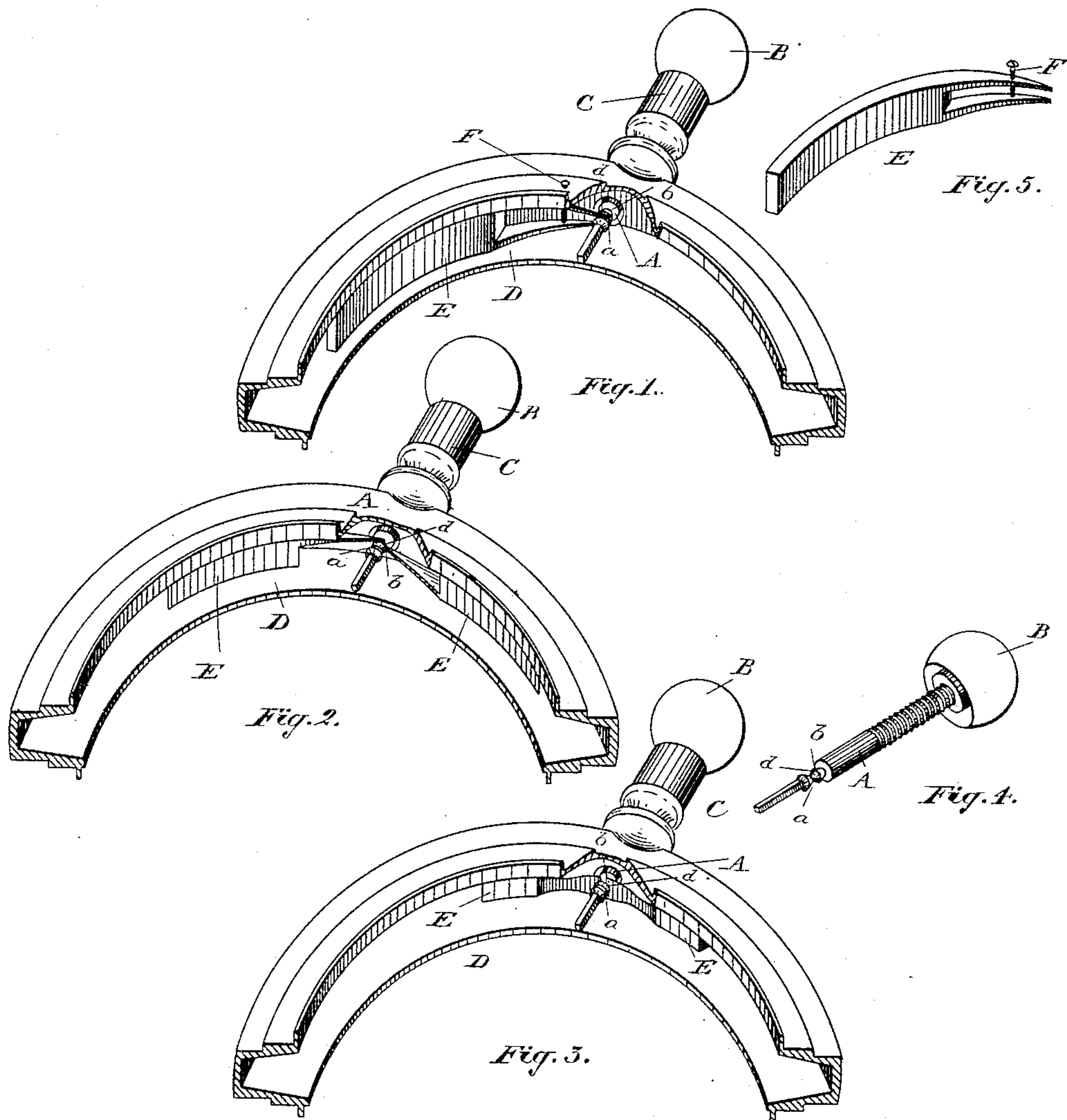


(No Model.)

E. F. HEFFERNAN.
PENDANT STEM FOR WATCHES.

No. 345,055.

Patented July 6, 1886.



Witnesses.

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UNITED STATES PATENT OFFICE.

EDWARD F. HEFFERNAN, OF TORONTO, ONTARIO, CANADA, ASSIGNOR TO
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PENDANT-STEM FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 345,055, dated July 6, 1886.

Application filed January 28, 1886. Serial No. 190,072. (No model.) Patented in Canada February 13, 1886, No. 23,419.

To all whom it may concern:

Be it known that I, EDWARD FRANCIS HEFFERNAN, of the city of Toronto, in the county of York, in the Providence of Ontario, Canada, watch-maker, have invented certain new and useful Improvements in Stem-Winding Watches, of which the following is a specification.

The object of the invention is to design a simple device for holding the stem of the watch in position either for winding the works or setting the hands; and it consists, essentially, in making the stem preferably solid with the cap or crown of the pendant, and forming on the said stem two grooves separated by a narrow beveled collar, the said stem passing between the forks of a spring-catch held within the center in such a manner and position that the spring-catches shall clip into either one or other of the grooves, so as to hold the said stem either in the required position for winding the works or in the position in which it should stand for setting the hands, substantially as hereinafter more particularly explained.

Figure 1 is a perspective view, partially in section, to expose the stem and spring-catch for holding the same. Figs. 2 and 3 are similar views showing alternative forms of spring-catch. Fig. 4 is a detail of the stem, showing the grooves. Fig. 5 is a detail of spring-catch.

I am aware that it has been proposed to provide the pendant with a spring-catch, and a longitudinally-adjustable push-pin, so constructed that the spring will retain it in two positions—one for winding and one for setting. Therefore I do not claim such a construction.

In my invention the spring-catch is made large and durable, and located within the watch-center.

A is the stem of the watch, which is rigidly or solidly fixed to the cap or crown B, which is shaped, as shown, to fit over the pendant C.

D is the center, and E the spring-catch inserted in the center, as indicated. This spring-catch may either be made in a single piece, as shown in Fig. 1, or in two pieces, as shown in Figs. 2 and 3, the object of the catch being ac-

complished in either case—that is to say, in Fig. 1 the prongs of the fork spring into opposite sides of one of the grooves made in the stem A; in Fig. 2 the spring ends will do likewise, and in Fig. 3 the single prongs. The groove *a* is made in such a position in the stem A that when it is opposite to the spring-catch E the said stem is in proper position for winding the works of the watch, and the groove *b* is in such a position on the stem A that when it is opposite to the spring-catch E the stem is in proper position for setting the hands of the watch. The two grooves *a* and *b* are separated by a narrow collar, *d*, which collar is beveled from the base of each groove, so as to permit the spring-catch E to slip over it when the stem A is adjusted, as and for the purpose specified.

While it will be found advisable to have a double catch—that is to say, one on each side of the stem, such as is shown in Figs. 1 and 2—the same effect would in a measure be secured with a single catch; but in a single catch the spring would of course have a tendency to push the stem A on one side of the winding-pinion, which in my opinion would be objectionable.

When the spring-catch shown in Fig. 1 is used, I generally provide an expanding-screw, F, so that the prongs of the fork may be separated in order to carry them clear of the groove and permit the withdrawal of the stem A.

In place of the screw F being made to expand the spring-catch, it might be made to draw the legs of the catch together, though the former construction is preferable. The only function of the adjusting-screw is to control the tension of the spring-catch.

What I claim as my invention is—

1. In a stem-winding watch, the stem A, fixed to the cap or crown B, and having grooves *a* and *b* made in it, in combination with the spring-catch E, located wholly within the watch-case center, arranged substantially as and for the purpose specified.

2. In a stem-winding watch, the stem A, having grooves *a* and *b*, separated by a beveled collar, *d*, in combination with the spring-catch E, located wholly within the watch-case cen-

ter, substantially as and for the purpose specified.

3. In a stem-winding watch, the stem A, having grooves *a* and *b*, made in it, in combination with the forked spring-catch E, held in the center D, and adjusted by the expanding-screw F, substantially as and for the purpose specified.

4. In a stem-winding watch, the center and its pendant, in combination with a spring-catch consisting of two spring-jaws projecting from a curved body portion rigidly supported within the center and independent of the pendant, and the push-pin having a collar adapted to be held upon either side of said spring-catch, substantially as and for the purpose specified.

5. In a stem-winding watch, the center having an adjusting-hole and its pendant, in combination with a spring-catch rigidly supported within the center and independent of the pendant, an adjusting-screw to regulate the tension of the catch located within or under the hole in the center, and the push-pin having a collar adapted to be held upon either side of said spring-catch, substantially as and for the purpose specified.

6. In a stem-winding watch, the center having an adjusting-hole upon its face, in combination with a curved spring-catch having two flexible arms or jaws, and adapted to fit within the center, and a push-pin having that part within the center provided with a collar, substantially as shown, and adapted to be snapped upon either side of the said spring-catch, substantially as and for the purpose specified.

7. In a stem-winding watch, the center having an adjusting-hole upon its face, in combination with a curved spring-catch having two flexible arms or jaws and adapted to fit within the center, an adjusting-screw adapted to adjust the said spring-arms to or from each other, and a push-pin having that part within the center provided with a collar, substantially as shown, and adapted to be snapped upon either side of the said spring-catch, substantially as and for the purpose specified.

Toronto, January 18, 1886.

E. F. HEFFERNAN.

In presence of--

CHARLES C. BALDWIN,
CHAS. H. RICHES.