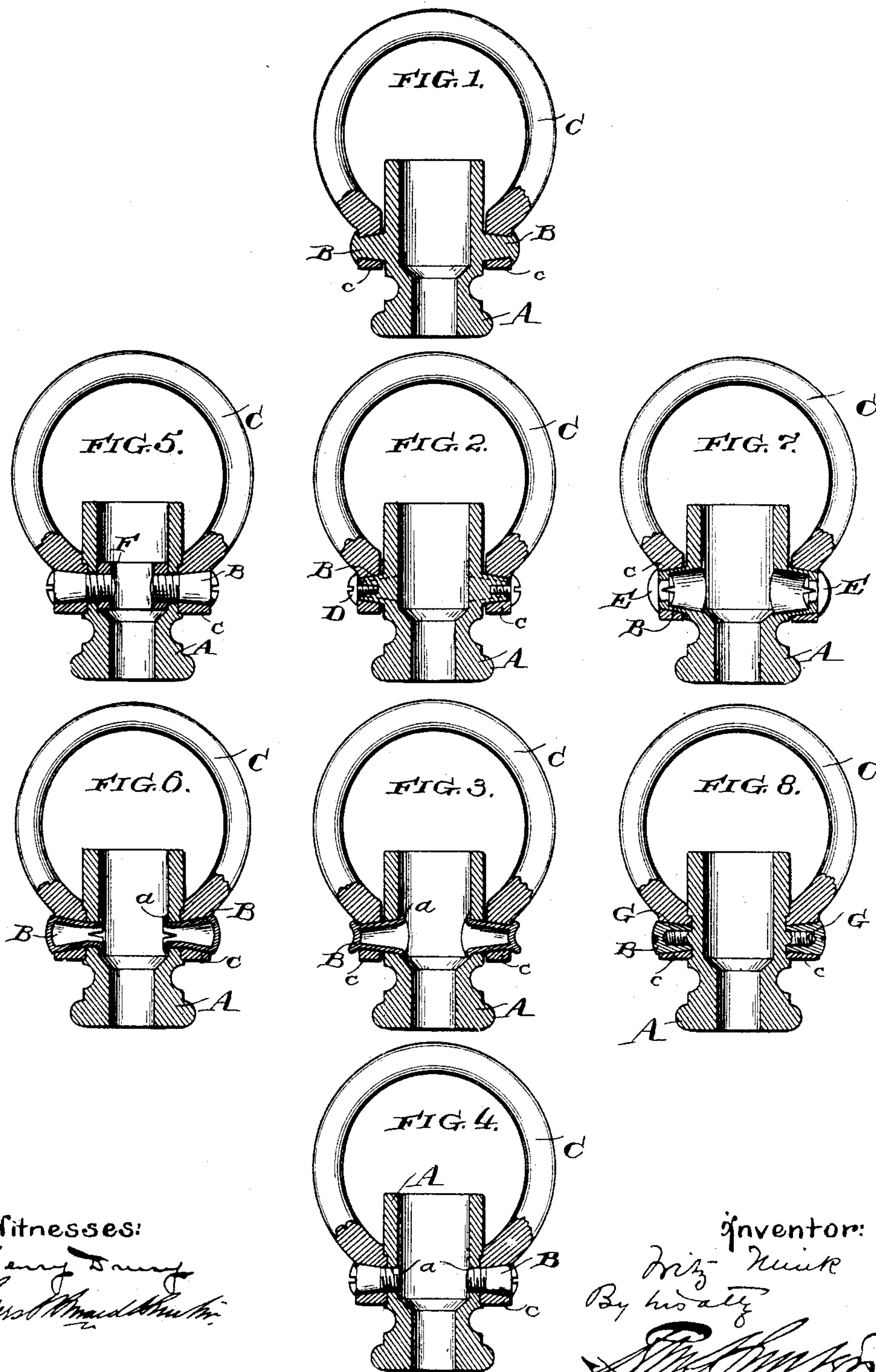


(No Model.)

F. MINK.
WATCH BOW FASTENER.

No. 472,764.

Patented Apr. 12, 1892.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRITZ MINK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
KEYSTONE WATCH CASE COMPANY, OF SAME PLACE.

WATCH-BOW FASTENER.

SPECIFICATION forming part of Letters Patent No. 472,764, dated April 12, 1892.

Application filed August 8, 1891. Serial No. 402,090. (No model.)

To all whom it may concern:

Be it known that I, FRITZ MINK, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Watch-Bow Fasteners, of which the following is a specification.

My invention relates to watch-bow fasteners; and it consists of certain improvements, which are fully set forth in the following specification, and are shown in the accompanying drawings, which form a part thereof.

It is the object of my invention to provide for a watch-case a convenient, efficient, and economical device for fastening the watch-case bow to the pendant, while permitting it to have the usual freedom of swinging movement.

My object is also to construct the fastening devices so as to take up any wear in the bearing-surfaces of the pendant and bow which may result from the constant movement of the bow. By this means the ends of the bow are prevented from becoming loose upon their bearings. In carrying out my invention I provide the pendant with laterally-projecting arms or ears, upon which the ends of the bow are swiveled and form a tapered surface between these bearing-surfaces. The wear in the surfaces may be taken up by tightening the ends of the bow upon projecting arms or ears to force the tightened surfaces upon one another. The ends of the bow may be held upon the projecting arms or ears in a variety of ways, as is hereinafter more fully set forth.

In the drawings, Figure 1 is a sectional side elevation of a watch-case pendant and bow embodying my invention, and Figs. 2, 3, 4, 5, 6, 7, and 8 are similar views illustrating modifications of the invention.

A is the watch-case pendant provided upon opposite sides with laterally-projecting arms or ears B, having tapered surfaces.

C is the bow, having its ends *c* provided with apertures adapted to fit over the arms or ears B. The inner surface of these apertures in the ends of the bow may be tapered to correspond with the tapering of the arms or ears B. These arms or ears B may be tapered either inwardly or outwardly—*i. e.*, the diameter may either increase or diminish

from the body of the pendant. With the former construction the arms or ears are made separate from the pendant and are subsequently fastened thereto, and the tapering of the arms serves to fasten the ends of the bow against lateral displacement. With the outward taper or diminished diameter from the body of the pendant additional devices are required to fasten the bows in place.

In Fig. 1 is shown a construction in which the arms B are formed integral with the pendant and are tapered outwardly with the bow ends fastened in place by upsetting the ends of the arms.

The construction shown in Fig. 3 is similar to the construction of Fig. 1 with the arms B formed of independent ears inserted in sockets *a* in the pendant.

In Fig. 2 is shown a construction with the outwardly-tapering arms B and independent fastening-screws D. Fig. 7 shows a similar construction employing snap-buttons E in place of the screws D.

In Figs. 4, 5, 6, and 8 are shown constructions employing inwardly-tapered arms or ears B. In the construction of Fig. 4 these arms are screwed or otherwise fastened to the body of the pendant. In Fig. 5 they are shown connected with a ring, plate, or button F on the inside of the pendant. In the construction shown in Fig. 6 spring-ears B are employed snapped into the sockets or apertures *a* of the pendant, and in Fig. 8 the arms are fastened to projecting screws or pins G, carried by the body of the pendant.

To take up the wear resulting from the friction between the bearing-surfaces, the bow is forced more tightly upon the tapered surface to bring it up a portion of increased diameter.

In the constructions in which the taper is outward or decreasing from the body of the pendant, as in Figs. 1, 2, 3, and 7, this is accomplished by tightening the fastening device, and thus forcing the ends of the bow nearer the body of the pendant.

In the constructions in which the taper is inward it is accomplished by tightening or drawing in the arms or ears.

While I prefer the minor details of construction that have been shown, I do not limit

my invention to them, as it is apparent that they may be modified without departing from the principles of the invention, the essential feature of which is the tapered surface between the arms or ears of the pendant and the apertures of the bow swiveled thereon.

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

- 10 1. In a watch-bow fastener, the combination of a pendant carrying laterally-projecting arms or ears and a bow having its ends provided with journal-holes, swiveled upon said arms or ears, with a taper formed between the adjacent surfaces of the ends of the bow about the journal-holes and the arms or ears of the pendant, the arms or ears projecting through the journal-holes on the ends of the bow.
- 15 2. In a watch-bow fastener, the combination of a bow having its ends provided with journal-holes and a pendant carrying laterally-projecting arms or ears projected through the journal-holes on the ends of the bow and having tapered surfaces, whereby the ends of the
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bow may be moved upon the tapered surfaces of the ears to take up wear between the parts.

3. In a watch-bow fastener, the combination of a bow having its ends provided with journal-holes having internal tapered surfaces and a pendant carrying laterally-projecting arms or ears extending through the journal-holes on the ends of the bow and having their surfaces tapered to correspond with the taper of the surfaces upon the ends of the bow, whereby the ends of the bow may be moved upon the tapered surfaces of the arms or ears to take up wear between the parts.

4. In a watch-bow fastener, the combination of a pendant, a bow having its ends formed with apertures, and inwardly-tapering arms separable from the pendant, adapted to be inserted through the apertures of the ends of the bow and attached to the pendant.

In testimony of which invention I have hereunto set my hand.

FRITZ MINK.

Witnesses:

H. M. KAIN,
JOSEPH M. CANFIELD.