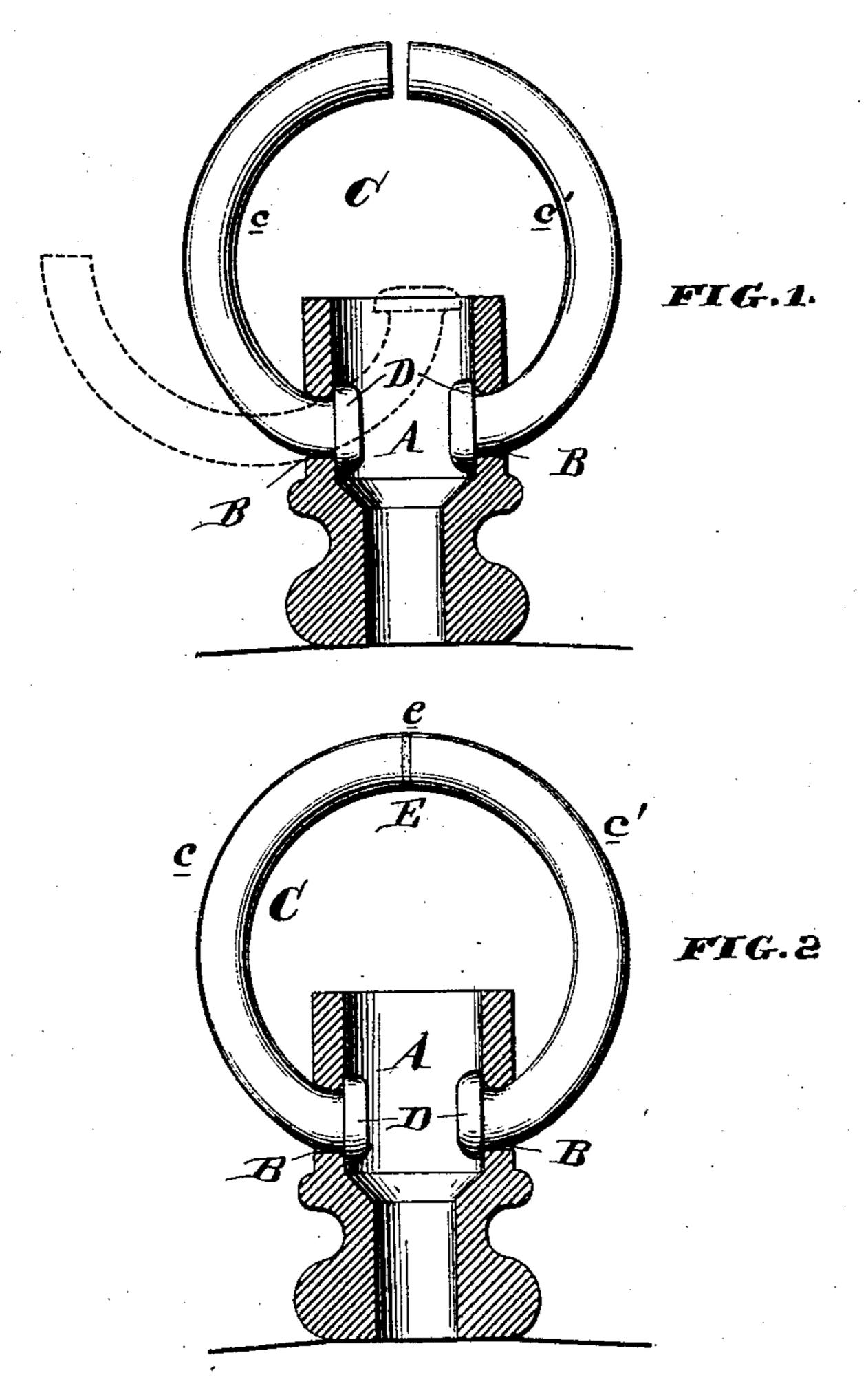
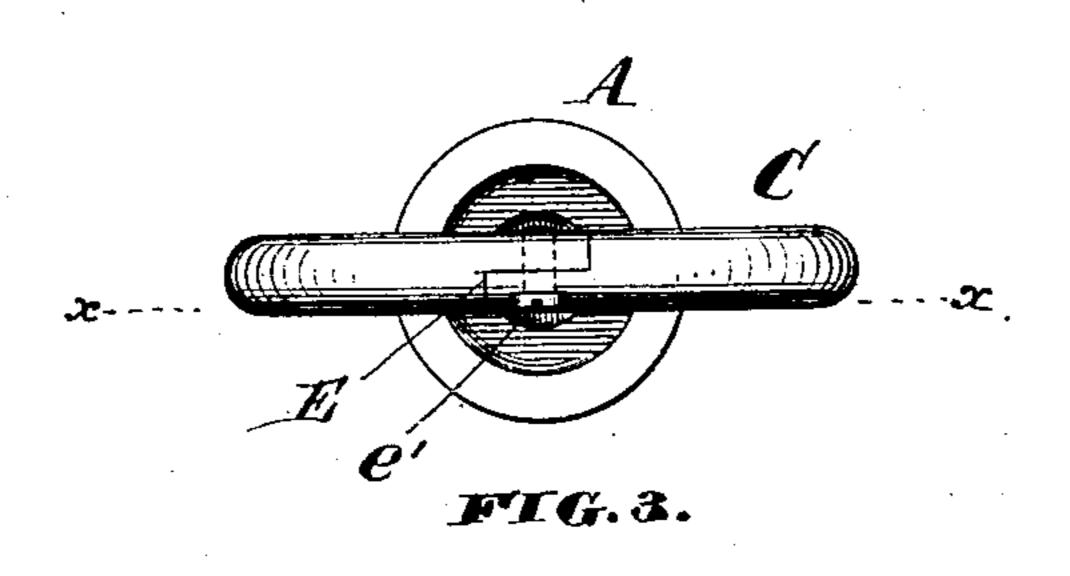
(No Model.)

E. C. CHAPPATTE.
BOW FOR WATCH CASES.

No. 414,793.

Patented Nov. 12, 1889.





MITNESSES: Savid S. Milliams S. J. Yerkes. Edw. C. Chappatte By his arty

## United States Patent Office.

EDWARD C. CHAPPATTE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE KEYSTONE WATCH CASE COMPANY, OF SAME PLACE.

## BOW FOR WATCH-CASES.

SPECIFICATION forming part of Letters Patent No. 414,793, dated November 12, 1889.

Application filed June 22, 1889. Serial No. 315,242. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. CHAPPATTE, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Im-5 provement in Bows for Watch-Cases, of which the following is a specification.

My invention has reference to bows for watch-cases; and it consists of certain improvements which are fully set forth in the ro following specification, and shown in the accompanying drawings, which form a part thereof.

In carrying out my invention I provide a hollow pendant with two holes or apertures 15 extending through its walls, and on opposite sides of the pendant and through its apertures I pass two portions of a divided bow, and after they are placed in position the outer or free ends of such portions of the 20 bow are united by solder or otherwise. The bow-sections are passed through the apertures from the inside of the pendant and are provided with enlargements or projections upon their ends to remain within the pendant, so 25 as to prevent such ends being drawn out of the holes or apertures which form the journal-boxes of the bow.

The union of the two parts of the bow exterior to the pendant may be accomplished 30 in any suitable manner—that is to say, either by soldering, or screws or rivets, or in any

other manner.

In the drawings, Figure 1 is a sectional elevation on line x x, Fig. 3, of a pendant and 35 bow, showing my improvement in process of construction. Fig. 2 is a similar view of a completed structure, and Fig. 3 is a plan view of same, showing a modified way of uniting the two sections of the bow.

A is the hollow watch-pendant, and is provided upon diametrically-opposite sides with apertures B, extending entirely through its walls. These apertures act as the journal-

bearings for the bow.

C is the bow, and is formed of the two parts c c', united between the connection of the bow with the pendant and exterior to said pendant. These two sections of the bow are each provided on their inner ends with en-50 largements, projections, or heads D, which !

will not pass through the apertures B. These sections are then inserted through the apertures from the inside of the pendant outward, as indicated in dotted lines, Fig. 1. The two halves are then brought into line and united 55 at E by a soldered joint e. It will now be seen that the heads D prevent the bow from being in any manner pulled out of the pendant, and thereby prevent any possibility of the watch being disconnected from the 60 bow and falling to the ground, as frequently happens with watches of the ordinary construction found in the market.

In place of making a soldered joint e, (which may be of hard or soft solder,) the joint may 65 be made by lapping the ends at E and uniting them by screws or rivets e', as indicated in Fig. 3. It is also evident that the extent of this lapping is immaterial, and might be greater or less to suit the fancy of the con- 70 structor. This lap-joint may also be used in connection with the solder in place of the cross-break shown in Figs. 1 and 2.

While I prefer the construction shown I do not limit myself to the mere details thereof, 75 as they may be modified without departing from the spirit of the invention.

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

Patent, is—

1. The combination of a hollow watch-case pendant having perforations on its opposite sides, with a bow or ring formed of two parts, having enlargements or projecting portions on its adjacent ends within the pendant, and 85 in which the said parts are passed through the holes in the pendant from the interior outward and have their free ends united outside of the pendant.

2. The combination of a hollow watch-case 90 pendant having perforations on its opposite sides, with a bow or ring formed of two or more parts, having enlargements or projecting portions on its adjacent ends within the pendant, and in which the said parts are 95 passed through the holes in the pendant, from the interior outward and have their free ends united outside of the pendant by a soldered joint.

3. The combination of a hollow watch-case 100

pendant having perforations on its opposite sides, with a bow or ring formed of two parts, having enlargements or projecting portions on its adjacent ends within the pendant, and in which the said parts are passed through the holes in the pendant from the interior outward and have their free ends lapped and secured together outside of the pendant.

4. A watch-case bow consisting of two parts united at one place by a tight or inflexible joint and having their free ends provided with enlargements or projections.

5. A watch-case bow consisting of two parts united at one place outside of the pendant, in combination with said pendant.

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

EDWARD C. CHAPPATTE.

Witnesses:
E. R. Snow,
Jos. Z. Willies.