

(No Model.)

C. F. MORRILL.
WATCH BOW FASTENER.

No. 449,885.

Patented Apr. 7, 1891.

Fig. 1.

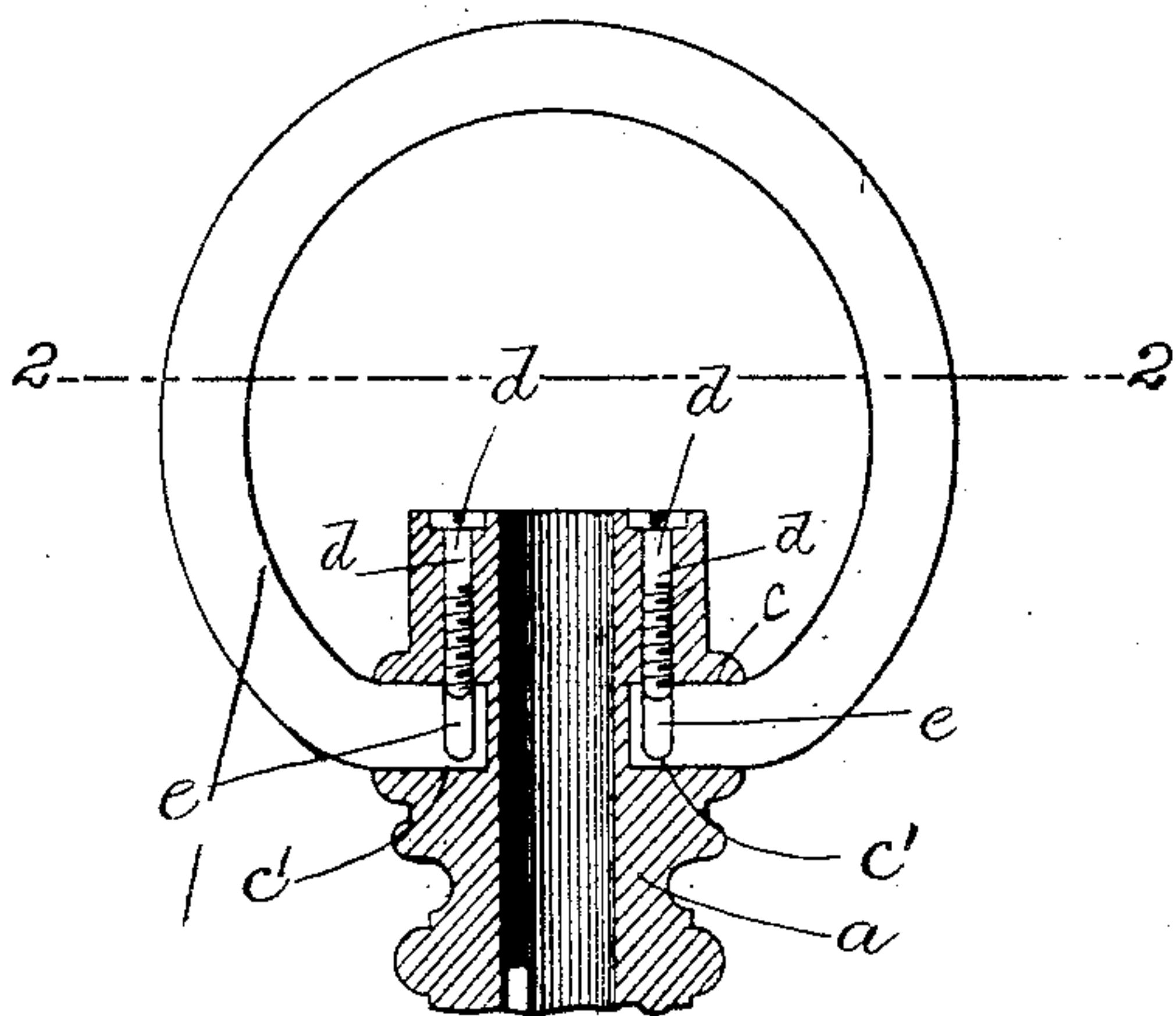


Fig. 3.

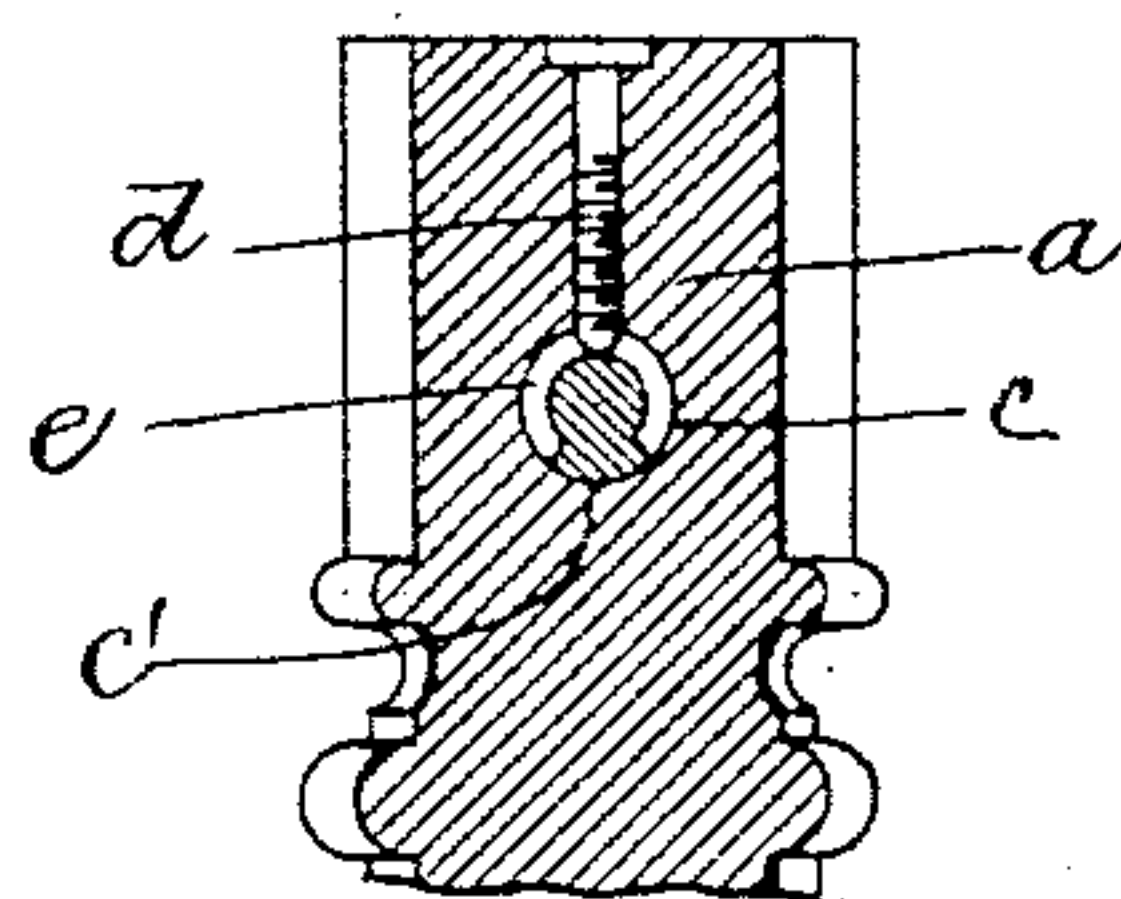


Fig. 4.

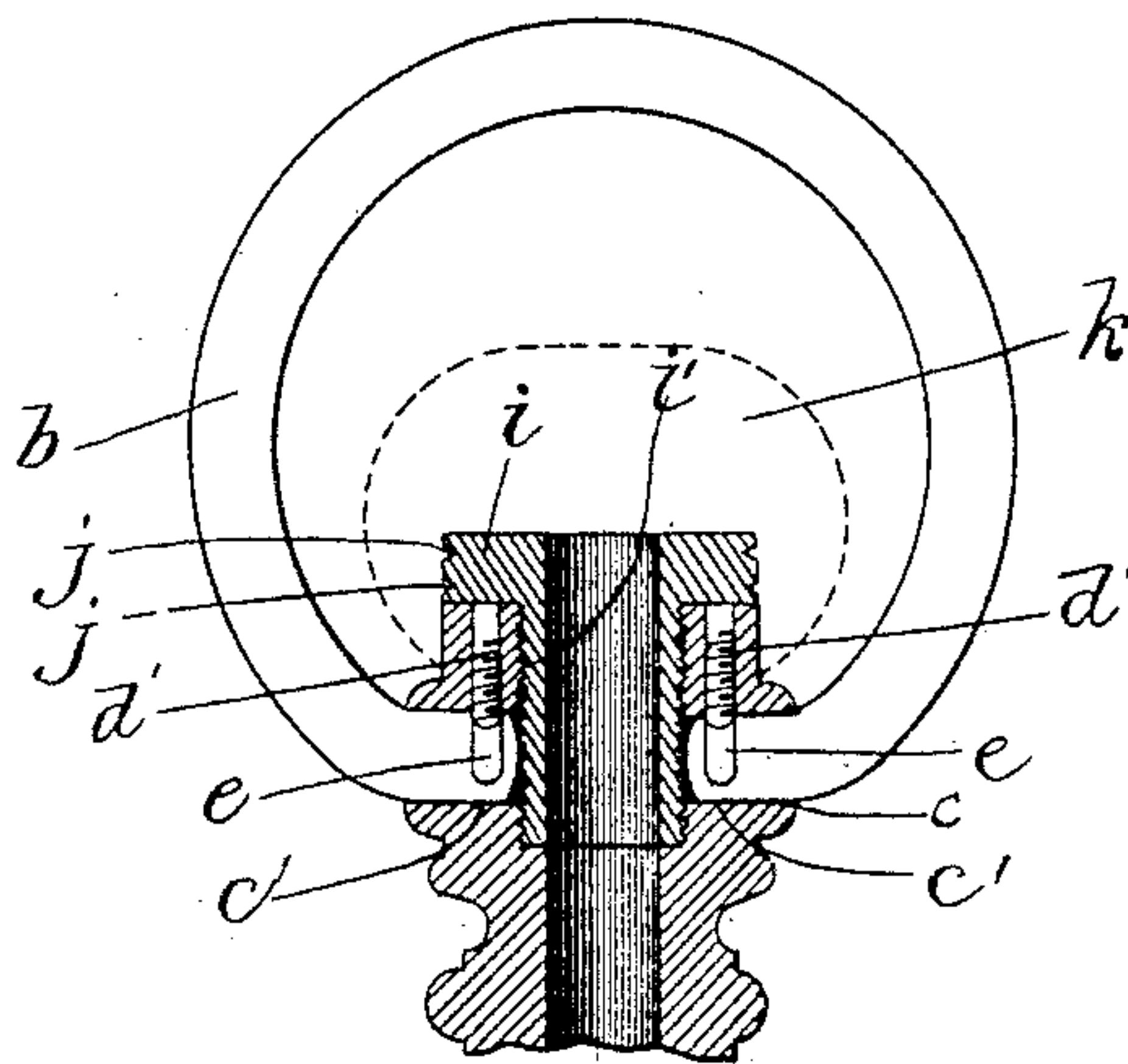
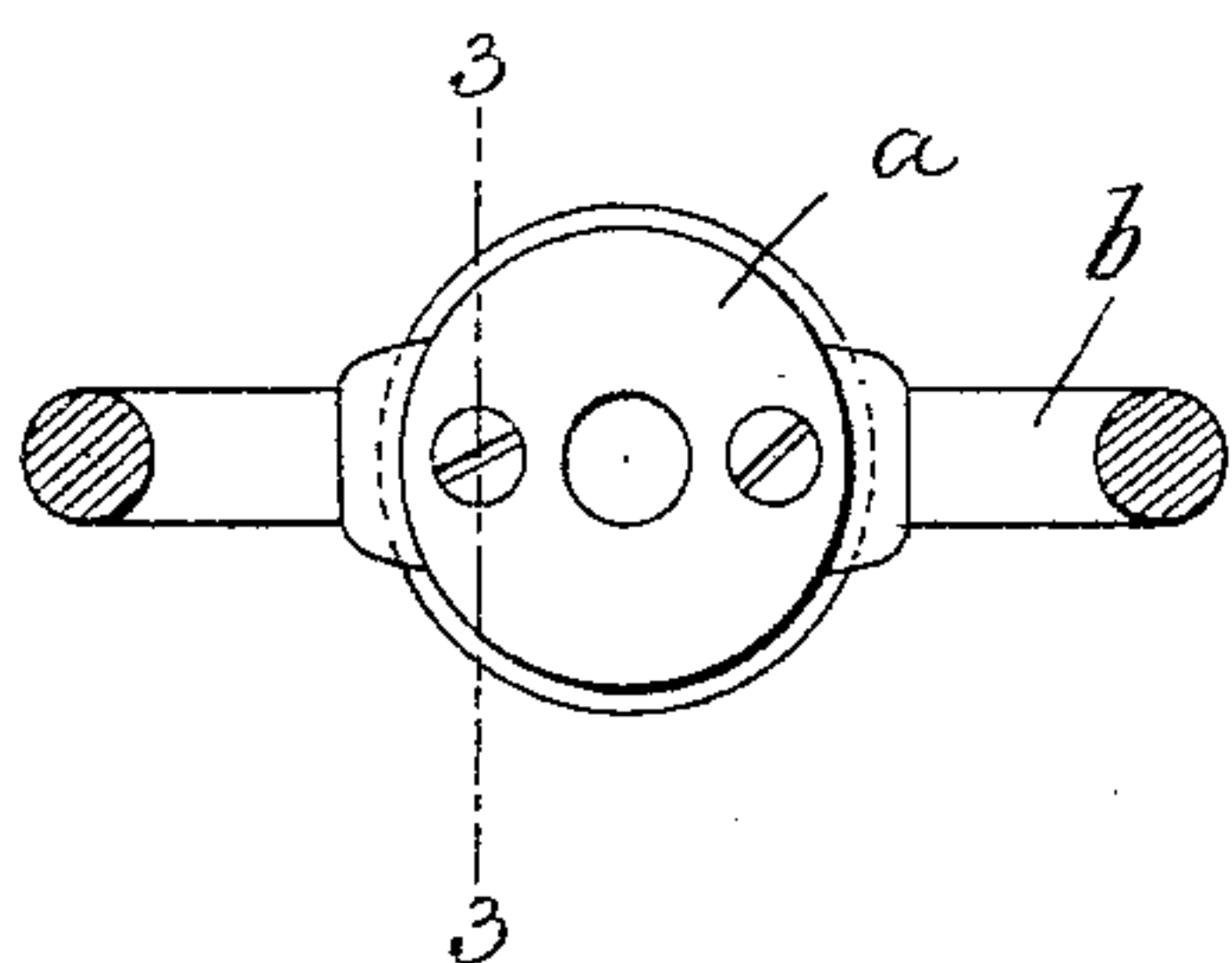


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES F. MORRILL, OF BOSTON, MASSACHUSETTS.

WATCH-BOW FASTENER.

SPECIFICATION forming part of Letters Patent No. 449,885, dated April 7, 1891.

Application filed May 21, 1890. Serial No. 352,582. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. MORRILL, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Watch-Case Pendants, of which the following is a specification.

This invention has for its object to provide a simple and reliable means for securing watch-bows to watch-case pendants in such manner that the ends of the bow cannot be removed from the sockets of the pendant without removal or breakage of parts attached to the pendant; and it consists in the combination of a pendant having two longitudinal holes formed in it extending from its outer end to the sockets that receive the ends of the bow, a bow having grooves in its ends arranged to coincide with said holes, and two screws or pins inserted in the holes in the pendant and projecting at their inner ends into the grooves in the bow, said pins being radially arranged with relation to the ends of the bow, or, in other words, placed so that a prolongation of their inner ends would pass through the centers of the bow ends, there being but one pin for each bow end. Said grooves are of sufficient length to permit the usual swinging movements of the bow without permitting the bow to come into contact with the sides of the case, while the bearing of their sides on the ends of the screws enables the screws to prevent the withdrawal of the ends of the bow from the sockets in the pendant, all of which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a longitudinal section of a watch-case pendant and a side view of a bow secured thereto by my improvement. Fig. 2 represents a section on line 2 2, Fig. 1, looking downwardly. Fig. 3 represents a section on line 3 3, Fig. 2. Fig. 4 represents a sectional view showing a cap secured to the outer end of the pendant.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a watch-case pendant, and *b* represents the bow, the ends

of which are inserted in sockets *c c*, formed in the pendant.

In carrying out my invention I form two longitudinal holes *d d* in the pendant, the same extending to the sockets *c c*, and insert in said holes two pins or screws *d' d'* of suitable length to project slightly into the sockets *c c* and into grooves *e e*, formed in the portions of the bow which enter the sockets, said holes being internally screw-threaded to engage the screws. The holes and screws are arranged radially with respect to the bow ends, so that each screw bears at its inner end on the upper side of the corresponding bow end.

It will be seen that the projection of the screws into the grooves in the bow causes said screws to secure the bow to the pendant, so that the ends of the bow cannot be sprung out of the pendant without the employment of sufficient force to break the screws.

The pendant is constructed, as shown in Fig. 4, with external grooves *j j*, adapted to engage an elastic ring or jaw in the crown of winding-bar and hold the latter in its winding and hands-setting positions, as shown in my pending application filed May 17, 1890, Serial No. 352,339, the winding-bar being thus secured by devices outside of the pendant. This peculiarity of construction enables the walls of the pendant to be made of greater thickness than would be practicable if the pendant had to be formed internally to receive the usual spring-jaws that hold the winding-bar in stem winding and setting watches. The thick walls of the pendant enable screws or pins of considerable size and strength to be employed. Hence one screw or pin is sufficient for each bow end, and said screw or pin is enabled to be radially arranged, as above described, so that its inner end bears on the upper portion of the bow end and does not require that the groove *e* be extended entirely around the bow end. Said groove is, in fact, extended only partly around, as shown in Figs. 1, 3, and 4, so that the bow end is not weakened to the extent that it would be if the groove extended entirely around it, owing to the described thickness of the walls of the

pendant. The sockets that receive the bow do not necessarily extend through the said walls, but may be left closed at their inner ends, thus preventing the admission of dust to the interior of the pendant through said sockets.

Besides having the ends of the bow stronger, a positive advantage is secured by forming the groove only partially around the said ends, as the remaining solid portion *c'* forms stops to limit the swing of the bow in each direction, and the bow is thereby prevented from striking or injuring the case when the covers are closed, and further holds the bow out of the path of the covers as they are being closed.

In Fig. 4 I have shown a cap *i* secured to the pendant and covering the outer ends of the bow-securing devices *d d*, which in this case may be pins instead of screws, the cap *i* holding said pins in place. The said cap is provided with a screw-threaded tubular shank *i'*, which is engaged with an internal thread cut in the interior of the pendant, the cap being thus secured to the pendant. The periphery of the cap, which is covered by the crown of the winding-bar, may be provided with grooves or shoulders *j j*, above described.

The cap *i* may be made of steel or other relatively cheap metal, it being covered by the crown, so that it is not visible. The cost of the pendant is thus reduced by making the precious-metal portion thereof shorter than usual and supplementing the same with a cheap-metal portion constituting the outer end of the pendant.

The crown *k* is shown in dotted lines in Fig. 4. The tubular shank *i'* is preferably extended into the pendant far enough to cover the inner ends of the bow-receiving sockets *c c*, and thus prevent the admission of dust through said sockets.

I am aware that I am not the first to insert screws or pins longitudinally within the pendant, which screws or pins enter grooves formed in the ends of the bow, and hence I do

not wish to be understood as claiming such structure.

I claim—

1. The combination, with the watch-case pendant having the sockets for the reception of the bow ends and longitudinal pin or screw openings intersecting said sockets, of the bow having grooves formed partially around each end having a solid portion to form stops, and the screws or pins inserted in the longitudinal openings in the pendant and entering said grooves, whereby the bow is held securely in place and its swinging movement is limited, substantially as described.

2. The combination, with the watch-case pendant having the sockets for the reception of the bow ends and longitudinal pin-openings extending in from the top and intersecting said sockets, the bow having the grooved ends within the sockets and the pins in the longitudinal openings entering said grooves, of the cap rigidly affixed to the pendant and overlying the ends of the pins and adapted to be itself covered by the crown on the winding-stem, substantially as described.

3. The combination, with the watch-case pendant having the sockets for the reception of the bow ends and longitudinal pin-openings extending in from the top and intersecting said sockets, the bow having the grooved ends within the sockets and the pins in the longitudinal opening entering said grooves, of the cap overlying the pins and having the screw-thread stem screwing into the pendant, said cap being adapted to be covered by the crown, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 17th day of May, A. D. 1890.

CHARLES F. MORRILL.

Witnesses:

C. F. BROWN,
ARTHUR W. CROSSLEY.