

(No Model.)

D. O'HARA.
WATCH CASE HINGE.

No. 435,765.

Patented Sept. 2, 1890.

Fig-1.

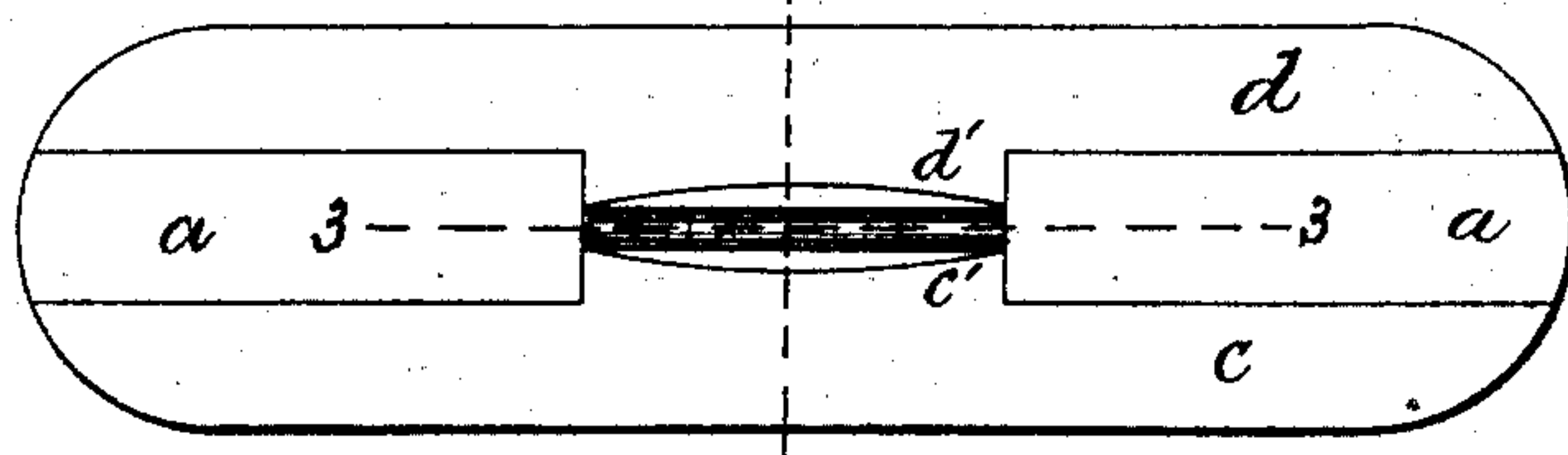


Fig-2.

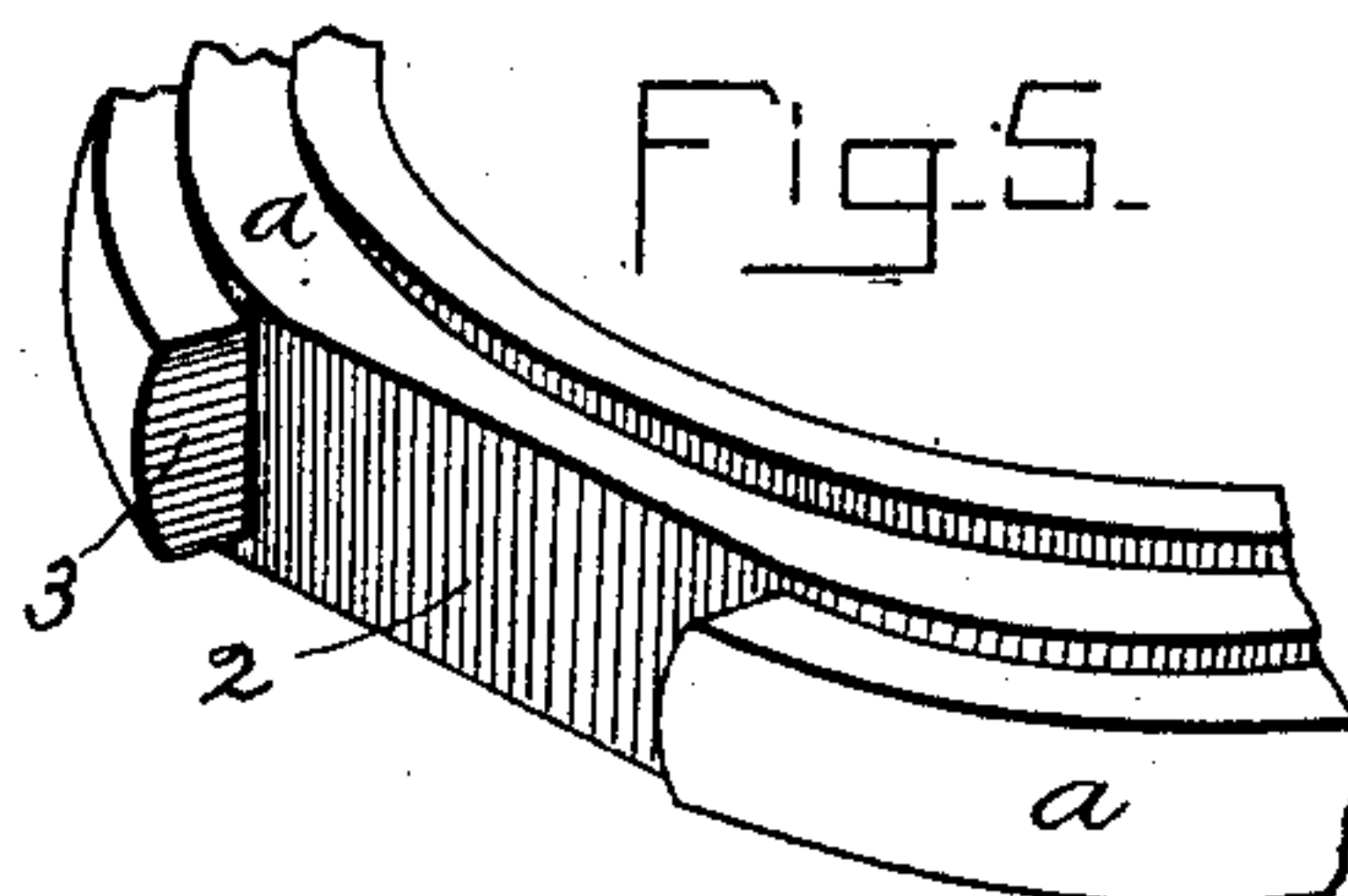
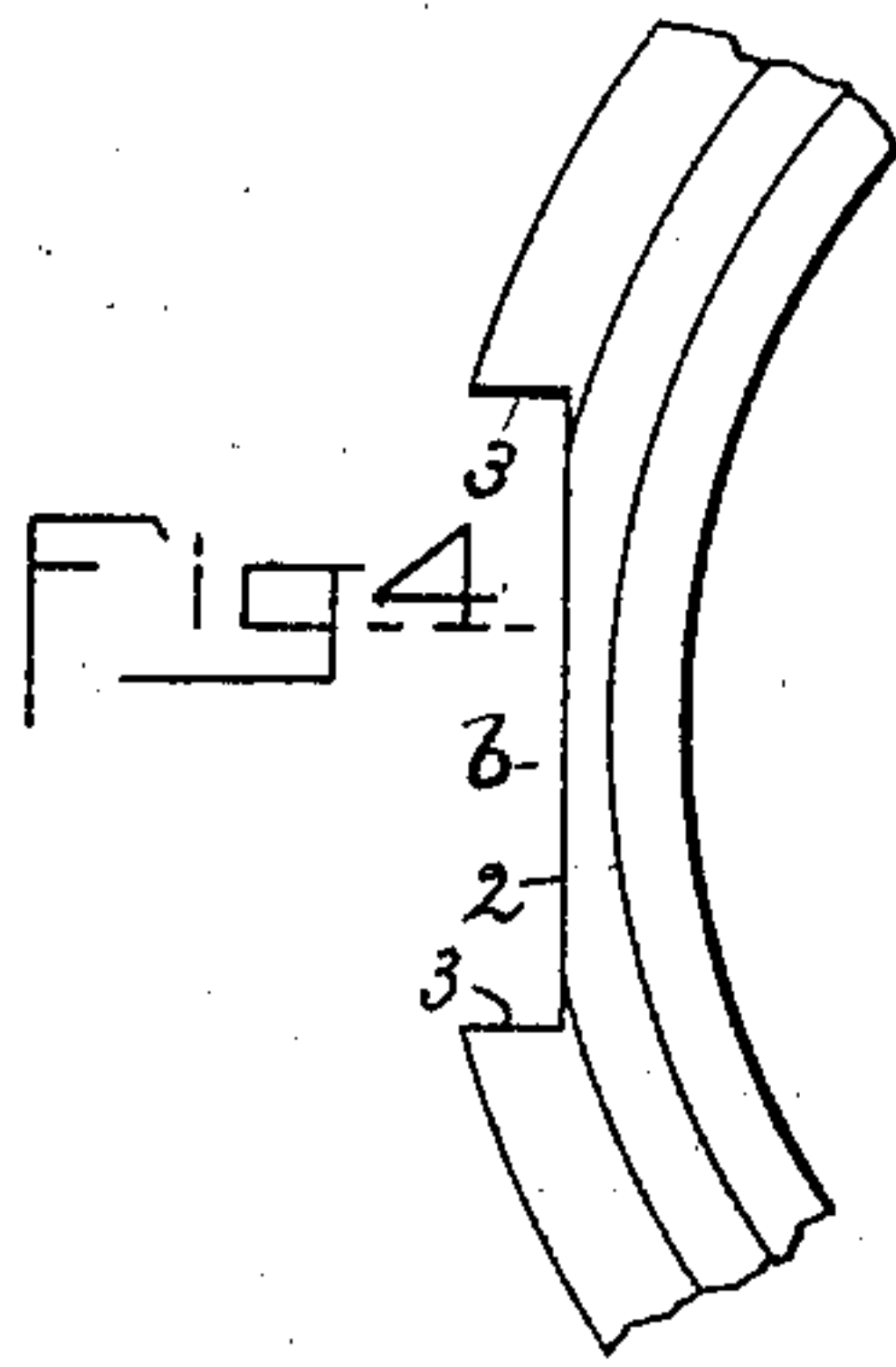
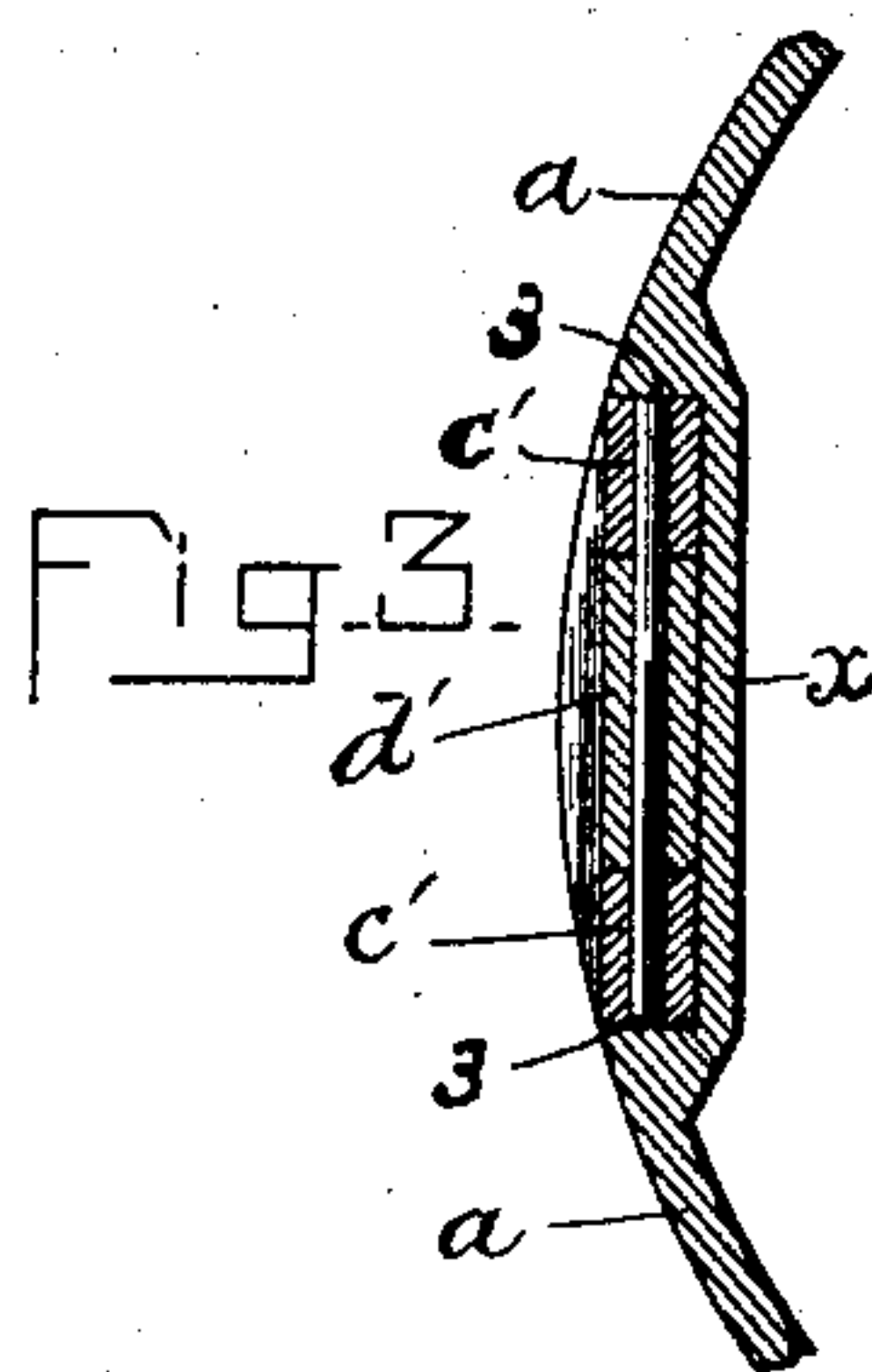
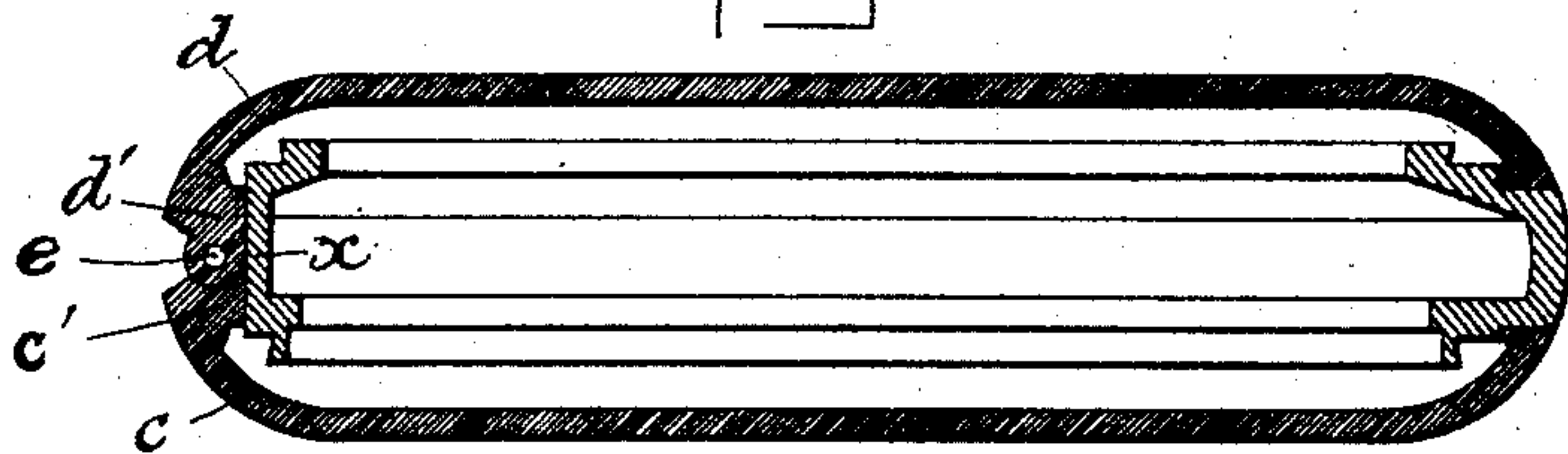


Fig-6.

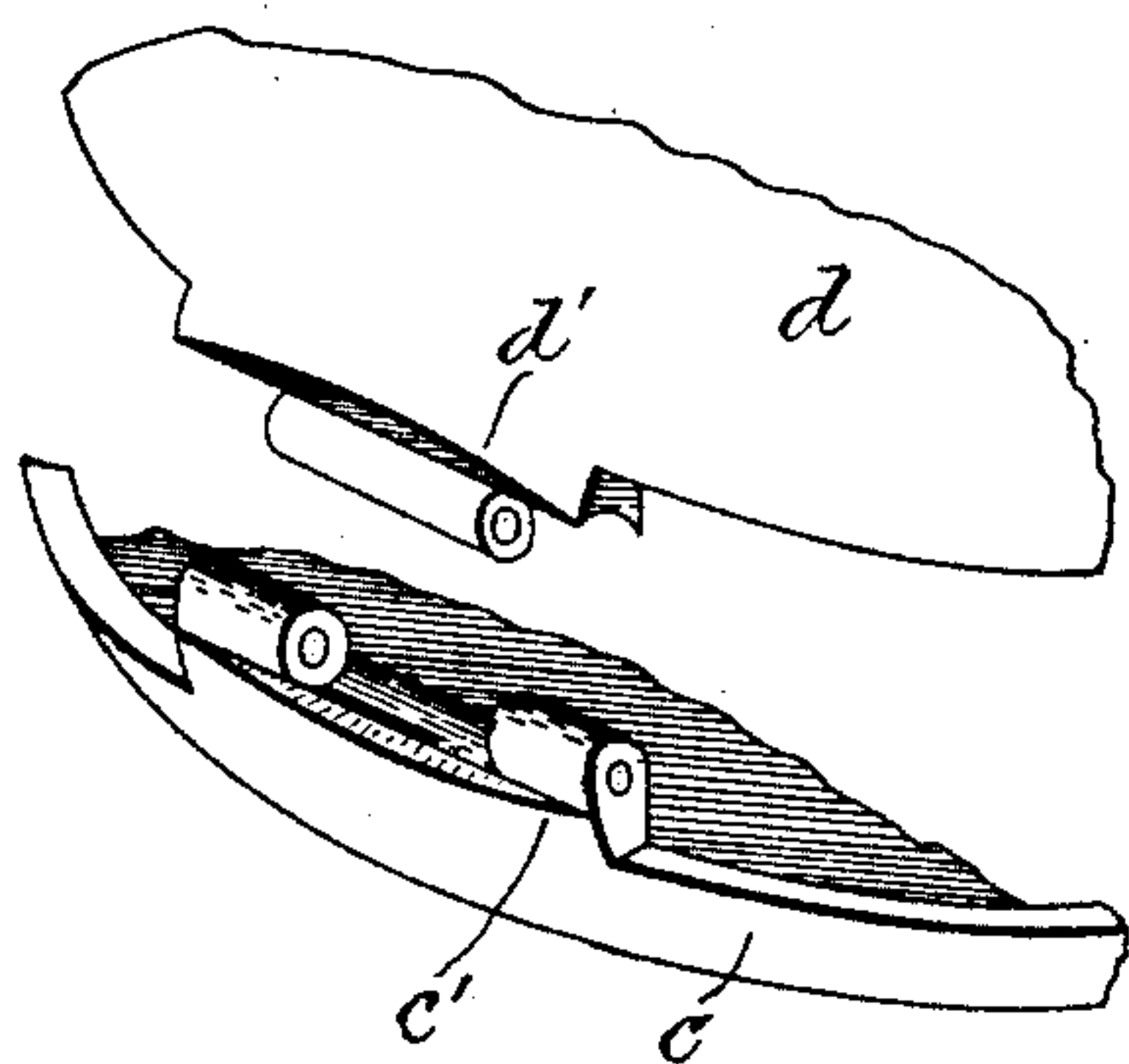
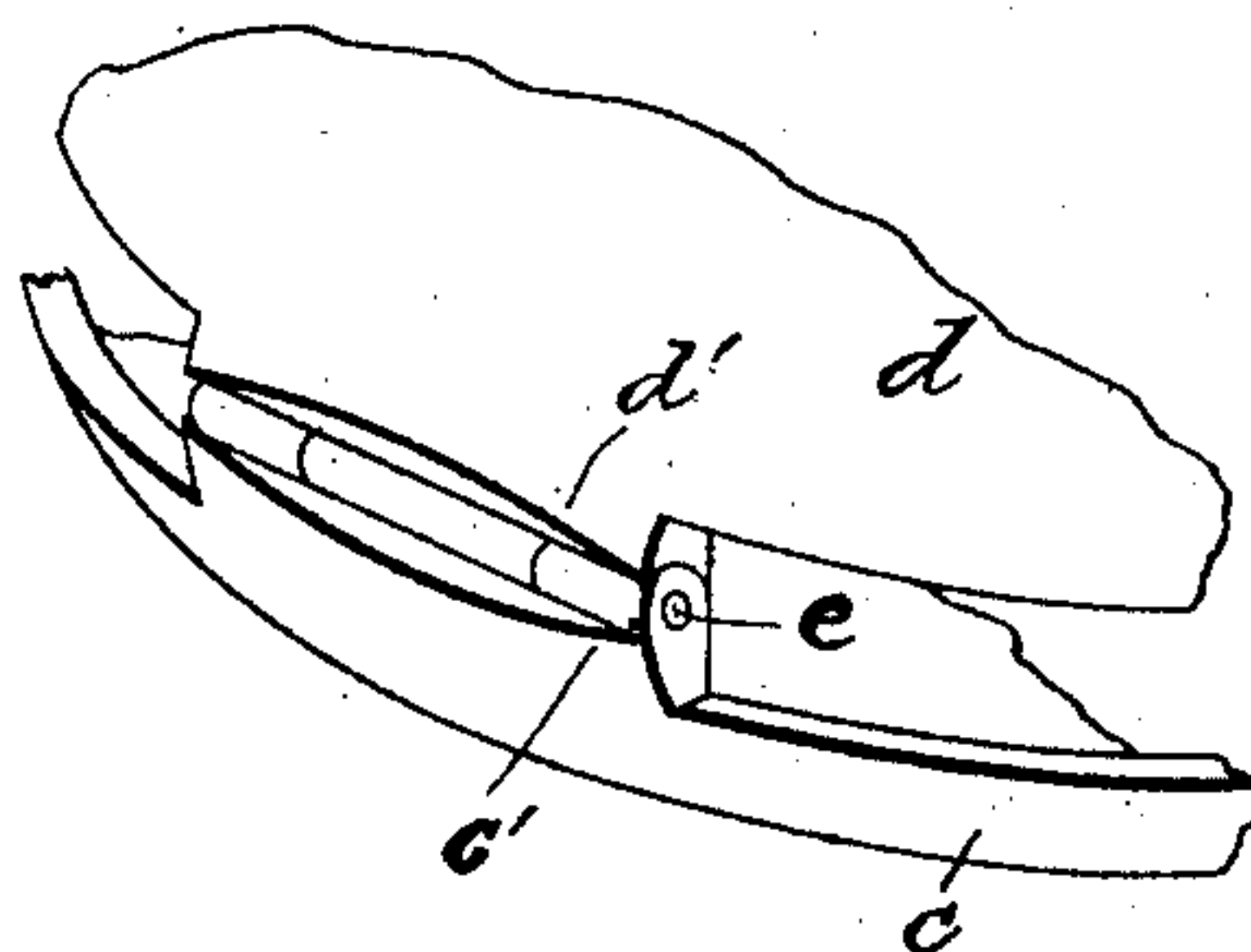


Fig-7.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DANIEL O'HARA, OF WALTHAM, MASSACHUSETTS, ASSIGNOR TO THE
AMERICAN WALTHAM WATCH COMPANY.

WATCH-CASE HINGE.

SPECIFICATION forming part of Letters Patent No. 435,765, dated September 2, 1890.

Application filed March 21, 1890. Serial No. 344,786. (No model.)

To all whom it may concern:

Be it known that I, DANIEL O'HARA, of Waltham, in the county of Middlesex and State of Massachusetts, have invented certain
5 new and useful Improvements in Watch-Cases, of which the following is a specification.

This invention has for its object to enable
10 the back and outer cap or front of a hunting-case watch and the back and bezel of an open-face watch to be detachably connected to the case-center and connected to each other by a hinge which is contained within the circle of the margin of the case-center, so
15 that said hinge will not project at any point outside of the periphery of the case-center.

The invention consists in a case-center having a portion of its periphery cut away to form a socket or recess extending across the case-center, combined with a back and a front cap, each having an offset hinge member, said
20 members being connected by hinge-pivot and formed to be received in the socket made in the periphery of the case-center, the arrangement being such that when either of said
25 parts—viz., the back or the front cap—are snapped to place upon a shoulder of the case-center the other movable part will be secured to the case-center only by the engagement of the said first-mentioned part, so that
30 both of the movable parts may be detached and removed from the case-center by simply disengaging their snap-edges from the shoulders with which said edges engage, as I will
35 now proceed to describe.

In the accompanying drawings, forming a part of this specification, Figure 1 represents an edge view of a watch-case embodying my invention, the movable parts—viz., the back
40 and the front cap—being closed upon the case-center. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 represents a section on line 3 3 of Fig. 1. Fig. 4 represents a side view of the portion of the case-center in which the above-mentioned socket is formed,
45 the removable parts being separated from the case-center. Fig. 5 represents a perspective view of the portion of the case-center shown in Fig. 4. Fig. 6 represents a perspective

view of portions of the back and of the
50 front cap, showing the hinge members formed thereon, said parts being separated. Fig. 7 represents a perspective view of the parts shown in Fig. 6, the hinge members of the back and of the front cap being connected
55 by their pivot.

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

In the drawings, *a* represents a case-center, in the periphery of which is formed at
60 one side a socket or recess *b*, which extends across the outer portion of the case-center, and has a flat side 2 and flat ends 3 3 substantially at right angles to the side 2. *c* represents the back, and *d* the front, cap of a
65 hunting-case watch. Said removable parts—viz., the back *c* and cap *d*—are provided, respectively, with offset hinge members *c'* and *d'*, said members having sockets for the reception of the pin or pivot *e*, that connects
70 the members *c'* and *d'* and forms a part of the hinge. The members *c'* *d'* are formed as shown in Figs. 1, 2, and 3, to closely fit the socket or recess *b*, so that when the back *c* and front cap *d* are snapped to place upon
75 the shoulders formed for their engagement on the case-center the pivot *e* of the hinge will be within the recess *b*, its ends bearing against the ends 3 3 of said recess, as shown in Fig. 3, so that there are no projections
80 formed by the hinge on the periphery of the case-center. It will be seen that each of the removable parts when snapped to place upon the case-center constitutes a holder to secure the other removable part. In other words,
85 when the snap-edge of the back *c* is engaged with the corresponding shoulder on the case-center the front cap *d* may be opened and closed in the usual way, the hinge member of said front cap being permitted to turn on the
90 hinge member of the back, the latter being for the time affixed to the case-center. In like manner, when the front cap *d* is secured to the case-center the back *c* may be opened and closed. It will be seen, however, that
95 when both the back *c* and the front cap *d* are disengaged from the case-center there is nothing to retain said parts in connection with

the case-center, so that they may be entirely separated from the latter.

In hunting-case watches the front cap *d* may be secured to the case-center by the usual spring-catch instead of by the engagement of a snap-edge with a shoulder on said case-center. In open-face watches the part here called the "front cap" will obviously be a bezel, and will be provided with a snap-edge like the back *c*. The case-center is preferably thickened at the point where the recess *b* is formed, so that a solid wall *x* will be interposed between said recess and the interior of the case-center, as shown in Figs. 2 and 3, so that no dirt or dust can enter the case-center at the vicinity of the hinge-connection of the parts *c* and *d* therewith.

I claim—

1. A watch-case center having a recess or socket cut in its periphery for the reception of removable hinge members formed on the back and front cap, as set forth.

2. The back and front cap provided with inwardly-projecting or offset hinge members connected by a pivot between said back and front cap, said members projecting inwardly from the parts to which they are attached,

and constituting a hinge formed to enter a recess or socket in the periphery of the case-center, said hinge separating the back and cap by a space of sufficient width to receive the exposed periphery of the case-center, as set forth.

3. The combination of the case-center having a socket formed in its periphery at one side, and the removable parts having offset hinge members connected by pin or pivot, the hinge composed of said members being formed to closely fit said socket, and having its outer surface formed as a continuation of the periphery of the case-center, as set forth.

4. A watch-case center having a hinge-receiving socket or recess in the exterior of its periphery and a solid wall *x* separating said socket from the interior of the case-center, as set forth.

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

DANIEL O'HARA.

Witnesses:

CHAS. P. McNABB,
JOHN F. MELODY.