

APPLICATION FILED OCT. 20, 1906.

Patented Dec. 29, 1908.

3 SHEETS—SHEET 1.

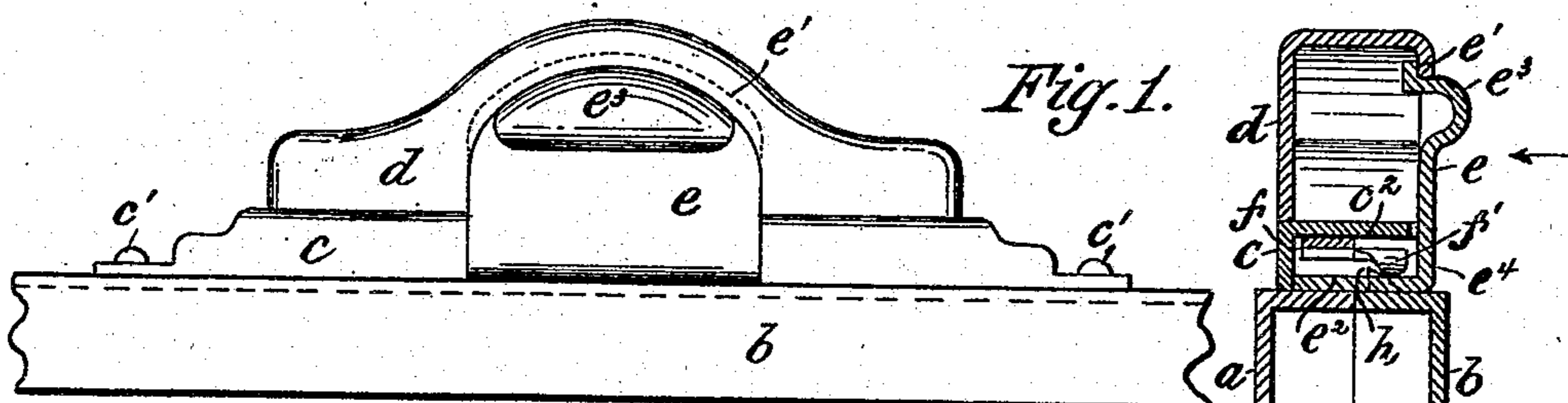


Fig. 4.

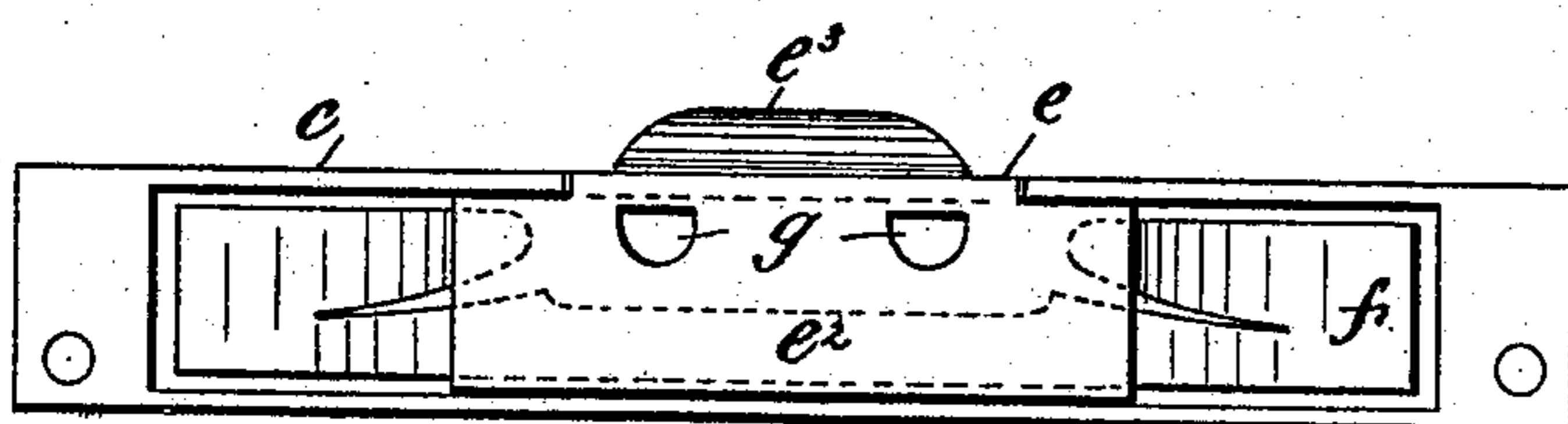


Fig. 3.

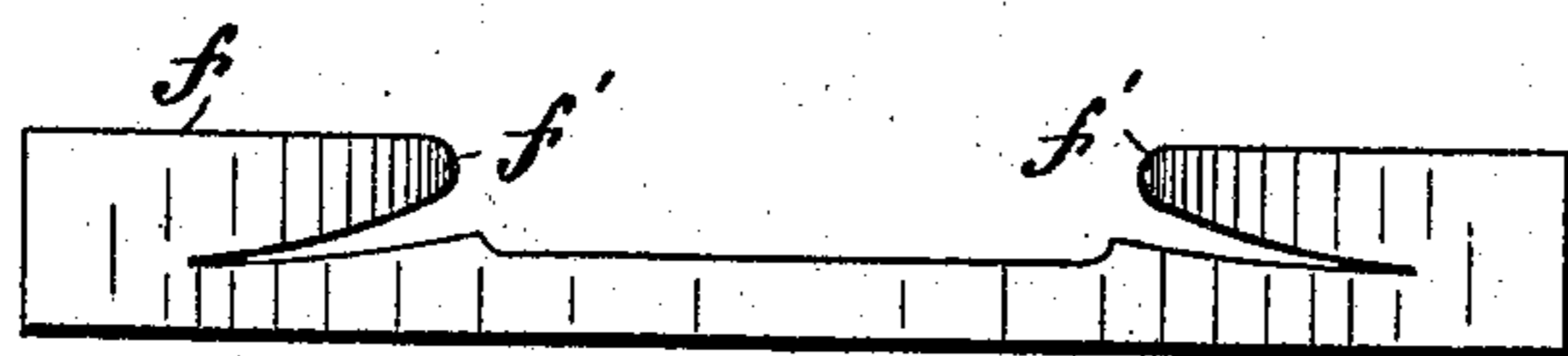


Fig. 5.

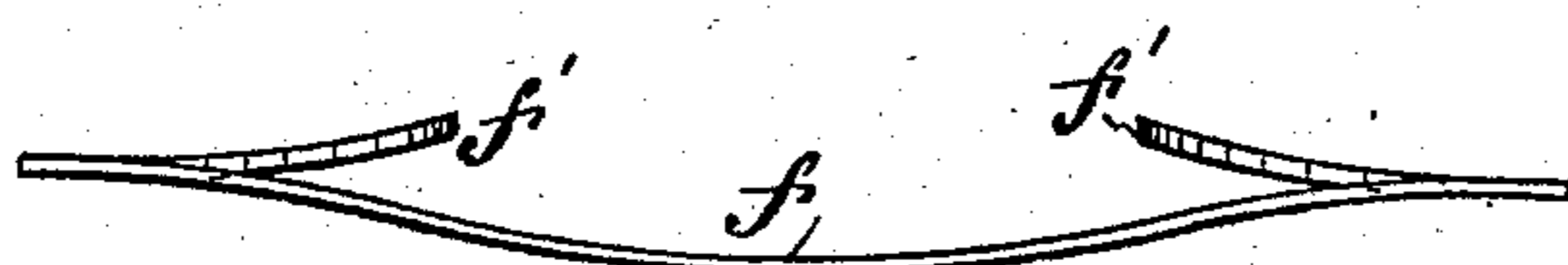


Fig. 6.

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3 SHEETS—SHEET 2.

Fig. 8.

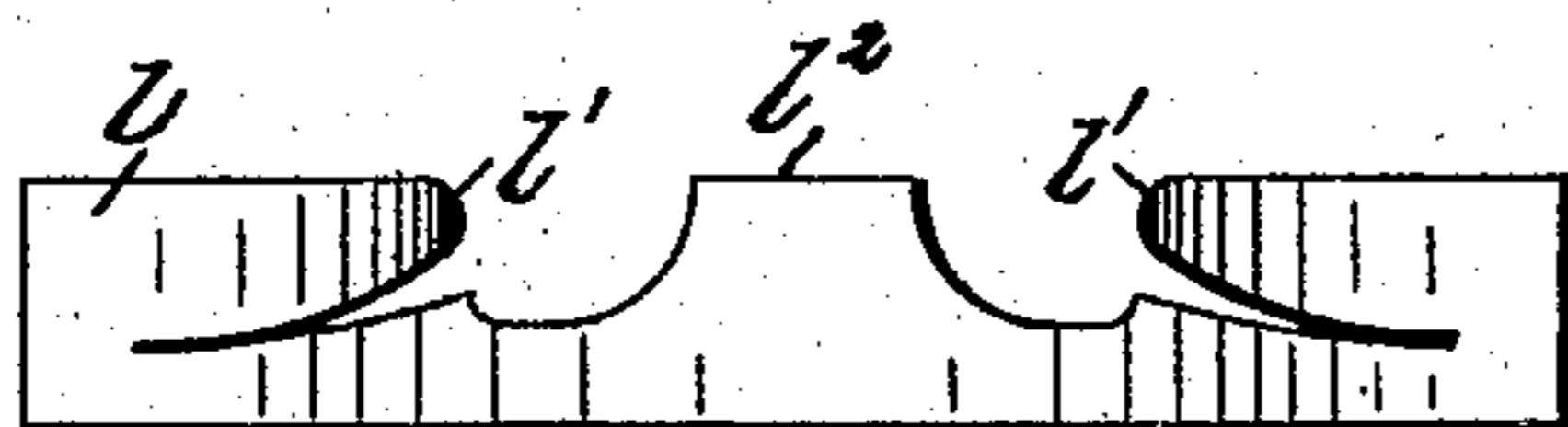
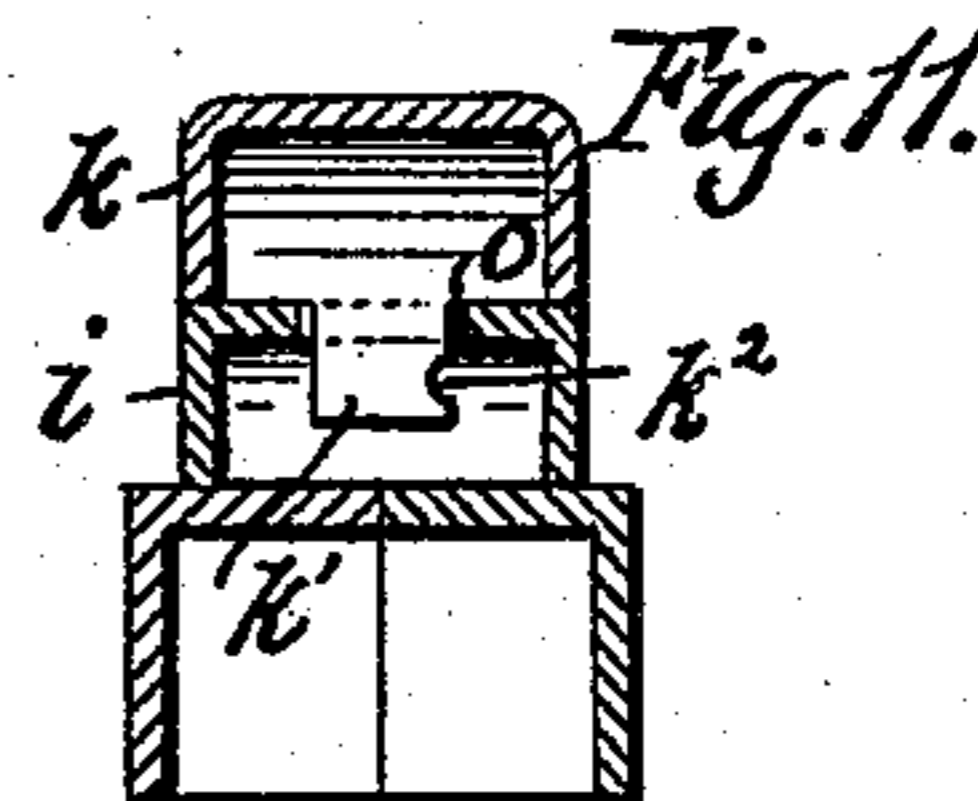
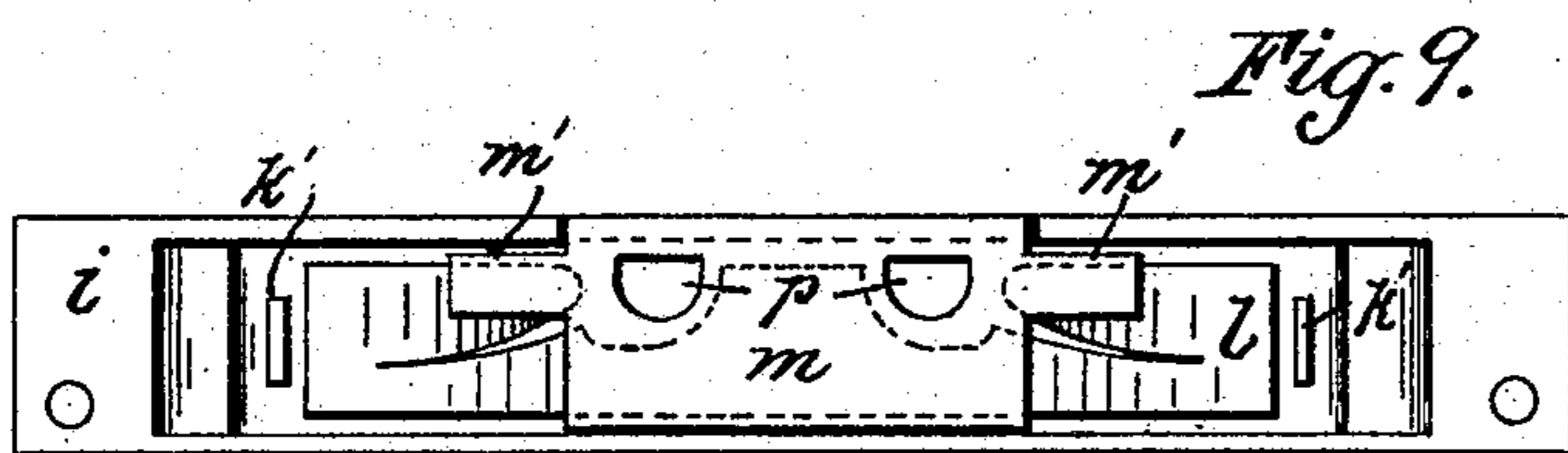
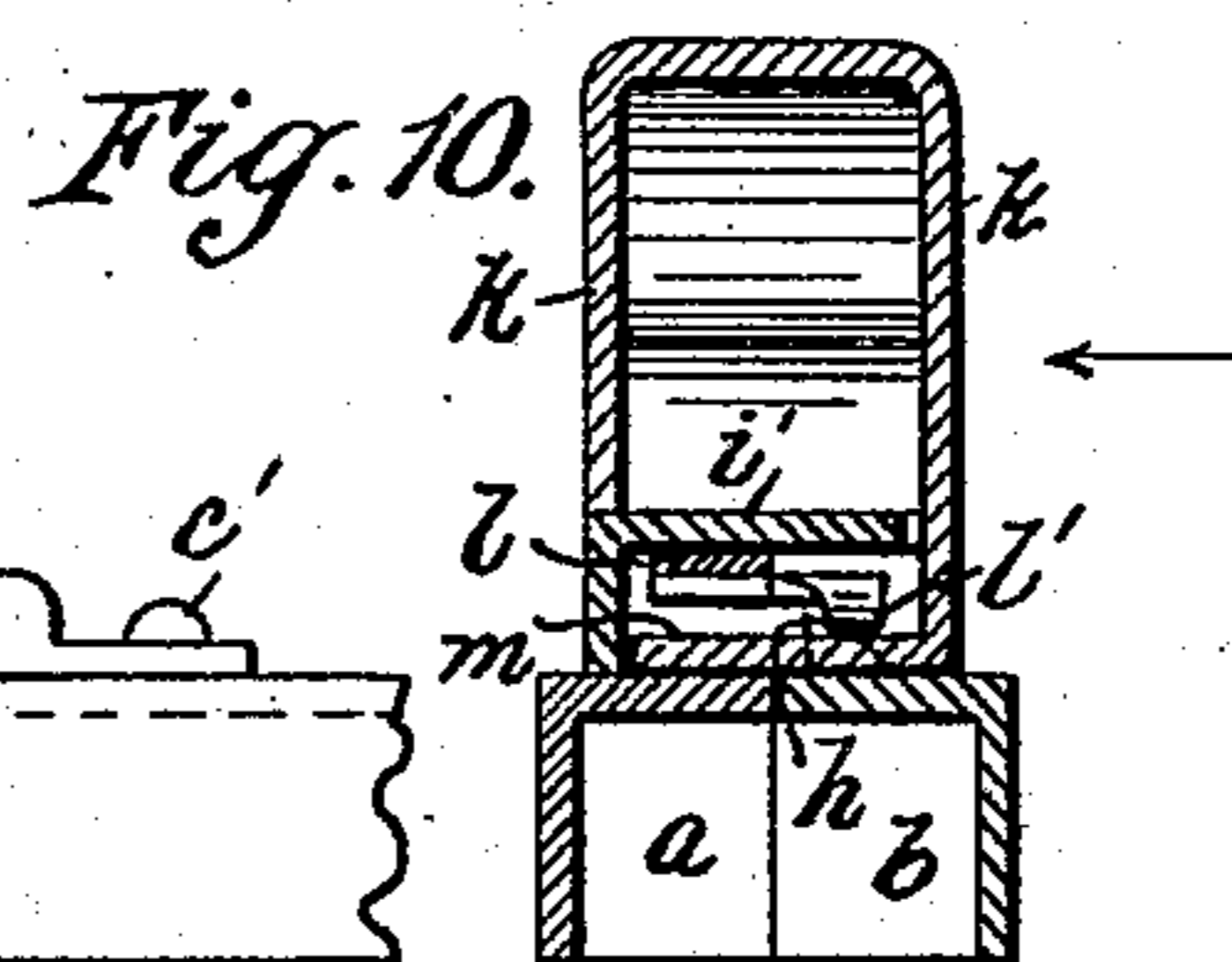
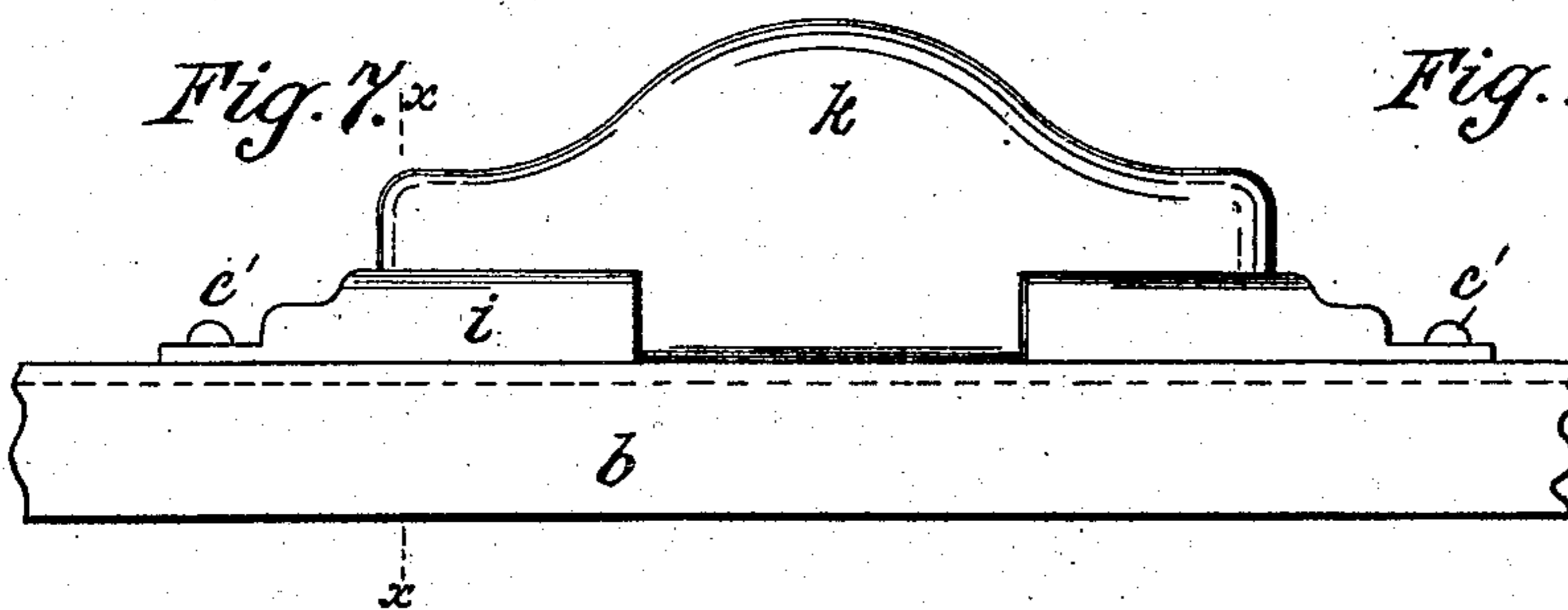
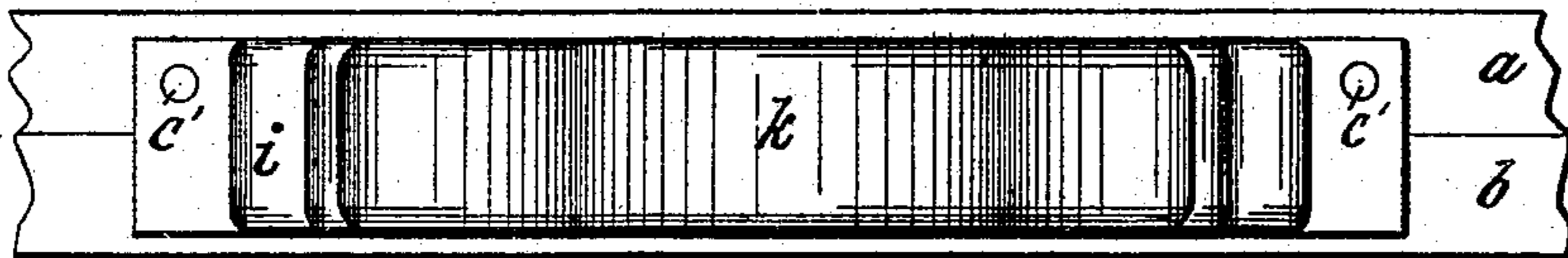


Fig. 12.



Fig. 13.

WITNESSES:
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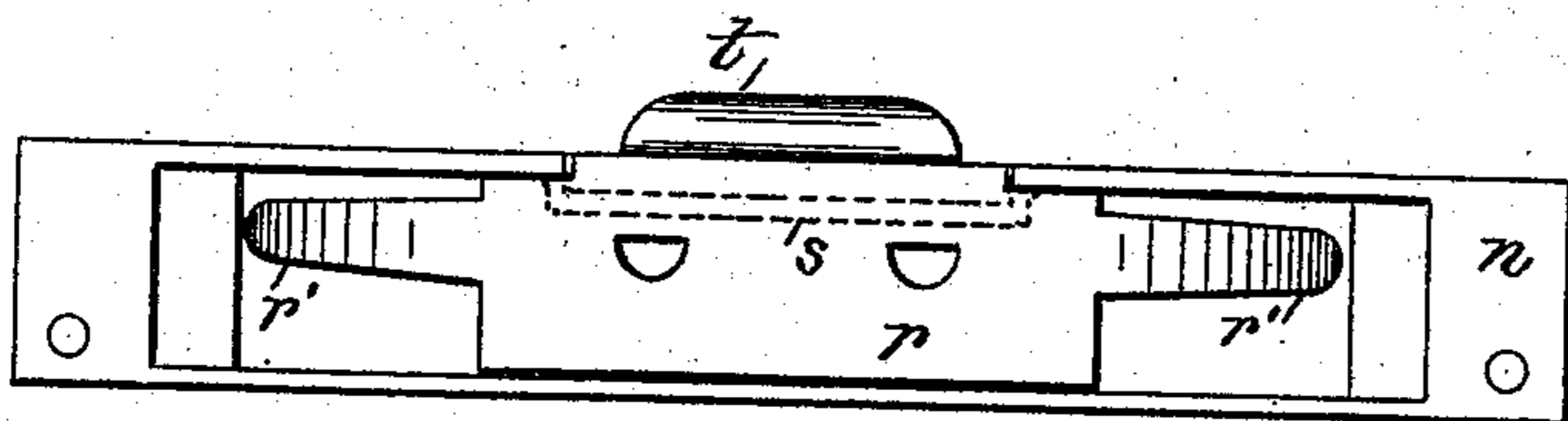
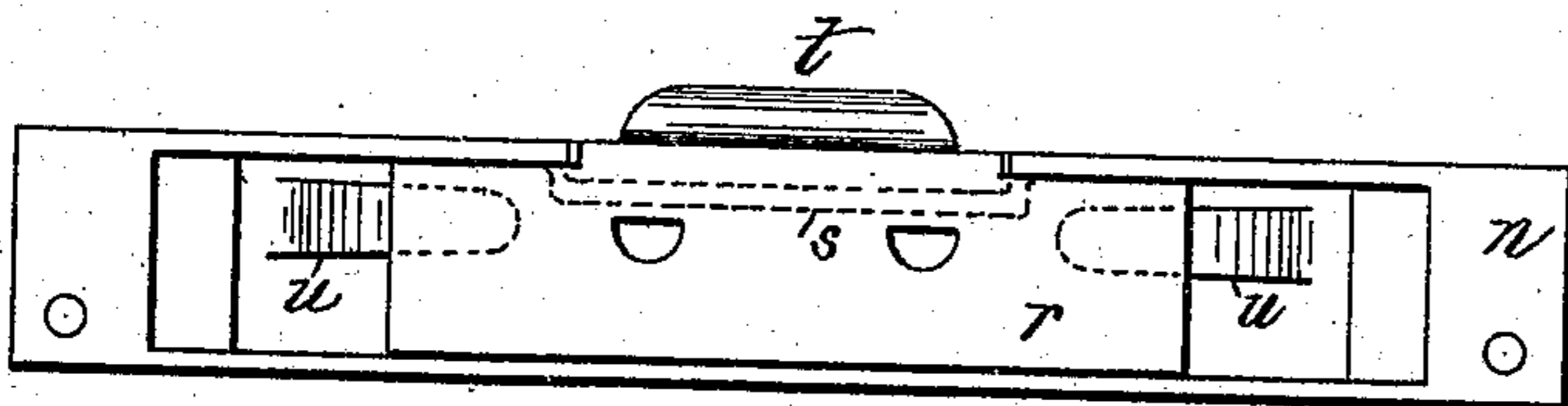
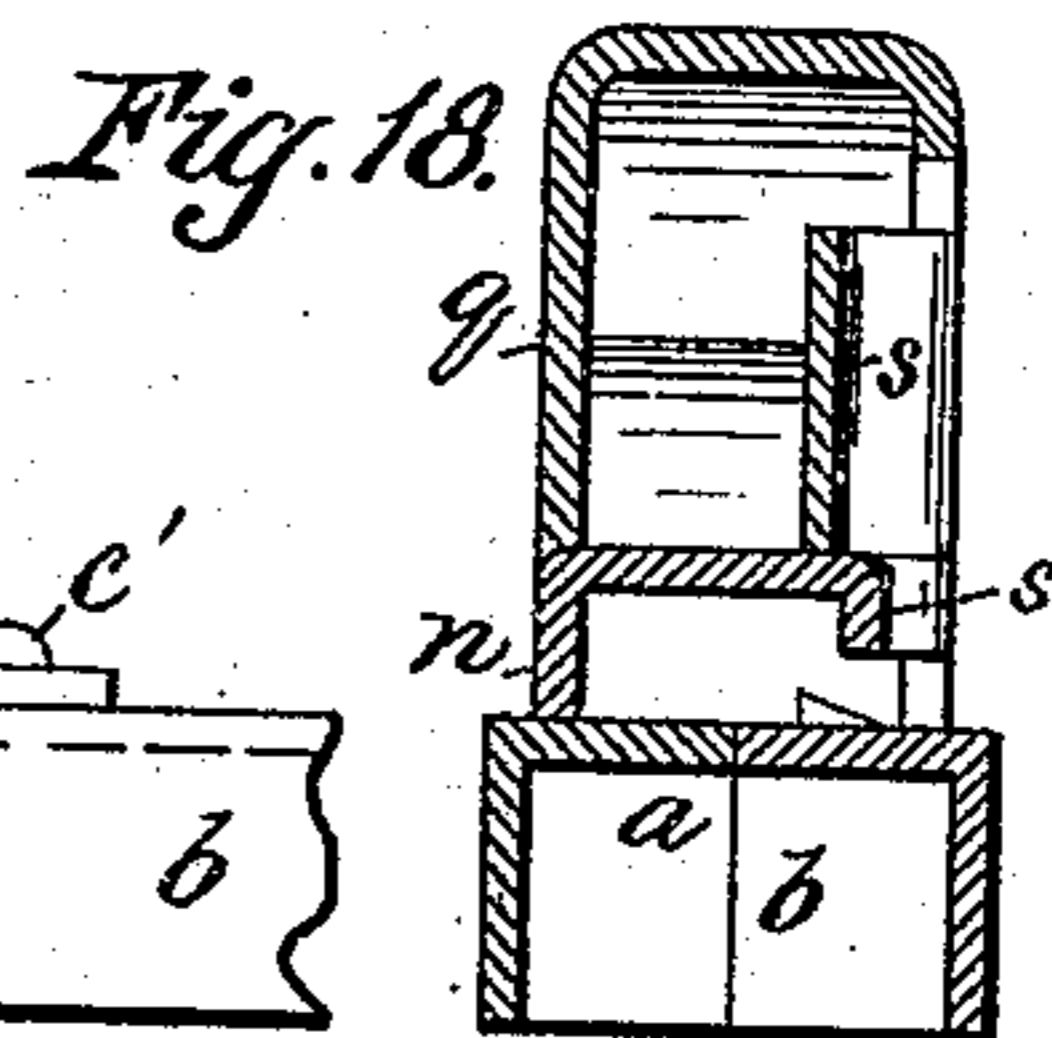
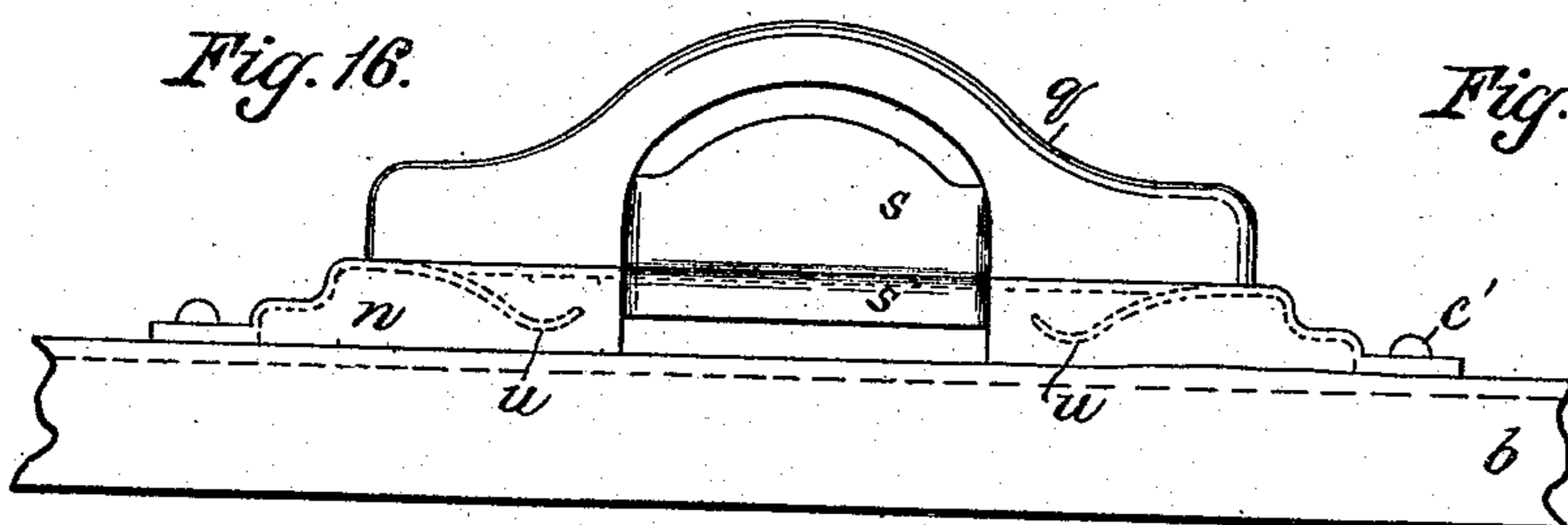
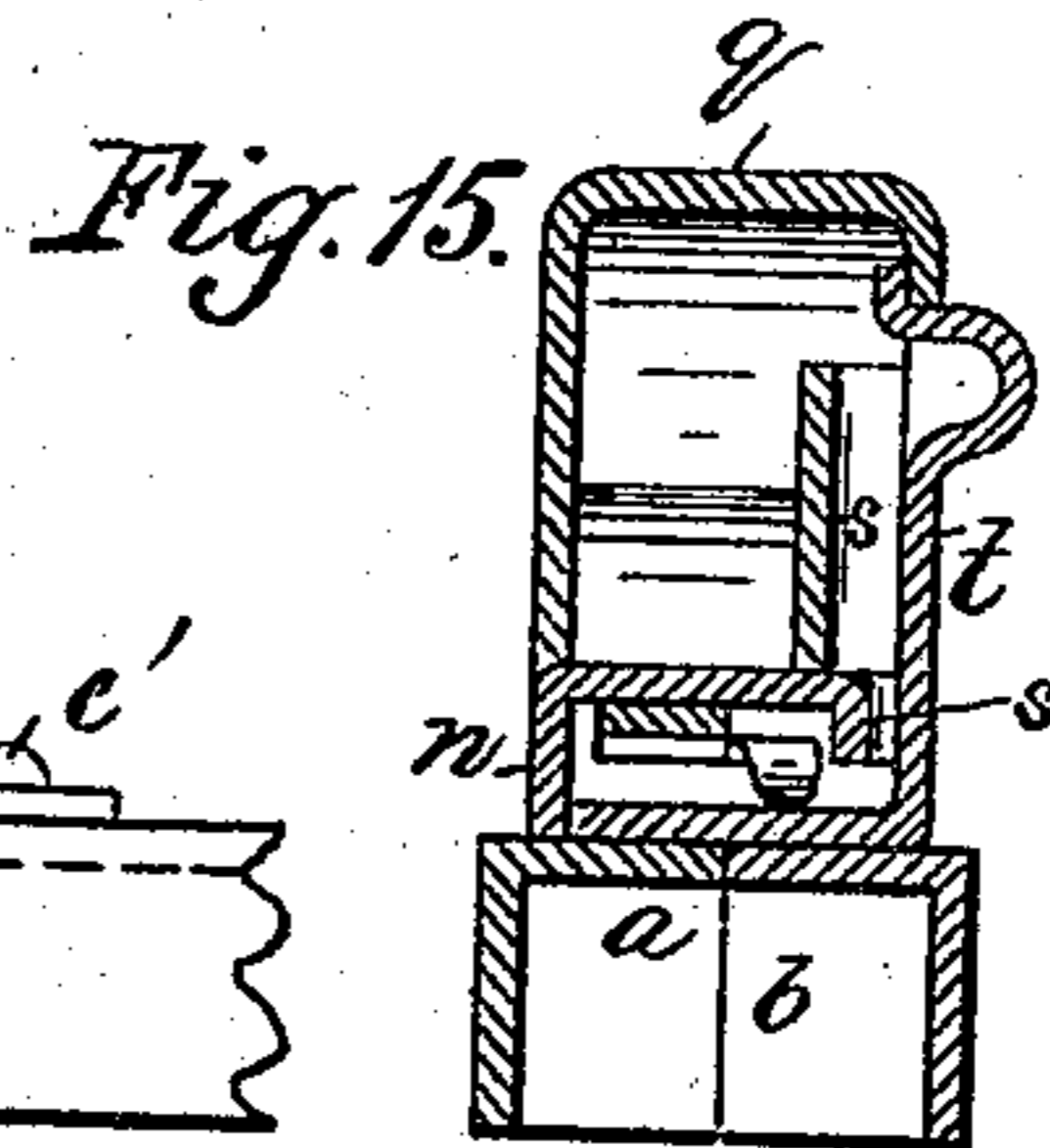
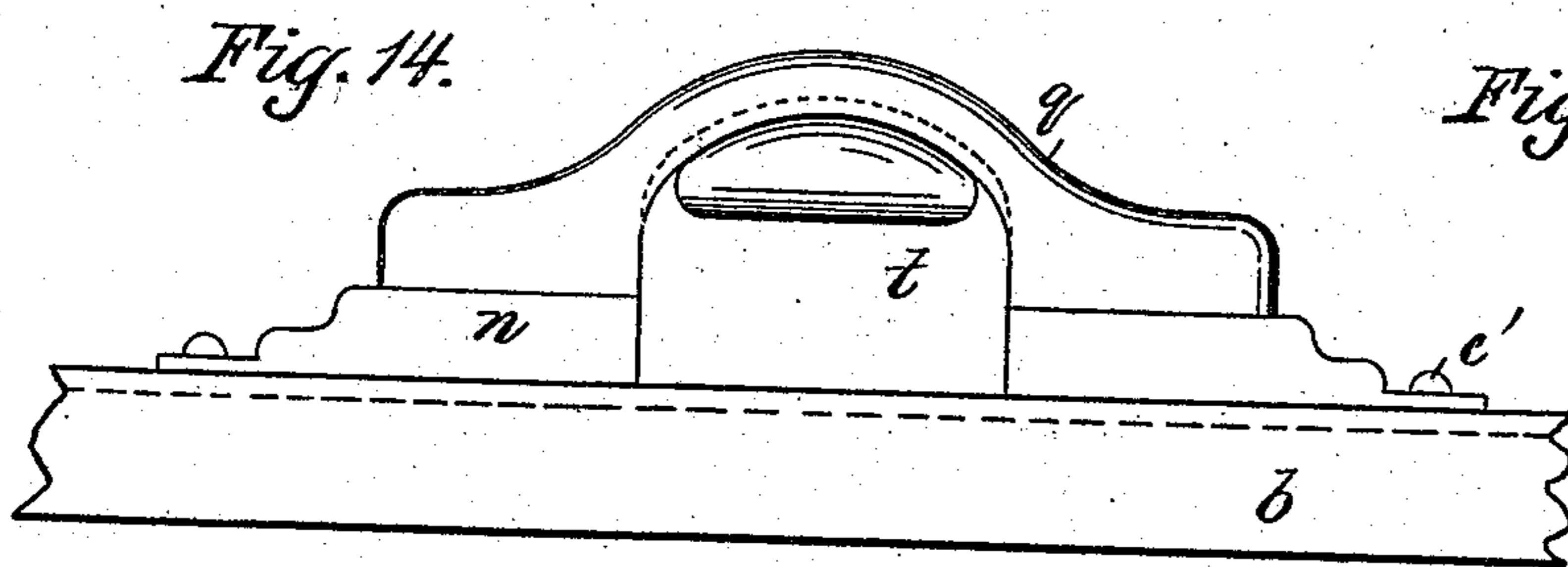
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

CHRISTIAN HIERING AND ALBERT FULLER, OF NEWARK, NEW JERSEY, ASSIGNORS TO J. E. MERGOTT COMPANY, OF NEWARK, NEW JERSEY.

BAG-FASTENER.

No. 908,004.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed October 20, 1906. Serial No. 339,747.

To all whom it may concern:

Be it known that we, CHRISTIAN HIERING and ALBERT FULLER, citizens of the United States, residing in the city of Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Bag-Fasteners; and we do hereby declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make, construct, and use the same.

The object of our invention is to construct a fastener for use upon bags, pocket-books and other similar devices, the same comprising preferably, a chambered base having a portion of its front wall recessed or cut-out and provided with a catch member having one limb lying in said recessed or cut-out portion of the base and flush with its front wall, the other limb extending into said base and a spring designed to bear upon said catch member to hold it in normal position, thereby producing a fastener which presents a neat appearance with no sharp external projecting members liable to become inoperative through shipment and careless manipulation.

In carrying out our invention, we make use of the structures illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of one form of fastener in which we have embodied our invention. Fig. 2 is a top plan view of the same. Fig. 3 is a bottom plan view showing the parts assembled. Fig. 4 is a central vertical section. Fig. 5 is a plan view, and Fig. 6 is a side elevation of the actuating spring. Fig. 7 is a front elevation of a modified form of our invention. Fig. 8 is a top plan view of the same. Fig. 9 is a bottom plan view. Fig. 10 is a central vertical section. Fig. 11 is a vertical section taken on line $x-x$ of Fig. 7. Fig. 12 is a plan view of the actuating spring. Fig. 13 is a side view of the actuating spring used in said modification. Fig. 14 is a front elevation of another modified form of our invention. Fig. 15 is a central vertical section. Fig. 16 is a front elevation of the recessed chambered base and chambered top piece with the catch member removed. Fig. 17 is a modified bottom plan view. Fig. 18 is a central vertical section of Fig. 16, and Fig. 19 is a modified bottom plan view.

Similar letters of reference refer to like

parts throughout the specification and drawings..

In the drawings, we have shown our invention as applied to the hinged members a and b of a bag frame. We provide a chambered base plate c secured by means of the rivets c' to one of the bag frame members as a . Rigidly secured to the top of this chambered base piece c in any convenient manner, is the chambered member d , substantially of the configuration illustrated in Figs. 1, 2 and 3. The front walls of both the base piece c and the top piece d are cut away as shown in Figs. 1, 3 and 4, for the reception of the L-shaped catch member e , having the rectangular limbs or flanges e^2 and e^4 , the limb e^4 being made to fit into said cut-away portions as illustrated in Fig. 1, and lie flush with the front face of the base c and member d , the upper margin, however of the catch member e is flanged as illustrated in Figs. 1 and 2 at e' for the purpose of extending into the chambered portion of the top piece d against which it bears to prevent its withdrawal when the parts are assembled. The lower or flanged portion or limb e^2 of said catch member e extends into the chamber of the base piece c and is made considerably longer than the width of the opening in the front of the piece c , so that the elongated flange or limb e^2 is received between and retained in position by means of the side walls of the chambered base piece c , where it lies normally parallel with the top wall c^2 . In this manner, it will be noted that there is left a rectangular space between the flange e^2 and the top wall c^2 of the base c . When the parts are thus assembled, we insert between the wall c^2 and the flange or limb e^2 , the spring f into said rectangular space with the inwardly directed tongues f' of said spring bearing upon the flange or limb e^2 , while the central cambered portion of said spring bears upon the upper wall c^2 of the base c . It will be noted that the spring tongues f' bear upon the forward portion of the flange or limb e^2 and resist any pressure which may be brought to bear upon the front face of the catch member e . If desired, the pressed out projection e^3 may be provided upon the catch member e to form a convenient finger hold. When the parts are thus assembled, the base piece c is riveted to one of the bag frame members as a , and it will be noted that under such circumstances, all of the parts

are held in position without liability to become accidentally separated. When so assembled, the rear edge of the flange e^2 extends to the rear side of the base c and any pressure upon the pressed out or finger piece e^3 will tend to oscillate the catch member e about said rear edge, such tendency being resisted by the spring tongues f' , while the forward extended ends bear upon the front wall of the base c and form stops to prevent the removal of the catch member e .

In the forward portion of the flange e^2 , we have provided the indentations g to receive corresponding projections upon the bag frame member b , so that when the bag frame members are closed as illustrated in the several figures, such projections will be received into the indentations g and firmly secure the bag frame members in locked position. If pressure is now brought to bear upon the finger piece e^3 , said finger piece will be depressed into the chambered top piece d , swinging about the rear edge of the flange e^2 as a fulcrum, thereby elevating the forward portion of said flange e^2 and causing the indentations g to clear the projections h upon the bag frame member b . This particular form of lock, it will be noted is made up of but four pieces, namely, the chambered base c , the top piece d , the catch member e and the spring f .

In the modification illustrated in Figs. 7 to 13 inclusive, we make use of but three separate parts, namely, the chambered base piece i , the spring l and the combined top piece and catch member k . In general appearance, the two modifications are substantially the same. Instead, however, of cutting away the front portion of the chambered top piece k , we leave the same integral and extend its front wall downwardly and provide it with the inturned flange m which extends into the cut-away portion of the base i as shown in Fig. 10, said inturned flange being provided with extensions m' to prevent separation of the parts when assembled, and form convenient stops which will limit the tilting movement of the combined top piece and catch member k . Under some circumstances, however, we may omit these extensions m' entirely so as to leave the flange m of the same length as the opening in the base piece i . With the top piece k in position upon the base i , it will be noted that a rectangular space is left between the flange m and the top wall i' of the base i , and into this space we insert the spring l with its cambered central portion bearing of the top wall i' and the spring tongues l' bearing upon the forward portion of the flange m . In this manner, any tendency to tilt backward the top piece k by pressure upon its forward side, will be resisted by the inwardly directed spring tongues l' bearing upon the inturned flange m .

In order to prevent accidental displacement of the top piece k , in case we do not use the extensions m' upon the flange m , we may make use of the projections k' upon the extreme end walls of the top piece k , such projections extending through apertures o in the top wall of the base i . We may, however, use both the extensions m' and the projections k' , but we do not desire to limit ourselves to the use of both of such parts in conjunction, as either method will secure the top piece k against accidental displacement. Where we use the extensions k' upon the ends of the top piece k , we provide the forward edge of the same with a notch k^2 , which upon tilting back the top piece k around the upper rear edge of the base as a fulcrum is resisted by the pressure of the spring tongues l' . As shown in Figs. 10 and 11, said notch k^2 will come in contact with the forward end of the aperture o and thus limit the extent to which the top piece k can be depressed rearwardly as indicated by the arrow in Fig. 10. We provide the forward portion of the flange m with the indentations p to receive corresponding projections upon the bag frame member b as heretofore described in connection with the modification illustrated in Fig. 3.

The springs illustrated in Figs. 5, 6, 12 and 13 are formed from a single flat piece of metal, centrally cambered as illustrated and having the spring tongues f' and l' formed by cutting away from points remote from the ends of the piece of metal towards the ends as illustrated in Figs. 5 and 12, with such tongues upwardly bent in the opposite directions from the camber of the metal. Under ordinary circumstances and in the locks shown, the metal between the tongues f' as illustrated in Fig. 5 may be cut away. There are, however, certain conditions where pressure brought to bear upon the spring tongues l' of the structure illustrated in Figs. 12 and 13, might tend to tilt the spring because of the fact that the bearing points of such tongues lie close to the edge of the spring. In order to overcome this tilting tendency, where it exists, we leave a central projection l^2 as shown in Fig. 12, so that the actual bearing points of the spring shall be in substantial alinement. In this manner, all tendency to tilt under pressure brought to bear upon the tongues l' and the central cambered portion l^2 will be completely overcome.

In the modification illustrated in Figs. 14 to 19, inclusive, we make use of the recessed chambered base piece n , the recessed chambered top piece q and the catch member t . In general appearance, the various modifications are substantially the same. Instead, however, of cutting away the front portion of the chambered base n and chambered top piece q , we leave the metal inte-

gral and press their front walls rearward as at *s*, in order to give additional strength to the parts. It will thus be seen that instead of cutting the metal away as in Figs. 1, 3, 4, 5 7, 9 and 10, we form a recess in the structures illustrated in Figs. 14 to 19, inclusive, by simply pressing the metal from the front wall rearwardly, thereby providing a recess for the reception of the catch member *t*, said 10 recess having a shape which conforms to the shape of the catch member *t*, which it is to receive and of such a depth that when such catch member is located within said recess, the front wall of said catch member will lie 15 flush or in the same plane with the front walls of the chambered base *n* and top piece *q*, and still leave sufficient space between the rear wall of the catch member *t* and the front walls *s* of the recessed parts to permit 20 said catch member to freely operate when depressed. In Figs. 16 and 17, we have entirely dispensed with the springs *l* and *f*, by forming suitable spring tongues *u* integral with the chambered base *n*. Said spring 25 tongues *u* are forced out of the metal forming the upper side of the chambered base *n* and bent downwardly a distance sufficiently to engage with the upper forward surface of the right-angled flange *r* of the catch mem- 30 ber *t*, which extends into the chambered base *n*.

In the modification illustrated in Fig. 19, we employ a combined catch member and spring. In this case, the inturned flange *r* of 35 the catch member *t* is provided with suitable extensions or spring tongues *r'*, the outer ends of which are designed to bear against the upper and inner surface of the chambered base *n*. It will thus be seen that we 40 have provided a fastener in which we have reduced the actual number of parts to three or four, and that when assembled, and in position upon a bag frame or other device, the fastener presents a neat and tasty appear- 45 ance with no sharp external projections and with the operating parts so protected as to leave practically no liability for displacement without breakage. The parts all are of such a shape as to lend themselves readily 50 to manufacture by the use of suitable punches and dies from ordinary sheet metal.

We claim:

1. In a bag fastener, the combination of a 55 chambered base having an opening in its front wall, a catch member lying in said opening flush with said front wall and having a flange extending within said base and fulcrumed against the rear wall thereof, and a spring located between said flange and the 60 top wall of said base.

2. In a bag fastener, the combination of a chambered base, and a chambered top piece rigidly secured to said base, the front walls of said base and of said top piece having a 65 cut-away portion, a catch member located in

said cut-away portion and having a right angled flange extending into said chambered base and a spring bearing upon said flange to hold said catch member in position.

3. In a bag fastener, the combination of a 70 chambered base, an L-shaped catch member having one of its limbs located within said base and fulcrumed against the rear wall thereof and its other limb lying in a cut-away portion of and flush with the front wall 75 of said base and a spring located within said base and bearing upon the upper wall thereof and upon said catch member to retain the same in normal position.

4. In a bag fastener, the combination of a 80 chambered base, a chambered top piece rigidly secured to said base, said base and top piece each having portions of their front wall cut-away, an L-shaped catch member 85 having one of its limbs lying in said cut-away portions flush with the front walls of said base and top piece respectively and its other limb extending into said base and a spring 90 within said base bearing upon said last named limb.

5. In a bag fastener, the combination of a 95 base having a chamber in its underside, and having a portion of its front and top walls cut-away, an L-shaped catch member having one limb thereof extending into said chamber 100 and its other limb lying in said cut-away portion, flush with said front wall and a spring lying between and bearing upon the top wall of said base and the first named limb of said catch member.

6. A spring for bag fasteners consisting of a flat piece of metal centrally cambered and having integral inturned spring tongues.

7. A spring of the class described, consisting of a flat piece of metal centrally cambered 105 and spring tongues cut-away from the body of said piece of metal.

8. A spring of the class described, consisting of a flat piece of metal centrally cambered and spring tongues formed by cutting curved 110 diagonal slits in one edge from points adjacent the center towards the ends of said flat piece of metal.

9. A fastener for bag frame and the like, comprising a chambered base having a por- 115 tion of its front and top walls cut out, an L-shaped catch member having one limb lying in said cut-out portion of the base and flush with its front wall, the other limb extending into said base and a spring bearing 120 upon said catch member to hold it in normal position.

This specification signed and witnessed this 13th day of October 1906.

CHRISTIAN HIERING.
ALBERT FULLER.

Witnesses:

WM. E. HOWELL,
FREDK. C. FISCHER.