

No. 706,272.

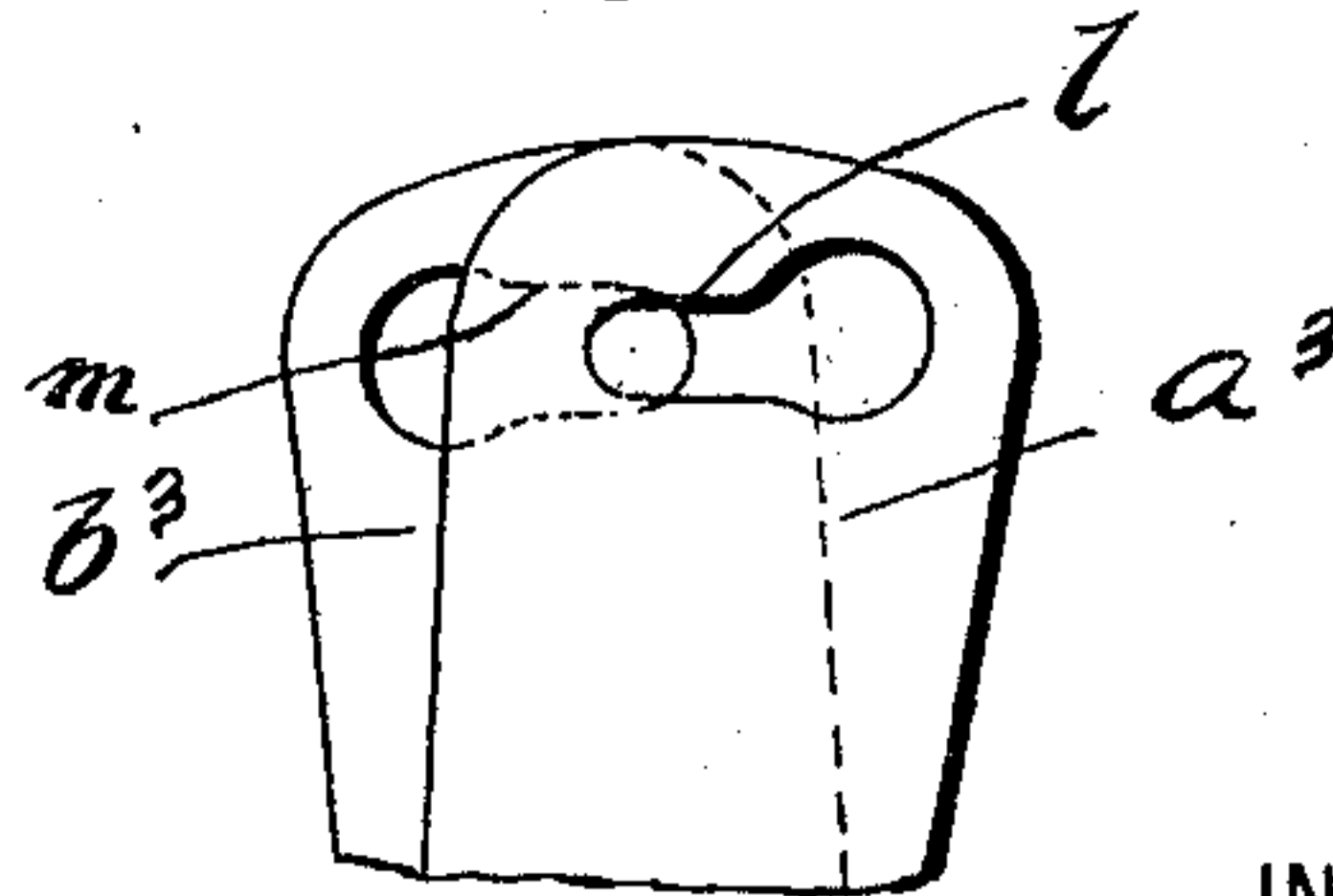
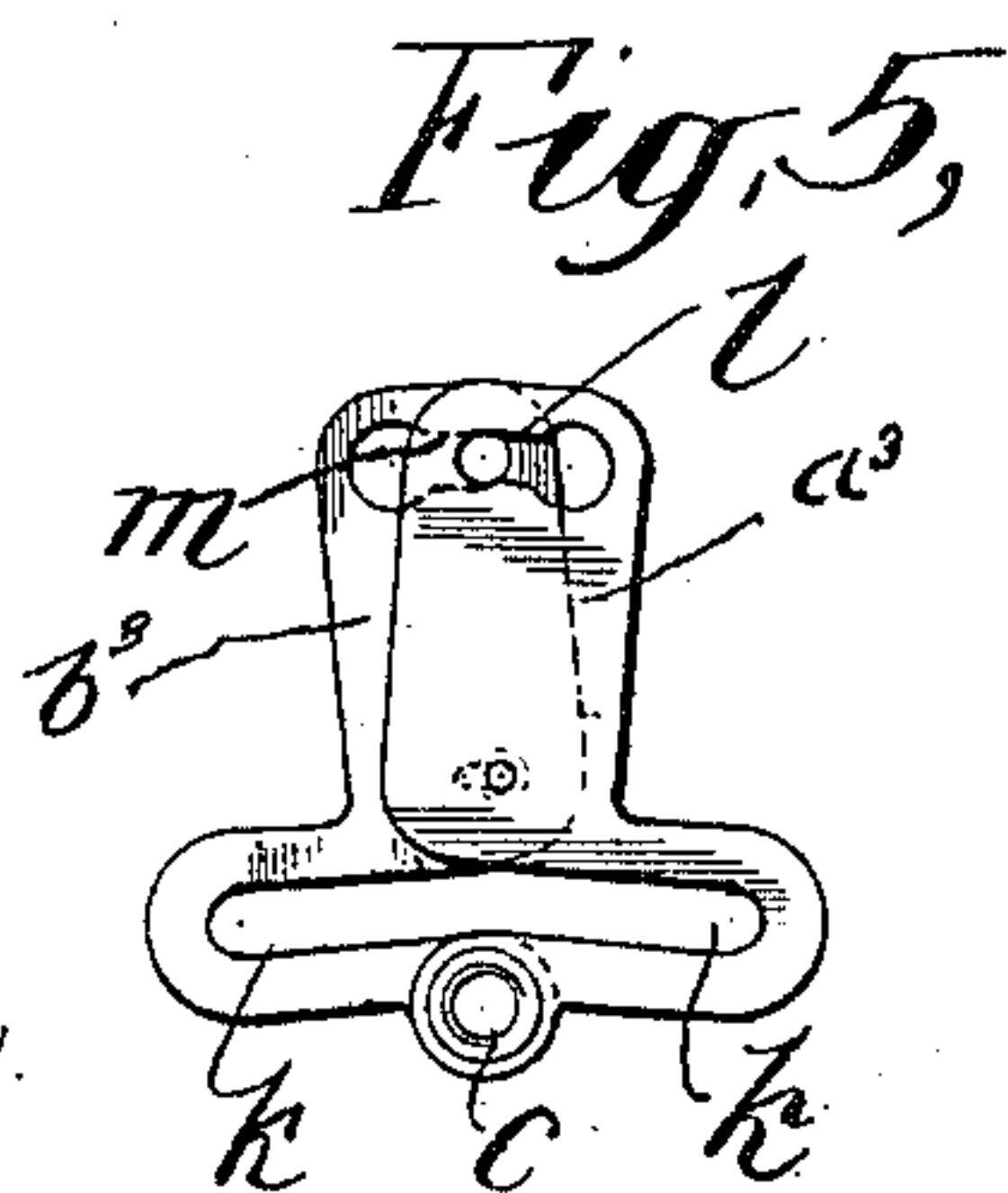
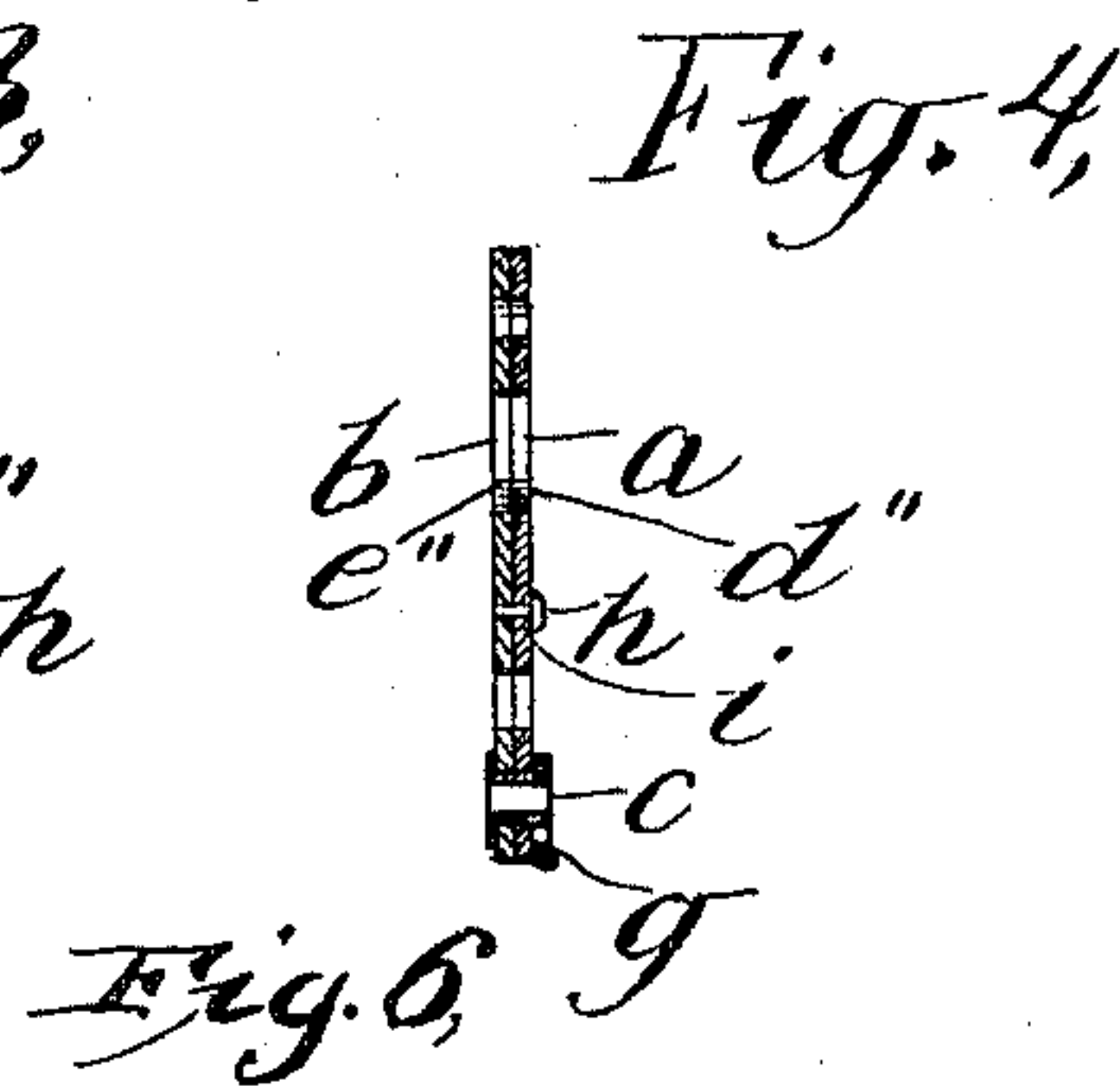
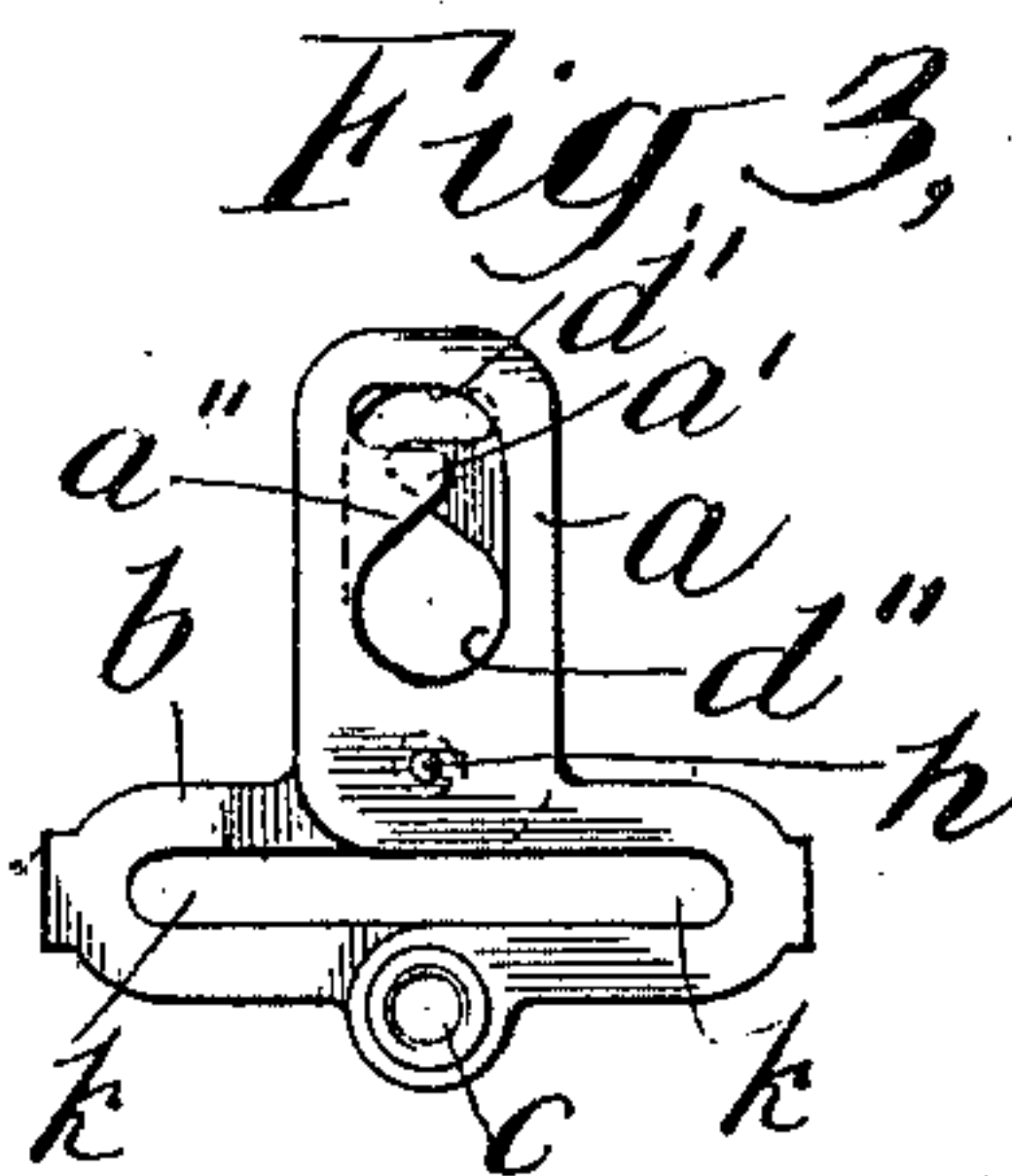
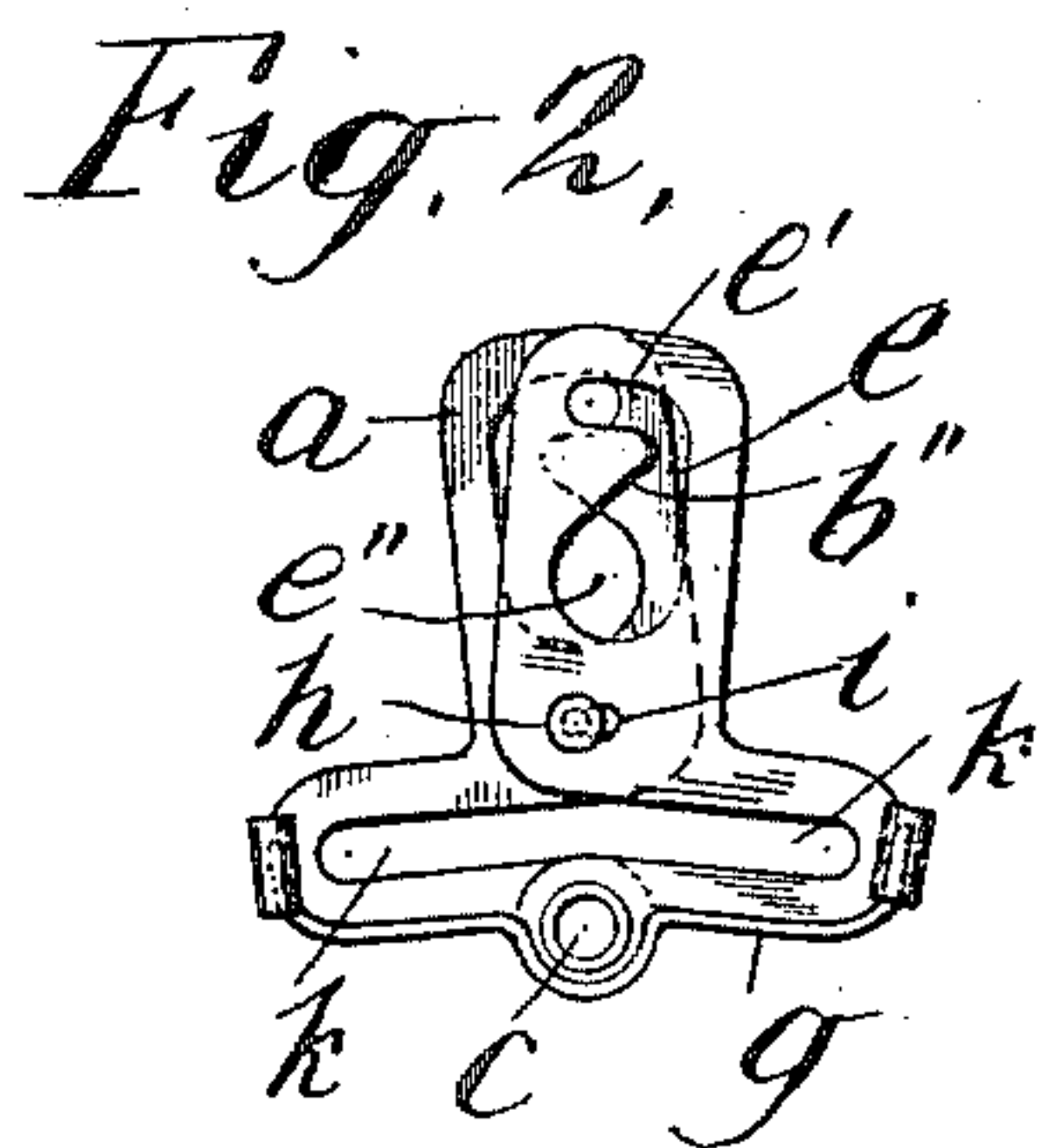
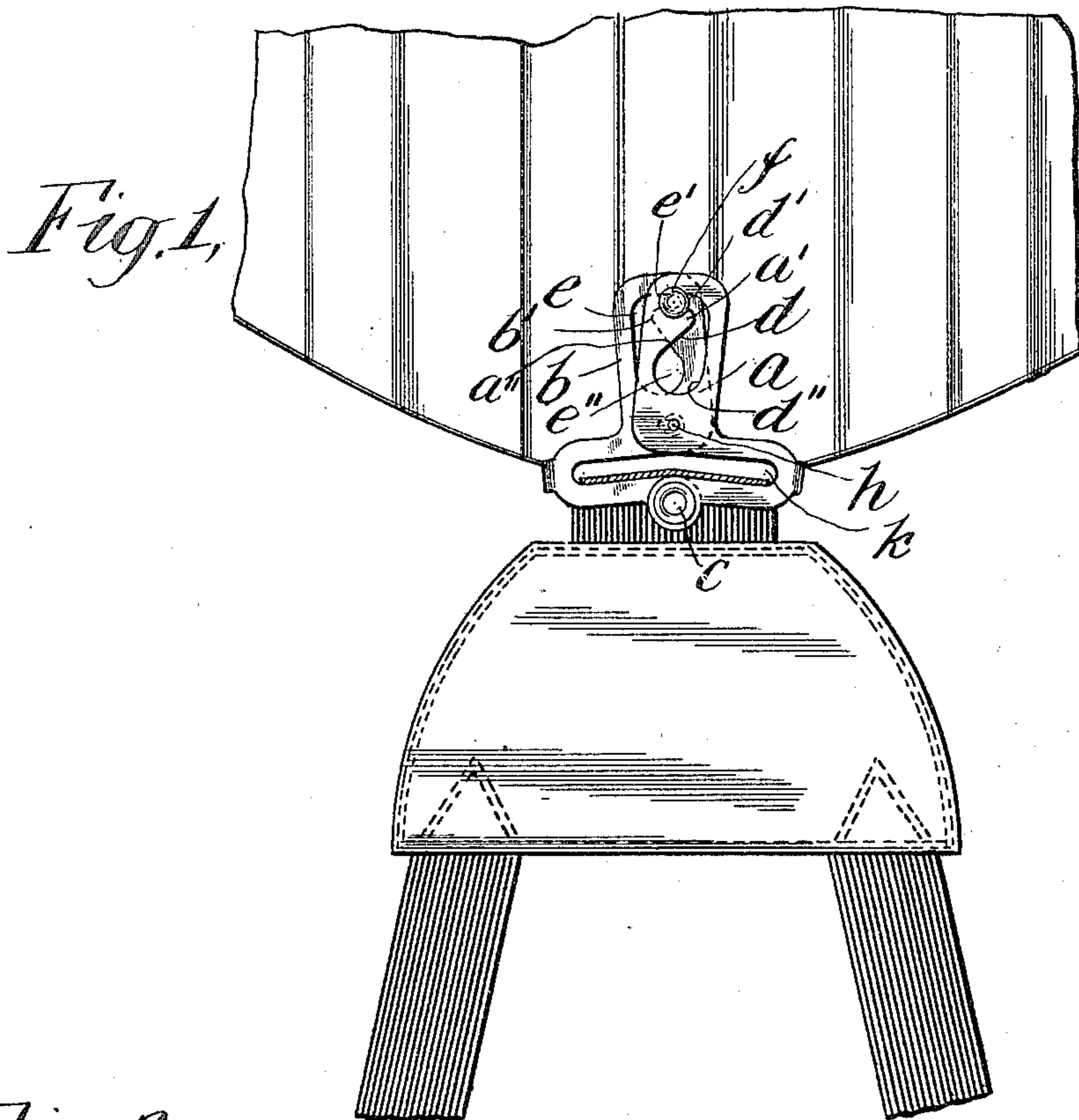
Patented Aug. 5, 1902.

C. W. STIMSON.

CLASP.

(Application filed Dec. 5, 1901.)

(No Model.)



WITNESSES:

Harry D. Goss
A. H. Goss

INVENTOR

C. W. Stimson

BY

Chapin Hayward & Marble
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES W. STIMSON, OF NEW YORK, N. Y.

CLASP.

SPECIFICATION forming part of Letters Patent No. 706,272, dated August 5, 1902.

Application filed December 5, 1901. Serial No. 84,760. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. STIMSON, a citizen of the United States, residing in New York, in the county and State of New York, have invented certain new and useful Improvements in Clasps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in clasps adapted to coact with headed studs and the like; and it consists in the novel construction of the clasp, and particularly in the use of overlapping members having a spring-hinge connection with each other and having in their overlapping portions openings which are adapted to permit the passage of the head of a stud, but are closed against the lateral escape of the stud, the openings of the two hinged members overlapping and being more or less completely in registry, according as the spring is under greater or less tension.

My invention also consists in the form of such openings and in the combination of such clasp with a stud.

My improved clasp is adapted to be used in connection with stocking-supporters for securing said supporters to the studs of corsets or to be used as a suspender cast-off clasp and for various other purposes.

The objects of my invention are to prevent accidental opening of the clasp and the consequent release of the stud and to make the clasp as simple and compact as possible and easy to operate.

I will now proceed to describe my invention with reference to the accompanying drawings, illustrating one form of said invention, in which—

Figure 1 is a front view of one form of the clasp shown in connection with a stocking-supporter and corset and shown in engagement with the stud at lower end of such corset. Fig. 2 is a rear view of the clasp shown in Fig. 1. Fig. 3 is a front view of the clasp, showing the parts pressed together into position to permit engagement with or disengagement from a stud. Fig. 4 shows a section of the clasp. Fig. 5 is a front view of another form of clasp, differing from the clasp shown in the preceding figures in the form of

the holes; and Fig. 6 is a view, on enlarged scale, of the upper portion of Fig. 3.

Referring first to Figs. 1 to 4, inclusive, of the drawings, the clasp comprises two members *a* and *b*, hinged together at their lower ends at *c*. The main portions of these members *a* and *b* overlap, and in such overlapping portions are two openings *d* and *e*, one in each of such members. The sides of the said members *a* and *b*, which bound the said openings, are continuous, without joint or break, and hence there are no points, edges, or hooks which may catch in delicate lace and the like and so do damage. Each of these openings is divided by means of a projection or shoulder *a'* or *b'* into an upper slot-shaped portion *d'* or *e'*, adapted to receive the shank of a stud *f*, and a lower larger portion *d''* or *e''*, adapted to permit the passage of such stud. The slots *d'* and *e'* may overlap slightly when the parts are in normal position, and the larger portions *d''* and *e''* preferably overlap when the parts are in normal position to an extent sufficient to permit the passage of the head of the stud through such registering or overlapping portions of such openings. The slot *d'* of the uppermost member *a* is preferably wider than the slot *e'* of member *b*, so that when the stud is held by the clasp it will bear against the edges of the slot of but one member of the clasp. This makes it impossible for pressure on the stud or on the clasp as a whole to open the clasp unintentionally. In order to hold the parts of the clasp normally in the closed position—namely, in the position shown in Figs. 1 and 2—a spring *g* is employed, which in the construction shown in the drawings is separate from the two members *a* and *b*, but is secured thereto in such manner that it tends normally to hold said members apart, the members *a* and *b* being provided with tongues of metal which are bent over in the making of the clasp, and so to embrace the ends of the spring *g* and hold the same tightly. The lower edges *a''* and *b''* of the projections *a'* and *b'* are inclined at such angle that when the shank of the stud has been inserted through the larger portions *d''* and *e''* of the openings *d* and *e* and the clasp or the stud is pulled the shank of the stud sliding along these inclined edges *a''* and *b''* will draw the parts of the clasp to-

gether against the tension of the spring *g* until the shank reaches the slots *d'* and *e'*, whereupon the members *a* and *b* are free to move apart under the influence of the spring, the shank of the stud entering the slots *d'* and *e'*, and so being held in such manner that it may be separated from the clasp only by pressing the clasp members *a* and *b* together and moving the stud or the clasp with respect to the stud until the shank of the latter is in the larger portions of openings *d* and *e*. A limiting-stud *h*, carried by one of said members and working within a slot *i* of the other member, serves to limit the degree of separation of the members *a* and *b*, and also by reason of its enlarged head to hold said members together.

The clasp may be attached to a stocking-supporter or other device with which it is to be used in any suitable manner. I have shown its two members *a* and *b* as provided with corresponding slots *k*, which together form a single slot adapted to receive a strip of webbing which may form a portion of the stocking-supporter; but I do not limit myself to this method of attachment.

In the use of the clasp to connect it to a stud the head of the stud is passed through the larger portions *d''* and *e''* of openings *d* and *e*, and the clasp or the stud, as may be most convenient, is pulled in such way as to cause the shank of the stud to pass to the slot-shaped portions *d'* and *e'* of the openings of the clasp, the shank sliding along the inclined edges *a''* and *b''* and pressing the members *a* and *b* together until the slots *d'* and *e'* are reached, when the members of the clasp are separated by the spring *g*, the stud being held securely. To release the stud, the members *a* and *b* are pressed together, and the stud may then be moved into the larger portions of the openings *d* and *e* and detached from the clasp.

Heretofore a clasp adapted for connection to a stud has been used which consists of two spring-hinge-connected members having coacting jaws which when brought together by the spring grasp between them the shank of a stud. My clasp differs from the said former clasp in that instead of using jaws I provide the two members of the clasp with openings which are closed against the lateral escape of the stud, so that even though the parts of the clasp be pressed together accidentally such parts will not separate from the stud until the clasp is also lifted from the stud, and also in that it is not necessary for the user of the clasp to see the clasp or the stud while bringing the two together, it being easy to place the head of the stud through the openings of the clasp without other guide than that afforded by the sense of touch and then to pull upon either the stud or the clasp in such manner as to cause the clasp to operate and grasp the stud. Similarly it is easy to open the clasp by pressing the members together without looking at it.

This property of the clasp especially adapts it for securing stocking-supporters to garments and for use as a suspender cast-off. The objections to the former clasp, above mentioned, are that the members of it may be pressed together accidentally while the device is in use, and when so pressed together they are immediately released from the stud, and that it is difficult to engage the clasp with its stud when the parts are not in full view.

In Fig. 5 I have illustrated another form of clasp differing from that shown in Figs. 1 to 4, inclusive, in the form of the openings which receive the head and shank of the stud. In this second form of clasp these openings are slots enlarged at one end to permit the passage of the head of the stud and contracted at the other end to receive the shank thereof, but to prevent the passage of the head. This form of clasp, like that first illustrated and described, differs from the prior clasp above mentioned in that instead of employing jaws which grasp the stud between them, but are incapable of being secured to the stud separately, the members of my clasp are provided with overlapping openings each adapted in one portion to permit the passage of the head of the stud and in another portion to receive the shank of the stud, while preventing the passage of the head. Such a clasp, whether of the form shown in Fig. 1 or of that shown in Fig. 5, grasps the stud more securely than a jaw-clasp, for in order to release the stud it is necessary not only to press the members of the clasp together, but also to lift the clasp from the stud, and no movement of the wearer can press the members of the clasp together and simultaneously lift the clasp from the stud accidentally.

The contracted portion *l* of the slot in the upper member *a*³ of the clasp shown in Fig. 5 is made somewhat narrower than the contracted portion *m* of the slot in the lower member *b*³ in order that pressure on the stud or on the clasp as a whole may not open the clasp unintentionally. This is clearly shown in Fig. 6, where the difference in width is somewhat exaggerated.

It is obvious that the structure of the clasp may be varied greatly, while retaining the characteristic features of my invention, and I do not limit myself to the particular construction of the clasp.

I do not limit myself to the use of any particular form of opening in the members of the clasp, or to any particular method of pivoting the two members together, or to any particular means of applying the spring. Any suitable spring-hinge connection between the two members of the clasp may be employed.

What I claim is—

1. A clasp comprising two members having a spring-hinge connection with each other, and having overlapping portions, in which are overlapping openings, adapted each to permit the passage of the head of a stud

through it, and in conjunction with the other opening, to prevent escape of such stud, when the parts are in normal position, the portions of said members which bound said openings
5 being continuous and completely inclosing said openings.

2. A clasp comprising two members having a spring-hinge connection with each other, and having overlapping portions in which are
10 overlapping openings, each such opening being bounded continuously and comprising a larger portion adapted to permit the passage of the head of a stud through it, and a narrower or contracted portion arranged at an
15 angle to said larger portion.

3. A clasp comprising two members having

a spring-hinged connection with each other, and having overlapping portions in which are overlapping openings, each such opening being bounded continuously and comprising a
20 larger portion adapted to permit the passage of the head of a stud through it, and a narrower or contracted portion, the contracted portion of the opening of one member being
25 narrower than that of the other.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES W. STIMSON.

Witnesses:

H. M. MARBLE,
A. H. PERLES.