

(No Model.)

W. H. RUTTY.
FASTENER FOR GLOVES.

No. 547,360.

Patented Oct. 1, 1895.

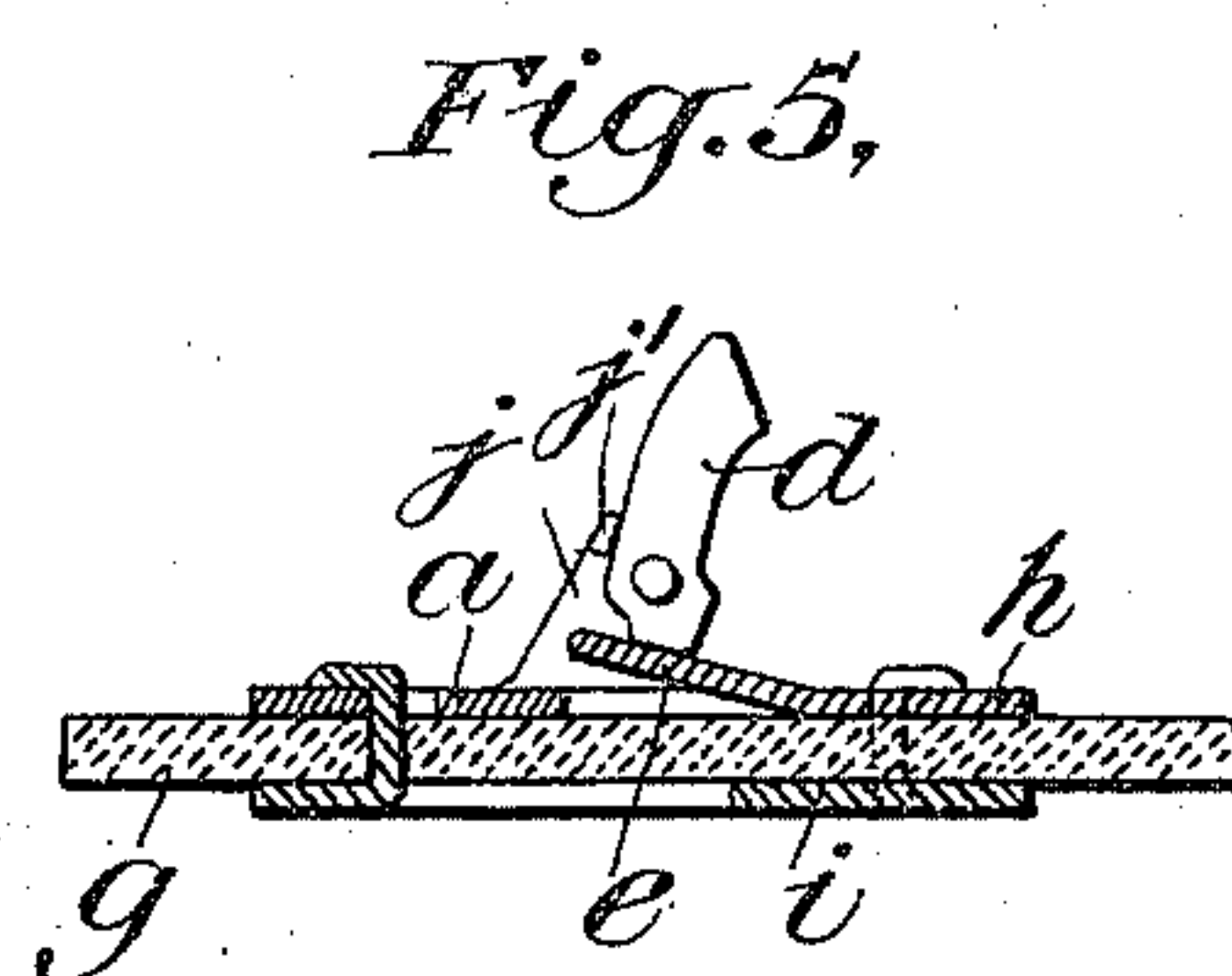
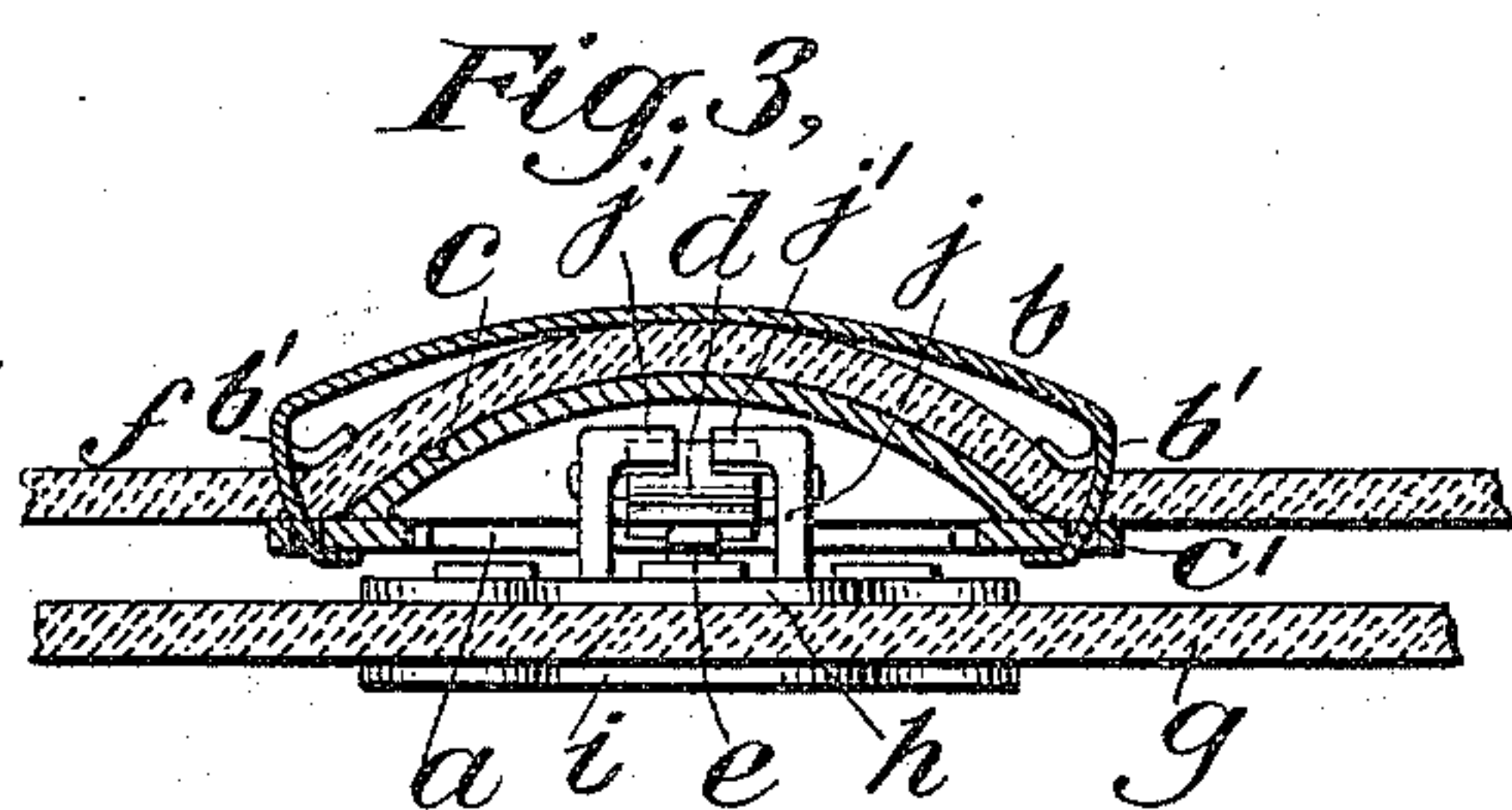
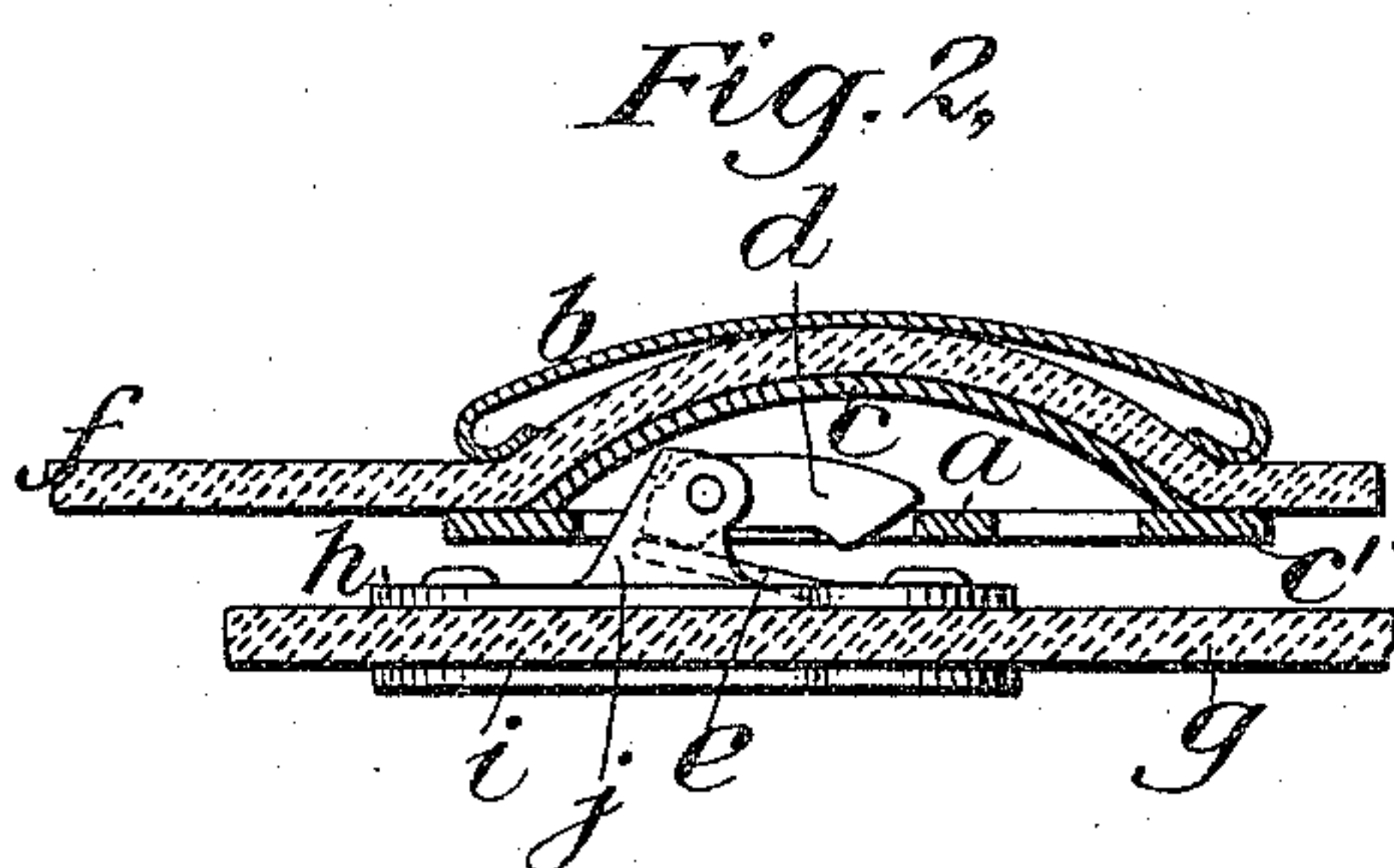
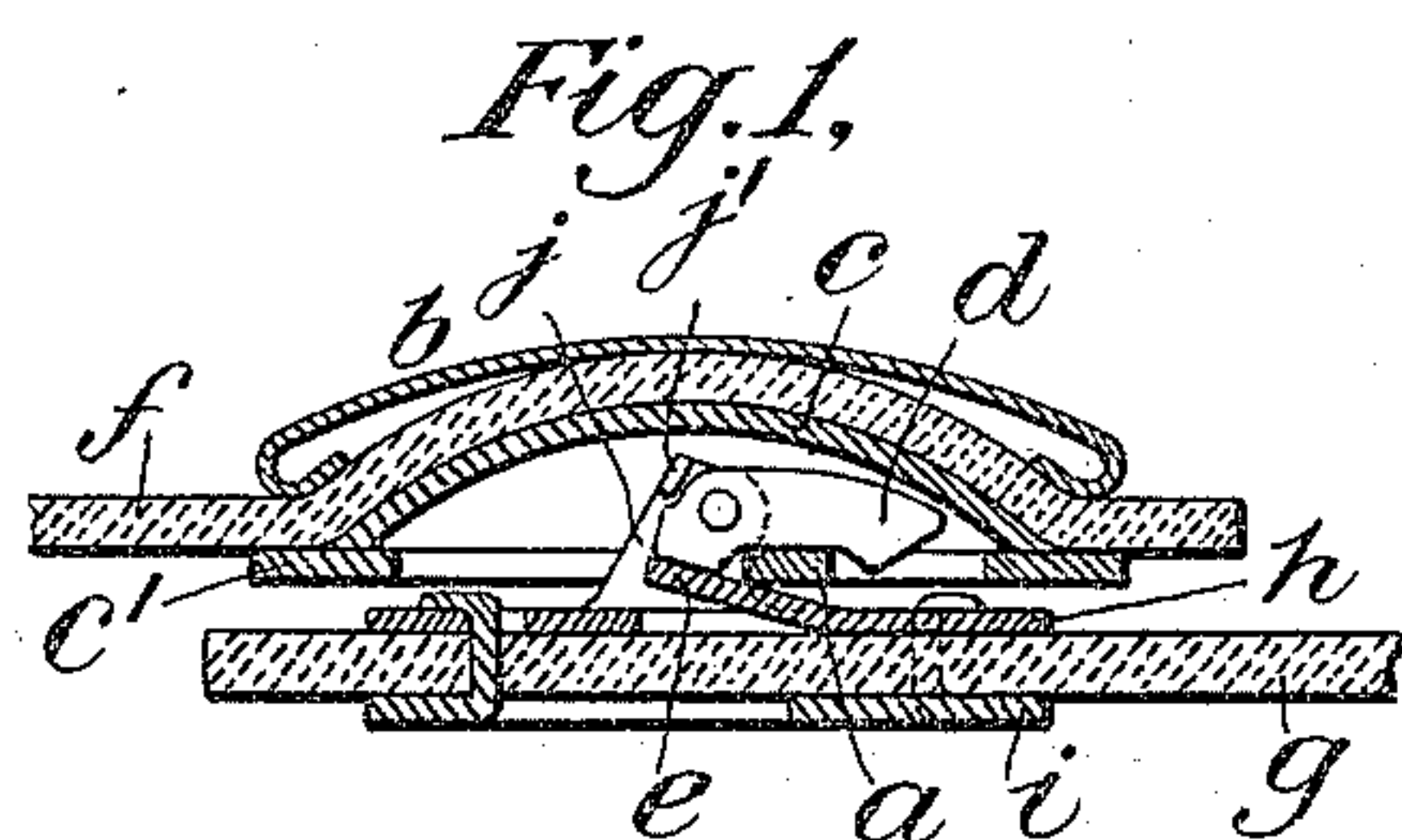
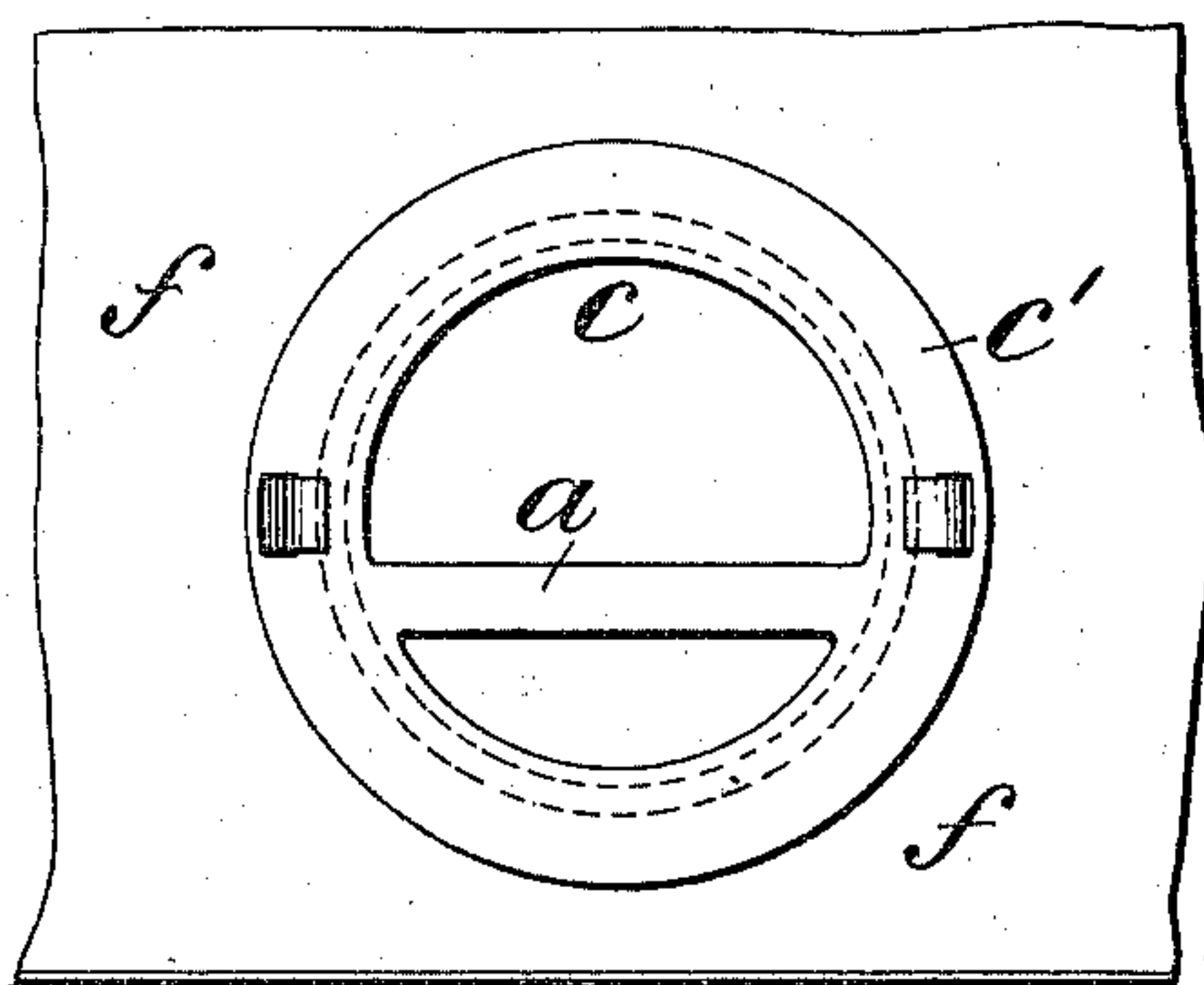


Fig. 4,



Witnesses:-

N. H. Raymond
F. M. Eggelston.

Inventor:-

William H. Rutty
By *Redding & Kiddle*
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM H. RUTTY, OF NEW YORK, N. Y.

FASTENER FOR GLOVES.

SPECIFICATION forming part of Letters Patent No. 547,360, dated October 1, 1895.

Application filed December 17, 1894. Serial No. 532,056. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. RUTTY, a subject of the Queen of Great Britain, and a resident of the city and county of New York, State of New York, have invented certain new and useful Improvements in Fasteners for Gloves, &c., of which the following is a specification, reference being had to the accompanying drawings, forming part hereof.

This invention relates to fastening devices—such as are employed in gloves, shoes, and other wearing-apparel, purses, umbrella-cases, and innumerable other articles in which it is desirable to have a secure fastening and one that may be readily opened or unfastened and closed or fastened, as desired.

The improved fastener embodying this invention is so constructed as to be positively locked against working strains, so that the members cannot be sprung apart under such working strains, and to this end is provided with locking or engaging parts, including a pivoted lever, said parts being adapted to be locked together against longitudinal or working strains, but yieldingly held together by said lever against movement in a direction about at right angles to such working strains.

One of the objects of this invention is to attain in a fastener, as above set forth, the advantageous feature that the members may be brought together without other manipulation than simply placing one over the other, whatever may be the position of the pivoted lever, and the two members are constructed so that protruding parts of the inner member, including said lever, will enter the outer member when the two members are moved together, and the members will then assume their locked position by this movement and an accompanying or additional longitudinal movement of the members relatively to each other.

The accompanying drawings illustrate an embodiment of my invention.

Figure 1 is a vertical longitudinal section taken centrally through both members of the fastener and shows the members locked together. Fig. 2 is a vertical longitudinal section, but with the lower or inner member of the fastener in side elevation, and shows the position of the members when the outer member has been placed over the inner member and the

inner member has entered the outer member and the members are ready to be locked by a slight longitudinal movement relatively to each other. Fig. 3 is a transverse section taken centrally through the outer member, but with the inner member in rear elevation. Fig. 4 is an underneath plan view of the outer member. Fig. 5 is a separate vertical longitudinal section of the inner member, showing the pivoted lever in extreme upper or open position.

The lower or inner member of the fastener, as shown in the drawings, comprises a base-plate *h*, secured to the outer flap or part *g* of the garment or article by means of prongs passing through the material of the garment or article from a lower plate *i* and clinched upon said base-plate *h*, and this base-plate *h* is provided with upwardly-extending lugs *j*, suitably shaped to lock the engaging part of the other member of the fastener, and in these lugs *j* is pivoted a swinging lever *d*, and a spring or spring tongue *e*, struck up from the base-plate *h*, bears directly against said lever. The construction above described may be modified, and the manner of securing this inner member to the article may be changed within the purview of this invention; but the movement of the lever should be so limited that when in extreme open position it may be closed by pressure such as results from placing the other member over it, and this is shown as accomplished by limiting said opening movement by the stops *j' j'*, extending laterally from the lugs *j j*, and the extreme open position is shown in Fig. 5, and the lever should be so constructed that when it is in closed position and the members are placed together the lever will ride over the engaging part of the outer member upon relative longitudinal movement of the members, or so that the meeting edge of the pivoted lever is farther out than, or, in the position shown, is above, the opposed meeting edge of the engaging part of the outer member, and this is shown as accomplished by beveling the end of the lever, so that its extreme end will be farther out than or above said engaging part of the outer member when the lever is closed and the parts are together, but not locked, as illustrated in Fig. 2. The lever is of such length that it will enter the outer member, whatever

may be its position when the members are moved together.

The upper or outer member of the fastener is provided with a piece or plate *c*, of concave or dish-shaped form and having a cross-bar *a*, which forms the engaging part of the upper member. As shown, a flat lower plate *c'*, of somewhat annular form and having the cross-bar *a* integral therewith, is secured as by soldering to or may be formed upon said concave plate *c*; but it is evident that the cross-bar may be soldered or riveted to the concave plate *c* or flat plate *c'*, and said plate *c'* may be merely a flange upon the concave plate *c*. The upper or outer part of this outer member of the fastener is a cap *b*, shown as of convex form and resembling a button in appearance, and this cap may be ornamented in any desired manner and may constitute the only exposed part of the fastener when the members are locked together. The concave plate *c* and cap *b* are held together by prongs *b' b'*, passing through the upper part or flap *f* of the garment or article, and the material is arched or bulged upward and very tightly clamped between the two parts. Other suitable means may be employed for holding this outer member to the garment or article and the construction of this member of the fastening device may be modified without departing from this invention. It will be observed that by reason of the concave shape of the plate or piece *c* the outer member is adapted to fit over and inclose the protruding parts of the inner member, said protruding parts comprising the lever *d* and lugs *j j*, and the opening shown in Figs. 1 and 2 at the left of the cross-bar *a* is sufficiently large to permit the entry of these protruding parts of the inner member when the outer member is placed over the inner member. The concave plate *c* will act as a guide in swinging the lever into closed position if said lever is not in closed position when the members are placed together.

In the use of my fastener the lever *d* will be left in open position by an opening movement, and therefore the lever will frequently be in open position when the fastener is operated to close or lock it. It frequently happens, however, that the lever is thrown into closed position after the fastener has been opened and before it is again closed or locked. It is highly desirable in fasteners of this character that no special skill or knowledge shall be required of the user and that the members may be locked by an exceedingly - simple movement.

My improved fastener is so constructed that it is only necessary for the user to so adjust the members that the protruding parts of the inner member will enter the opening of the outer member, and after this has been done, whatever may be the position of the lever *d*, the longitudinal working strain will throw the members into locked position. If the lever *d* is in closed position when the members are

brought together, the lever and its lugs will enter the opening of the outer member and the parts will then assume the position shown in Fig. 2. As will be seen, the extreme end of the lever will be slightly higher than the adjacent edge of the cross-bar *a*, and upon a slight longitudinal movement of the two members relatively to one another the end of the lever *d* will ride over the cross-bar *a* and the parts will assume the fully-locked position shown in Fig. 1. As these fasteners are usually subjected to longitudinal strains at all times, this slight longitudinal movement will usually be effected by such strains without any further manipulation.

When the lever *d* is in open position, as shown in Fig. 5, and the parts are brought together, the user has only to so place the outer member over the inner member that the lever *d* will enter the opening of the outer member, and when the members are thus brought together the concave plate *c* will act as a guide to swing the lever into closed position, and a slight longitudinal movement accompanying or following this vertical movement will cause the members to assume their fully-locked position. From the above it will be evident that whatever may be the position of the lever the operator need only cause the protruding part of one member to enter the opening of the other, and that in no case is any direct manipulation of the lever required.

When the parts are in locked position, the undercut edges of the lugs *j* are in engagement with the cross bar *a* and cannot be disengaged by longitudinal strains, and can only be separated under longitudinal strains by a sufficient force to break the fastener. The lever bears down upon the cross-bar *a* with a spring-pressure, and thus yieldingly holds the members together against vertical movement; but when it is desired to unlock or open the fastener it is only necessary to positively move upward the end of the outer member, and this movement will cause the lever to swing into open position and will cause the members to be separated or unlocked.

In the case of a tight-fitting garment a slight advantage is gained in closing the fastener by having the lever in open position when performing such closing operation, as it will then not be necessary to cause the parts to overlap each other to such an extent as when the lever is in closed position. It is of course evident that the amount of swinging movement of the lever may be greater or less than is shown in the drawings and that in some constructions the spring may be adjusted so as normally hold the lever in closed position.

From the above it will be evident that some of the advantages capable of attainment in my improved fastener may be summed up as follows, viz: a button-like appearance, a positive locking of the parts together against longitudinal or working strains, closing of the fastener by mere insertion of the protruding part of one member into the opening of the

other member, and opening of the fastener by merely moving the members away from each other in a direction about at right angles to the working strains.

5 The terms "upper" and "lower," employed in describing the construction and operation of my improved fastener, are adopted for convenience and clearness in description and are not intended to limit the construction to the
10 arrangement shown of the outer member vertically over the inner member, as the members will frequently be side by side or in oblique or reversed positions.

15 It will be obvious that various modifications may be made in the structure above described without departing from my invention. I do not, therefore, limit my invention to the specific construction shown and above particularly described; but

20 What I claim, and desire to secure by Letters Patent, is—

1. A fastener comprising two members, the outer member containing an engaging part and the inner member containing a pivoted
25 lever and said pivoted lever having a meeting edge farther out than the opposed meeting edge of the engaging part on the outer member so that when the outer member is placed over the inner member with the lever of the
30 inner member in closed position, the lever of the inner member will move into engagement with the engaging part of the outer member upon relative longitudinal movement of the members and the members will be locked together against longitudinal strains, substantially as set forth.

2. A fastener comprising two members, the outer member having an opening therein and an engaging part and the inner member containing a pivoted spring lever and an engaging part, and said lever and engaging part of the inner member being constructed so as to enter the opening of the outer member and said lever having a meeting edge farther
40 out than the opposed meeting edge of the engaging part of the outer member so that the lever when in closed position will ride over the said engaging part upon relative longitudinal movement of the members, substantially as set forth.

50 3. A fastener comprising two members, the outer member having an opening therein and

an engaging part, and the inner member having a pivoted lever and lugs with which said engaging part of the outer member is engaged
55 when the fastener is closed, said lever and lugs being constructed so as to enter the opening of the outer member in all positions of said lever, and said lever having a meeting edge farther out than the opposed meeting
60 edge of the engaging part of the outer member so that said lever and engaging part will be engaged by relative longitudinal movement of the members of the fastener, substantially as set forth.

4. A fastener comprising two members, the outer member having a concave guide upon the lower surface of the outer part or flap of the article and a cross-bar below said guide surface and a convex cap upon the upper surface of said outer flap, and the inner member
70 having a lever pivoted in lugs extending upward from a base plate, and a spring for actuating said lever, the lever and lugs being adapted to enter the outer member in all positions of said lever and the pivoted lever having a meeting edge farther out than the opposed meeting edge of the engaging part of the outer member whereby the lever if open is thrown by said guide into closed position
80 or if closed rides over said cross-bar upon relative longitudinal movement of the members of the fastener, substantially as set forth.

5. A fastener comprising two members, the outer member having a cap, concave guide
85 piece and cross-bar, and the inner member having locking lugs and a lever pivoted in said lugs and a spring for said lever and a stop to the upward movement of said lever, said lever and lugs being constructed so as to
90 enter said outer member in all positions of said lever, and said lever having a meeting edge farther out than the opposed meeting edge of the cross-bar so that the lever when in closed position will ride over said cross-bar
95 upon relative longitudinal movement of the members of the fastener, substantially as set forth.

This specification signed and witnessed this 14th day of December, 1894.

WILLIAM H. RUTTY.

In presence of—

HENRY D. WILLIAMS,
EDITH J. GRISWOLD.