

(No Model.)

F. E. HALL.
GLOVE FASTENER.

No. 545,493.

Patented Sept. 3, 1895.

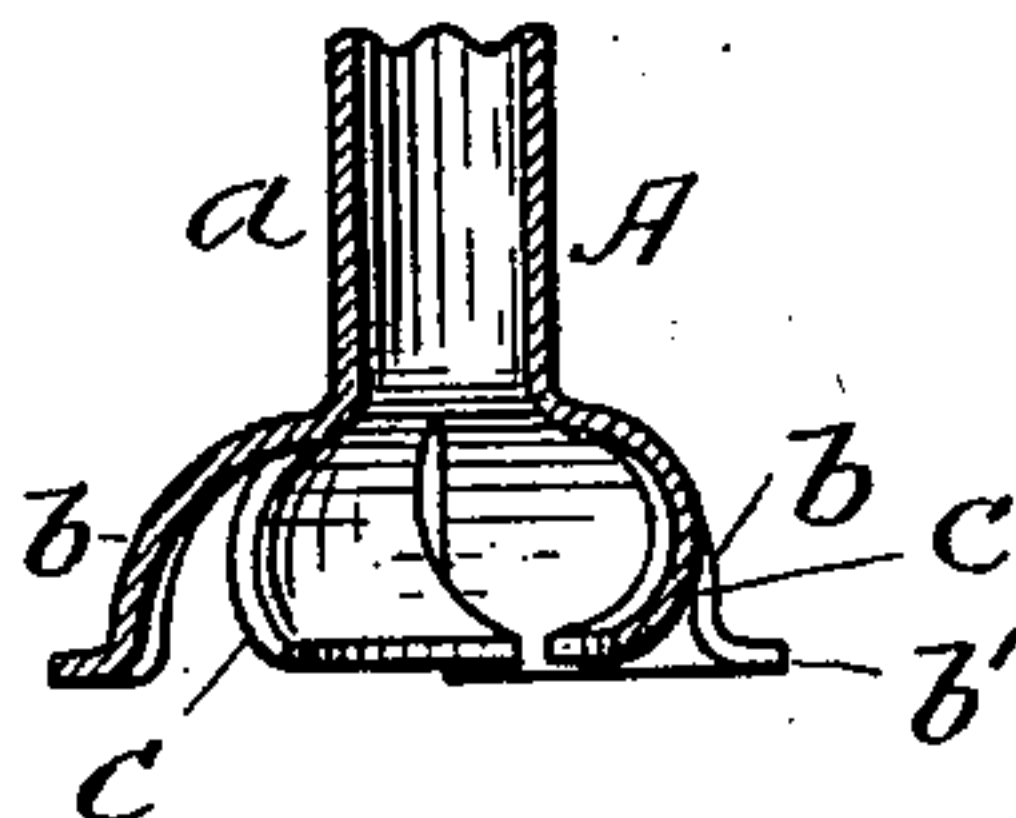


Fig. 4.

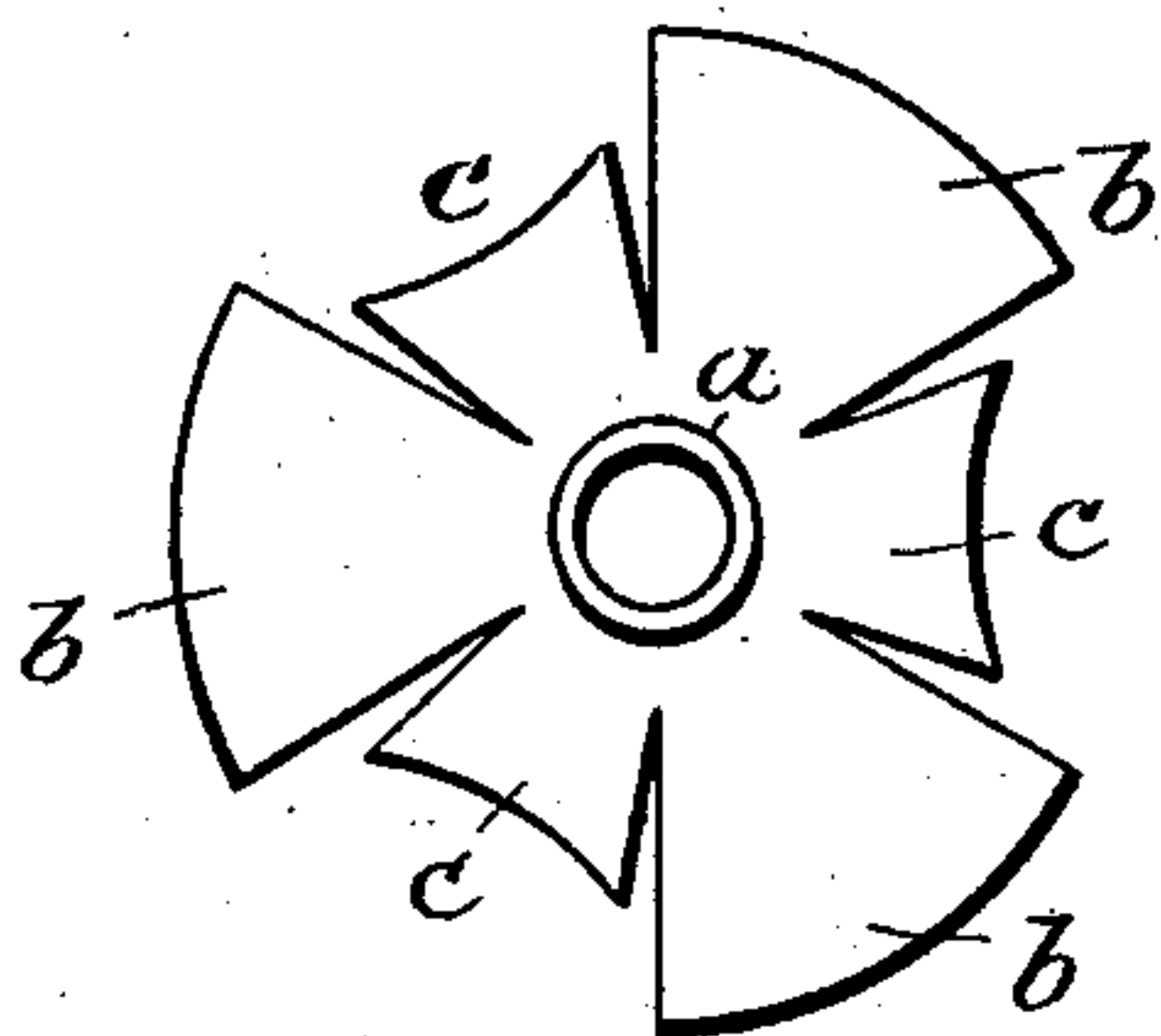


Fig. 1.

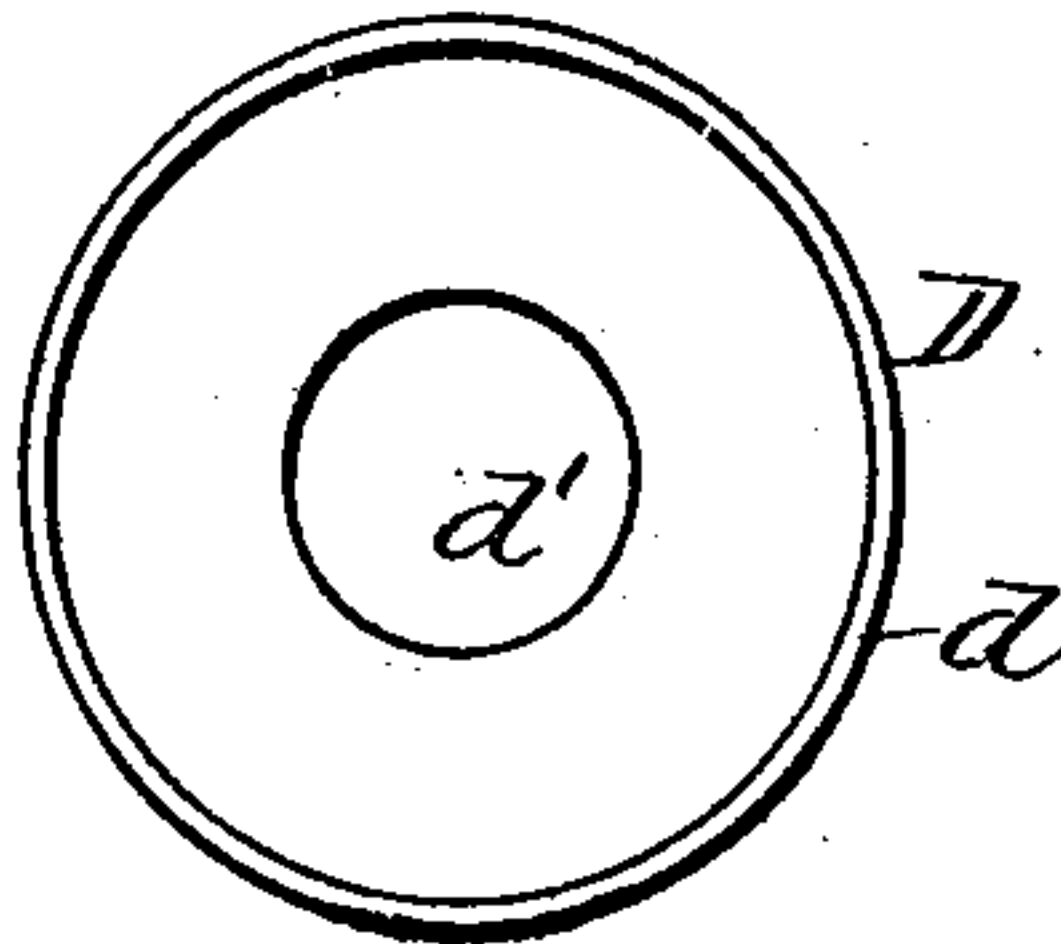


Fig. 5.

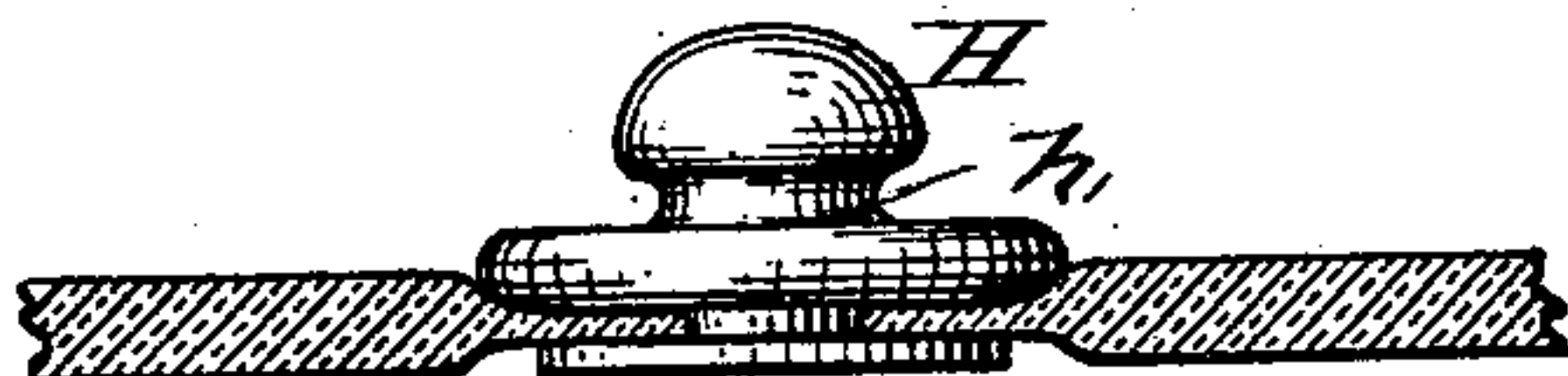
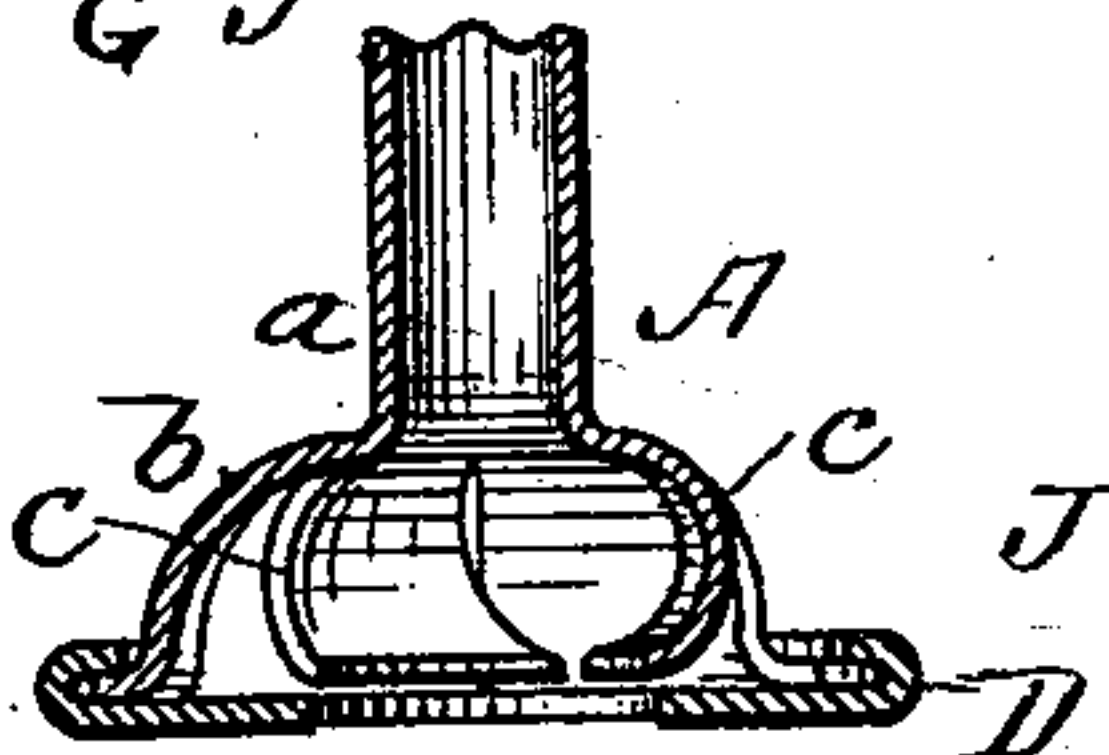
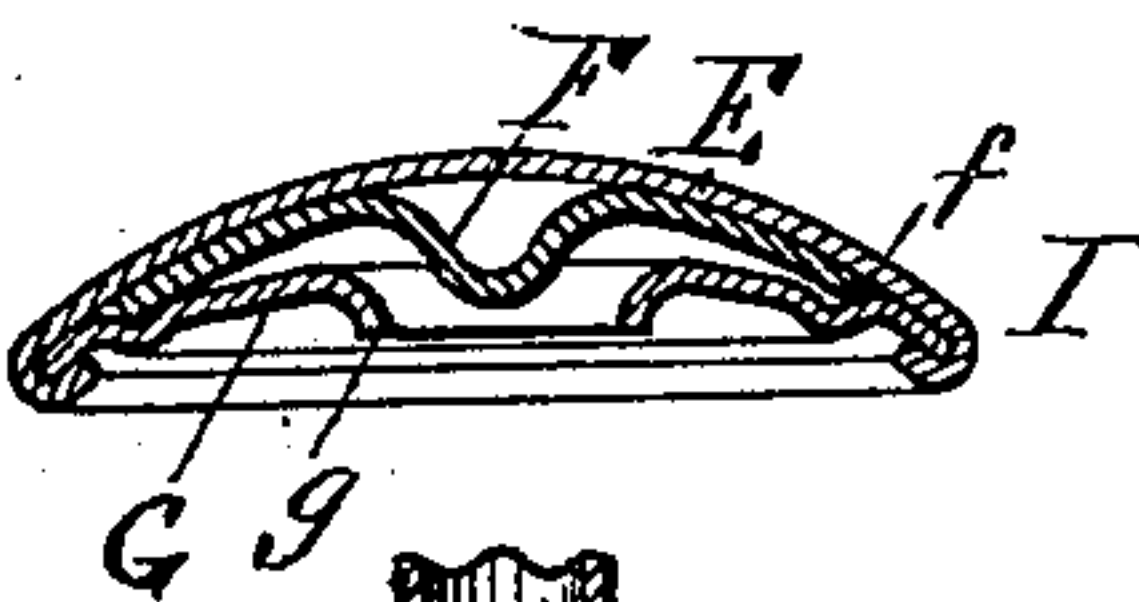


Fig. 7.

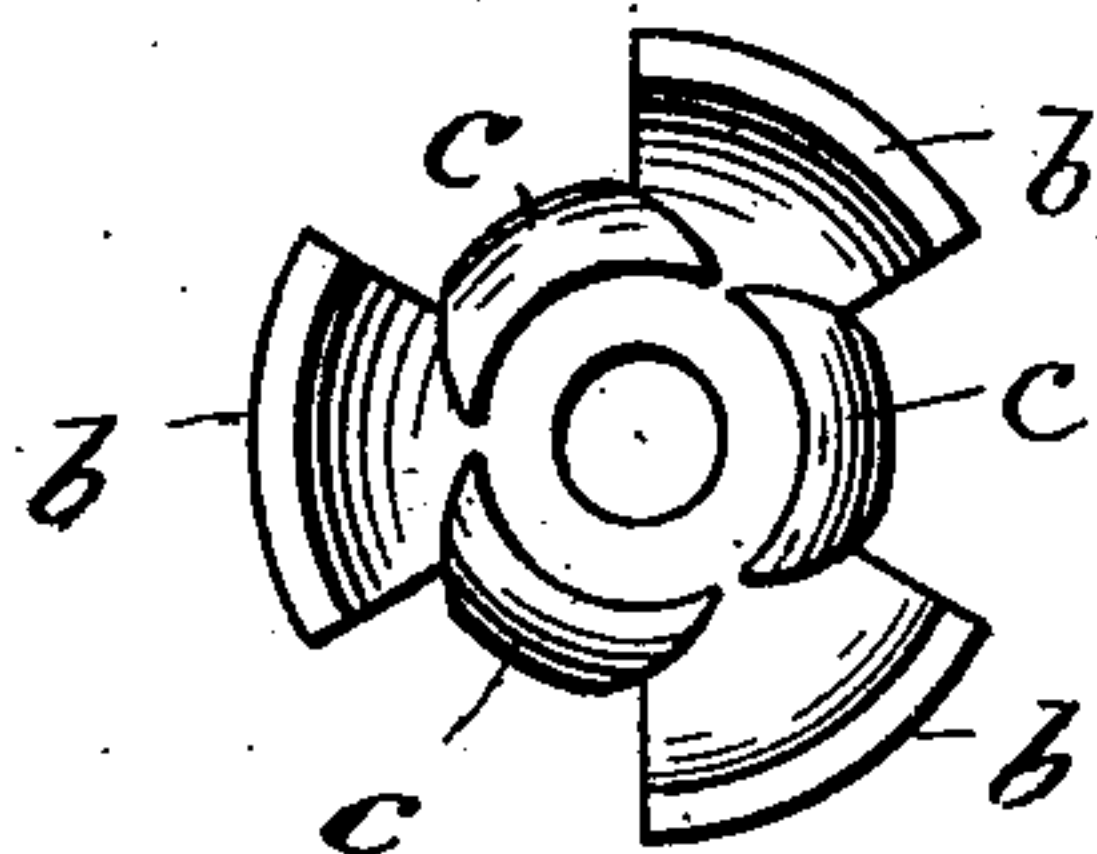


Fig. 3

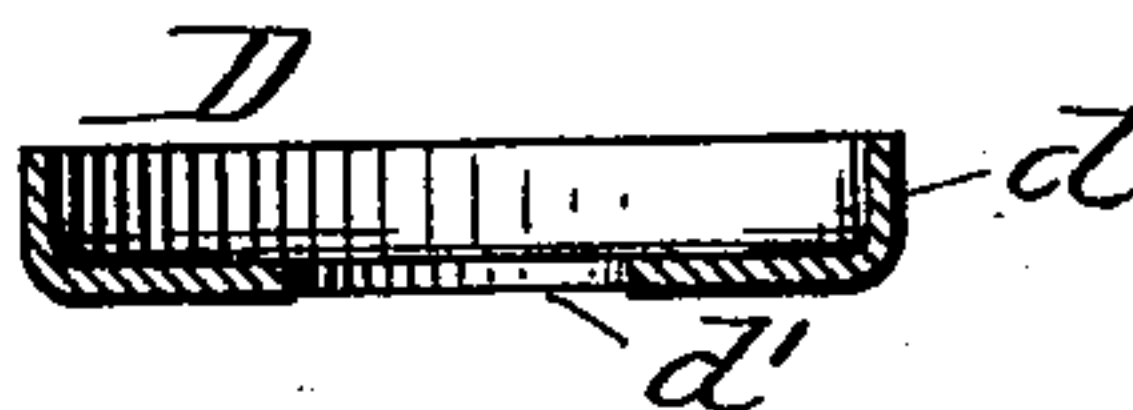


Fig. 6.

WITNESSES

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GLOVE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 545,493, dated September 3, 1895.

Application filed January 11, 1895. Serial No. 534,522. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. HALL, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Fasteners, of which the following is a full specification, reference being had to the accompanying drawings, wherein like letters represent like parts.

My invention relates to that class of fasteners for gloves or other articles wherein there are two main parts—a stud or button member and a socket or buttonhole member; and it consists of certain improvements in the construction of the socket member hereinafter described in detail.

Referring to the accompanying drawings, Figure 1 is a plan of the blank from which the socket-piece of my improved fastener is formed. Fig. 2 is a plan of the socket-piece. Fig. 3 is a plan of the same, looking at its under side. Fig. 4 is a vertical section of the same. Fig. 5 is a plan of the collet of the socket-piece. Fig. 6 is a vertical section of the same. Fig. 7 is a view of my complete fastener, showing in section the cap and socket of my socket member and an elevation of the stud member set on the material of a glove or other article.

The resilient socket J, Fig. 7, of my socket member consists simply of two pieces—the socket-piece A, Figs. 1, 2, 3, and 4, and the collet D, Figs. 5 and 6. The socket-piece A is made from a single piece of metal. The central attaching-eyelet *a* is first drawn from the center of the blank, leaving a wide horizontal frame, which is suitably shaped into a number of radial arms *b b b* and springs *c c c*, as shown in Fig. 1. Alternate ones *b b b* of these arms are bent down and out, as shown in Figs. 1, 3, and 4, forming a broken dome-shaped surface having a horizontal flange *b'* at its base, while the spring-arms *c c c* are bent down more sharply and curved under, so that they nearly meet at the center about a circular opening. These springs *c c c* are so shaped that when they are bent down and under, as shown in the drawings, their ends will form a nearly-continuous opening of the proper size and in a plane a little above that of the flange *b'*. The opening thus formed should be of a

slightly-smaller diameter than the stud H, so that when the stud is pushed up through it the springs will open slightly, allowing the stud to enter and then grip about its neck. The socket J is completed by placing the collet D over its bottom and closing its edge *d* up over the flange *b'*. The collet D is a disk having an upwardly-projecting flange and has in its center a hole *d'* large enough to allow the stud H to pass easily through it, so that it may engage with the spring above. The collet D thus serves to give a finished appearance to the socket J and to protect the springs *c*; but it will be seen that the socket-piece could be used without the collet, as shown in Figs. 2, 3, and 4, the arms *b* serving to keep the material away from the springs *c*, which would engage directly with the neck of the stud.

The cap I of my socket member, as shown in Fig. 7, consists of three pieces—the shell E, the plate G, and the anvil F, the anvil being confined between the shell and plate, which are closed together, as shown. The anvil F is so shaped as to split and spread outward the attaching-eyelet *a*, and is held in its central position in the shell by the circular shoulder *f* on the plate G. The plate G has in its center, directly over the point of the anvil, an opening large enough to allow the attaching-eyelet *a* to enter, and the edges *g* of this hole are turned outward, as shown. This is to facilitate setting the fastener on thick or tough material, for it has been found that sometimes the setting pressure causes the material to crush down the plate G on the anvil F before the eyelet can pierce the material. Were the edges *g* of the hole straight, it would be seen that this crushing would close up all entrance for the attaching-eyelet and prevent its spreading beneath the plate G. With my construction there is always an annular wedge-shaped opening around the point of the anvil, into which the eyelet may enter and so force its way beneath the plate, even though the plate has been crushed down on the anvil.

In setting the socket member of my fastener the material is placed between the cap I and the socket J, the cap resting on top of the material and the socket beneath. They are

then suitably pressed together, which causes the attaching-eyelet α to pass through the material and enter the hole in the cap. It then meets the anvil F, which splits it and turns it outward, so that it clinches beneath the plate G, thus firmly riveting the two parts together on the material.

Although I have shown this method of riveting the cap and socket together—that is, providing the socket with an integral attaching-eyelet α , which rivets up into the cap—it is obvious that the operation could be reversed—that is, by providing the cap with a downwardly-projecting eyelet, which would pass into a hole in the top of the socket-piece and be clinched under its upper shell. In this latter case the socket-piece would have no integral eyelet, but simply an opening in its top.

Fig. 7 shows my stud member, which consists of a non-resilient stud H, having a reduced neck h , with which the spring of the eyelet

may engage, the stud being suitably riveted to the material of the glove or other article.

I claim—

1. A fastener for gloves or other articles consisting of a button and button-hole member provided with a socket piece having the integral arms b and springs c integral with the blank and intermediate of the arms, substantially as described.

2. A fastener for gloves or other articles consisting of a button and button-hole member provided with a socket piece having the integral arms b and springs c integral with the blank and intermediate of the arms in combination with the collet D, substantially as described.

In witness whereof I have hereunto set my hand.

FRANK E. HALL.

Witnesses:

E. H. GILMAN,
GEO. O. HOLMES.