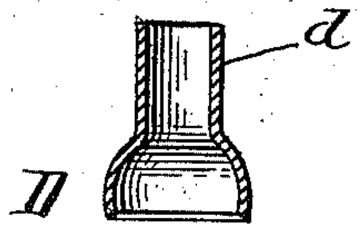
(No Model.)

W. B. H. DOWSE.

FASTENER.

No. 584,757. Patented June 15, 1897.



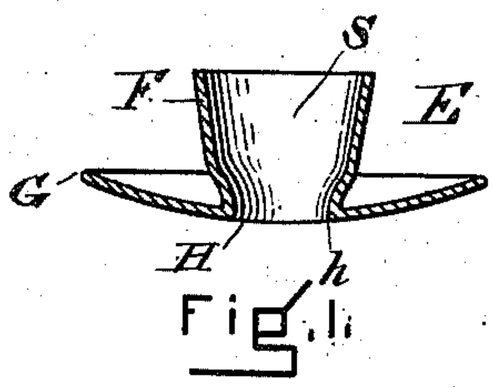


Fig. 1.

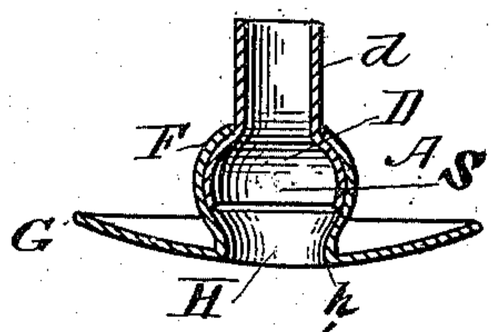


Fig. 2.

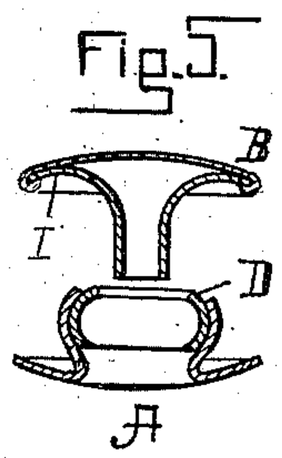


Fig. 5.

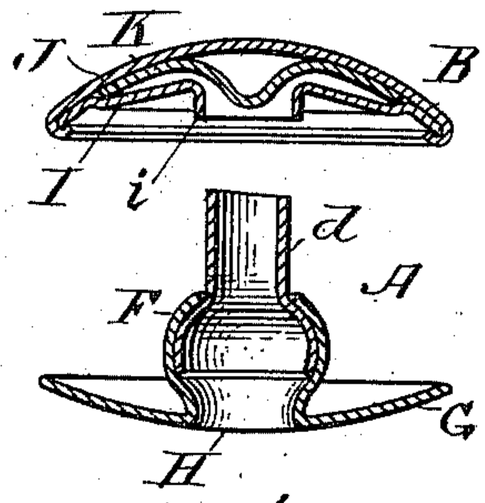


Fig. 3.

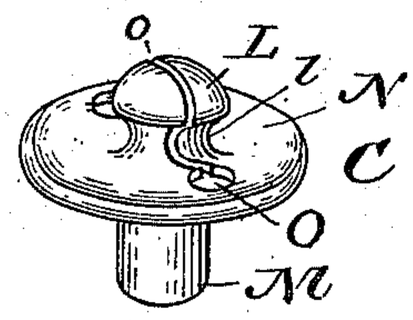


Fig. 4.

WITNESSES

E. N. Gilman.

Geo. A. Holmes

INVENTOR

W. B. H. Dowse

UNITED STATES PATENT OFFICE.

WILLIAM B. H. DOWSE, OF NEWTON, MASSACHUSETTS.

FASTENER.

SPECIFICATION forming part of Letters Patent No. 584,757, dated June 15, 1897.

Application filed January 12, 1895. Serial No. 534,649. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. H. DOWSE, a citizen of the United States, residing at Newton, in the county of Middlesex and Commonwealth 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 consisting of two main parts—a button or male member and a buttonhole or female member—and it consists in special features of construction hereinafter described in detail, reference being had to the accompanying drawings, wherein—

Figure 1 is a sectional elevation of the two parts of the socket of my improved non-resilient buttonhole or female member before they are closed together. Fig. 2 is a sectional elevation of the completed socket. Fig. 3 is a sectional elevation of the two parts of my improved buttonhole or female member consisting of a cap and a socket. Fig. 4 is a perspective view of my improved resilient button or male member. Fig. 5 is a sectional view of a slight modification.

In attaching a socket to many kinds of goods with which it is used it is desirable that the hole made in the goods should be as small as possible. It is also desirable that the socket should be made in the simplest and cheapest manner. The points desired in the socket are that the gripping edge thereof, which comes in contact with the stud, should be well defined, and that there should be just above this edge an enlarged chamber which should afterward, for the purpose of attachment, be contracted above. In producing a socket of this nature from a straight eyelet having a horizontal flange it is desirable to obtain this enlarged chamber by expanding the shank of the eyelet rather than by contracting the opening, for it is desirable to get the gripping edge as low down and well defined as possible, and by this means the most contracted portion of the orifice is its outside edge. Therefore in producing this device I take an eyelet and first shape the gripping edge to a certain size. Then I expand the shank from above to produce an enlarged chamber. I then add an eyelet by placing the same within the expanded shank, which is closed around it, thus producing an expanded chamber with a contracted gripping-entrance thereto and having a small attaching-eyelet or attaching-hole.

As shown in the above drawings, the non-resilient socket A, Figs. 2 and 3, of my buttonhole member is preferably made of two separate eyelets D and E, Fig. 1. The eyelet E is the socket-forming eyelet and has a shank F and a broad flange G. As shown, the shank is flared from the flange up, so that the opening H is contracted, forming a gripping edge *h* at the plane of the flange and an enlarged chamber S above. Thus a resilient stud may be snapped into the eyelet, expanding in the enlarged chamber S after it has passed the contracted opening, the lip *h* of which engages with its neck. The flange G is preferably turned back, so that it may embrace tightly between itself and the under edge of the cap the material upon which it is set. The other eyelet D may or may not be provided with an attaching-eyelet *d*. The piece D fits into the top of the flared shank F of the eyelet E, closing the top of the chamber S. The piece A is completed by closing the upper edge of the shank F around the piece D, as shown in Fig. 2.

The cap B of my socket member, Fig. 3, consists of three pieces—the shell K, anvil J, and plate I, the anvil being confined between the shell and plate, which are closed together, as shown.

In setting the socket member of my fastener the cap B and socket A are held in suitable dies and the material placed between them. Pressure is then applied, so that the attaching-eyelet *d* passes through the material, enters the hole in the plate of the cap, meets the anvil J, and is split and spread outward behind the plate, thus riveting the two parts firmly together on the material. As above stated, the attaching-eyelet *d* may, if desired, be omitted from the piece D, which would then close the top of the chamber as before, but leave simply a small hole in the top. The anvil K would then be omitted from the cap and the edges *i* of the plate I be prolonged downward, forming an attaching-eyelet to rivet into this hole in the top of the socket A, as shown in Fig. 5.

The stud member C of my fastener, as shown in Fig. 4, consists of a struck-up stud L, provided with a suitable attaching-eyelet M. The stud L is integral with the flange N, the whole being formed from a blank of metal. The resiliency of the stud is obtained by splitting it, as shown, and this is accomplished by striking up from the metal the stud L and rolling in the neck *l*, with the slit *o* and holes O O, as shown. The edges of the flange are then turned down and under to embrace the head of an attaching-eyelet M. By having the holes O near the edge of the flange N great resiliency and endurance are given to the stud.

It is desirable that the socket-piece rest as flatly as possible on the material to which it is attached, and, on the other hand, it is important that the male or button member be of a sufficient size to make a firm and strong connection between itself and the socket. To accomplish this, the socket must be of considerable depth for heavy material and the button member consequently of considerable height. To present to the eye the desired smooth and finished appearance on the bottom of the socket when attached to the material, I have caused the flange G to be turned back toward the socket-piece, so that the socket piece or chamber rests to a certain extent within it—that is, the flange acts as a "take-up" for reducing the height of the socket-piece.

I claim—

1. A fastener for gloves or other articles consisting of a button or male member, and a buttonhole or female member provided with a socket-piece having a flange and a flaring shank F, in combination with the piece D having a reduced portion, substantially as described.

2. A fastener for gloves or other articles consisting of a button or male member, and a buttonhole or female member provided with a socket-piece having a flange, flaring shank F, and piece D having a reduced portion, in combination with an attaching-eyelet *d*, substantially as described.

3. A fastener for gloves or other articles consisting of a button or male member, and a buttonhole or female member provided with a socket-piece, having the upturned take-up flange G, and the expanded shank F and piece D, all arranged as and for the purpose substantially as described.

In witness whereof I have hereunto set my hand.

WM. B. H. DOWSE.

Witnesses:
E. H. GILMAN,
GEO. A. HOLMES.