(No Model.)

W. S. RICHARDSON. FASTENER FOR GLOVES.

No. 566,338. Patented Aug. 25, 1896. Fig. 6. Fig 8

United States Patent Office.

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FASTENER FOR GLOVES.

SPECIFICATION forming part of Letters Patent No. 566,338, dated August 25, 1896.

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To all whom it may concern:

Be it known that I, WILLIAM S. RICHARDSON, a citizen of the United States, residing at
Boston, in the county of Suffolk and State of
Massachusetts, have invented a new and useful Improvement in Fasteners for Gloves and
other Articles, of which the following is a full,
clear, and exact description, reference being
had to the accompanying drawings, forming
a part of this specification, in explaining its
nature.

10 a part of this specification, in explaining its The invention is an improvement upon that described in various of my patents; and it comprises the application to a fastener hav-15 ing a form of socket which preferably has a rectangular or oblong opening and which is attached to the material, with which it is used, by an eyelet, tubular rivet, or other suitable fastening device, of a shield having a central 20 opening, preferably circular in shape, and having a greater diameter than the shortest diameter of the socket-opening. This shield is secured to the socket member, preferably by being drawn in upon the upper side there-25 of, so as to lap upon the same above its greatest lateral diameter. The shield thus applied to the socket does not interfere with the grasping powers of the socket-jaws and provides a continuous preferably-inflexible edge, which 30 is adapted to receive the draft or pulling strain upon the socket member of the fastening. The shield also permits the socket to be made of lighter material, as it covers and protects the springing sides of the socket member. 35 This is of material consequence in the large type of fasteners used for coats and other garments, where, in order to obtain sufficient strength, it has been found necessary to make the socket of metal so thick as to somewhat 40 impair the best efficiency of its springing power, the spring under such circumstances being stiffer than is desirable; moreover, the sides of the socket are reinforced by the shield, and greater stiffness is obtained at the point

where desired, while increased resiliency is obtained in the grasping parts of the device.

Referring to the drawings, Figure 1 is a view in inverted plan and in vertical section, both views somewhat enlarged, of the socket member of the fastening. Fig. 2 is a view in plan and also in vertical section of

the shield. Fig. 3 shows the socket and shield assembled. Fig. 4 represents the shield as attached to the socket. Fig. 5 is a plan inverted of the parts shown in Fig. 4. Fig. 6 55 represents the shielded socket and the other members of the fastener assembled, but not united. Fig. 7 represents the parts of the socket member of the fastener as attached to the fabric and to each other by the engage- 60 ment of the outer cap with the inner socket by means of the connecting-fastening and the socket member as engaging the ball member of the fastening. Fig. 8 is a view of the socket member inverted.

A represents the socket-piece. It is formed from a blank of sheet metal in any desired way and so as to provide a socket-opening a, which is substantially rectangular or oblong in shape, the edges at a^2 of which form yielding or resilient jaws, this yielding effect being preferably provided by the slits $a^3 a^4$, and the curved side extending backward and upward from the edges $a' a^2$. The socket-piece also has the curved top a^4 , in which is formed 75 the hole a^5 , which receives the fastening used in uniting it to the material.

B is the shield. It is struck up from a blank of suitable shape, has the central opening b, which is preferably circular, and the 80 section b'.

The socket-piece and the shield-piece are assembled as represented in Fig. 3, and the upper portion b' of the shield drawn or struck in sufficiently to cause it to lap upon the upper surface of the socket-piece. (See Fig. 4.) The circular opening b to the shield is somewhat larger than the smallest diameter of the socket-opening, so that the edges a' a^2 of the socket-opening at about the center of their 90 length extend within the opening of the shield a limited distance. (See Fig. 5.)

The shield is formed so that it fits practically the lower surface and curved wall of the socket-piece and envelops such sections, and 95 it is held thereto by its overlapping upper edge, which is drawn in sufficiently to fasten it thereon. The parts thus united are then secured to the material either by means of a flanged fastening, as, for instance, a tubular 100 rivet or eyelet alone or by such a fastening and a button-piece or cap, and this construc-

tion is represented in Figs. 6 and 7, where C is a pronged tubular rivet and D the cap. The cap preferably is curved to form a cavity d, and has the hole d', through which the 5 shank d^2 of the tubular rivet extends; and when secured to the material the flange of the rivet bears against the cap and fastens it to one surface of the material, while the shank extends through the material and hole a^5 in 10 the socket, and its prongs or inner edge are upset upon the inner surface of the socket-

top. (See Fig. 7.)

The other member of the fastener comprises a ball E, which is fastened to the section or 15 part of the material with which it is used in any desired way. It is of spherical shape and has the neck e, by which it is secured in place. The jaws a' a^2 approach each other sufficiently close to bear against the neck of 20 the ball member when the ball has been entered into the cavity of the socket, and the opening b in the shield is of a size sufficient to permit the ready entrance of the ball. The ball in entering comes into contact with the 25 jaws $a a^2$ and spreads them apart until its largest part has passed them, when they close upon the neck or smaller part beneath, and the ball member and socket member are then moved laterally relatively to each other suffi-30 ciently to bring the edge of the ball or neck into contact with the circular edge b of the shield which covers the longitudinal extension of the socket-opening upon that side.

While I have described the opening b in 35 the shield as circular, I would say that I do not confine myself to such shape, as it may be oblong or even rectangular, so long as the principle of construction above specified is followed, but I prefer the circular shape.

I would further say that I do not confine myself in the use of the invention to a socket having an oblong or rectangular opening, but may use the shield in connection with a socket having a circular or other shaped 45 opening. I would here note, however, a slight difference in the operation of the device when used with the socket having the oblong or rectangular opening and when employed with the socket having a circular 50 opening. The edge of the shield where it crosses the oblong or rectangular socket opening acts to receive practically the entire draft of the ball member, the ball member with such form of construction having gen-55 erally a slight lateral movement after it has entered the socket, whereby its neck is brought into contact with the edge of this section of the shield, and when so used the shield, still acting to a limited extent to re-

65 inforce the socket, also acts to receive the

principal portion of the strain. Where the socket-opening is circular and the shieldopening is also circular, a portion of the socket edge may receive the strain of the draft of the ball member, or it may be divided 65 between the edge of the socket member and the edge of the shield, and the shield then acts to reinforce the socket edge, whereby it is more firmly held against the draft of the ball member than if such a support were not 70 employed and may take a portion of the draft

or strain directly upon its own edge.

It will be observed that while I have represented the shield B as entirely enveloping the sides and under section of the socket- 75 piece I have done so because it presents the best method, in my opinion, of making it and securing it to the socket-piece; but I would not be understood as limiting the form of the shield to this particular shape, because 80 it is obvious that the effect of the invention would be very largely produced by a continuous ring used about the mouth of the socket and fastened thereto by an arm extending up one side of it only, but preferably 85 upon the side opposite that upon which the strain or draft of the ball member would come.

Having thus fully described my invention, I claim and desire to secure by Letters Pat- 90

ent of the United States—

1. In a member of a fastener for gloves and other articles, the socket A having the yielding jaws a' a^2 and the shield-piece B embracing the socket-piece and having an opening 95 of greater diameter than that of the opening between the jaws applied to the socket member, as and for the purposes described.

2. In a member of a fastener for gloves and other articles, the socket member of a fastener 100 having the socket-piece A provided with a rectangular or oblong opening, with a shieldpiece covering in part said opening and reinforcing the socket-piece, and of greater diameter than that of the jaws applied to the 105 socket member, as and for the purposes de-

scribed.

3. The socket member of a fastener, having a socket-piece A and a shield-piece B, having an opening corresponding to the socket-open-110 ing and a shape to envelop the lower portion of the socket-piece and of greater diameter than that of the opening between the jaws applied to the socket member and to be secured to the same above said lower section, 115 as and for the purposes described.

WILLIAM S. RICHARDSON.

Witnesses:

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