

No. 751,559.

PATENTED FEB. 9, 1904.

W. S. RICHARDSON.  
GARMENT FASTENER.  
APPLICATION FILED MAY 9, 1901.

NO MODEL.

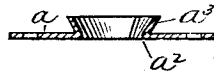


Fig. 1.

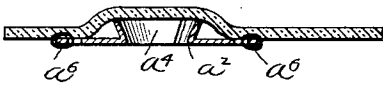


Fig. 2.

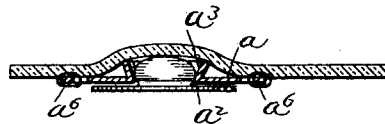


Fig. 3.

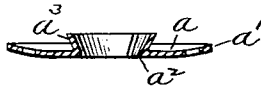


Fig. 4.

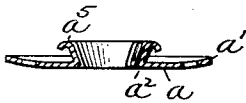


Fig. 5.

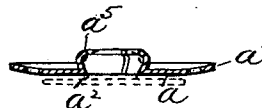


Fig. 6.

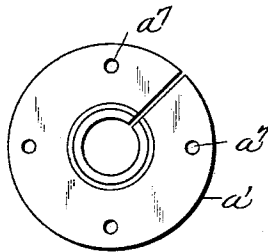


Fig. 7.

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## GARMENT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 751,559, dated February 9, 1904.

Application filed May 9, 1901. Serial No. 59,448. (No model.)

*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 Garment-Fasteners, 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.

The invention relates to an improvement in garment-fasteners of the kind described and claimed in my Letters Patent No. 604,637, dated May 24, 1898, and particularly to the socket member of such a garment-fastener.

It comprises a wide flange, which may be straight or may be bowed and which surrounds a socket-entrance, which has rising from its edge a short or narrow wall which is enlarged immediately above the socket-entrance. It is made from a blank of suitable shape by striking up a portion thereof in much the same way as an eyelet is formed and in removing the closed end of the struck-up section and then shaping the wall to form the enlargement over the socket-entrance and to also provide when desired a wide bearing at the inner end of the wall for the thumb or finger and the material which rests against it.

In the drawings, Figure 1 is a view in vertical section of the improved socket member. Fig. 2 represents it as attached to a garment or fabric. Fig. 3 shows the ball member in engagement therewith. Fig. 4 illustrates a modification in the shape of its flange. Figs. 5 and 6 represent modified forms, to which reference is hereinafter made. Fig. 7 is a view of the member represented in Fig. 1 and made resilient by means of a slit extending from the socket-entrance through the flange.

The flange or base *a* of the socket member may be flat, as represented in Fig. 1, or it may be slightly bowed, as represented in Fig. 4, to cause its outer edge *a'* to be raised somewhat above the socket-entrance *a*<sup>2</sup>. From the base, either centrally therein or otherwise, as may be desired, there is struck up the wall *a*<sup>3</sup>. It will be understood that originally or as a result of the first action of the striking-up process the wall will be of the same diameter through-

out and will have a closed end. This closed end is removed and the wall is enlarged above the socket-entrance *a*<sup>2</sup> by being expanded from the said socket-entrance to any desired extent. The wall is relatively shallow, and it provides a ball-holding cavity *a*<sup>4</sup>, which is open at both ends, and which is sufficiently enlarged above the socket-entrance *a*<sup>2</sup> to receive and hold the ball. The wall should not rise or be of a height greater than the thickness of the ball from its neck to its upper end. While the shape employed in Figs. 1, 2, and 3 may be used, I prefer as a rule to finish the inner edge of the wall by providing it with a relatively wide bearing *a*<sup>5</sup>. This is obtained either by turning the inner end of the wall outwardly, as represented in Fig. 5, or by turning it slightly inward, as represented in Fig. 6, and this finish prevents the edge of the wall from injuring or cutting the fabric or garment to which it is attached, and it also provides a broader and more agreeable surface for the thumb or finger which is used in pressing or holding it while the engagement is being made with the ball.

It will be understood that the socket-piece as a whole must be relatively flat in order that it may not cause any appreciable thickening of the garment at the point where it is secured, and that it must be secured to the garment without puncturing the garment, or, in other words, the flange must lie against the surface of the fabric of the garment and the fabric must extend over the open inner end of the socket member and the inner edge of the wall must rest against the fabric of the garment. It is secured in place to the fabric by means of stitches *a*<sup>6</sup>, which pass through the perforations or holes *a*<sup>7</sup> in the base or flange and the fabric of the garment, and by forming the flange *a* with the bowed-in edge *a'* the snug fitting of the flange and the socket member to the surface of the fabric or garment is increased.

The socket entrance may be unyielding, in which event the flange *a* and the wall *a*<sup>3</sup> are continuous, or it may be yielding, in which event the wall and the flange have a single slit extending from them. In the former instance it is of course used with a spring-ball—

that is, a ball which has resident in it the necessary engaging resiliency, and in the latter event it may be used with a ball member which is not resilient.

5 It will be understood that the flange  $a$  about the socket-entrance provides a practically continuous and smooth finish to the surface of the member which is exposed when it is attached to the fabric or material.

10 Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A socket member of a sew-on fastener having a perforated fastening-flange surrounding a socket-entrance  $a^2$  and forming a flat or substantially flat face from said socket-entrance outward and an integral wall extending inward from said socket-entrance, the said wall being open at its inner end and expanded outward above said socket-entrance to form a shallow ball-holding cavity and the inner edge of which wall forms a pressure-receiving bearing, the said flange being adapted to be united to the fabric or material with which the socket member is used by stitches and without perforating the material and the said wall being adapted to hold the said fabric or material from the said socket-entrance but not from the ball.

30 2. A socket member of a sew-on fastener having a perforated fastening-flange  $a$  surrounding the socket-entrance  $a^2$  the outer edge of which flange is turned upward, and a wall

extending inward from said socket-entrance, open at its inner end, expanded outward within said socket-entrance to form a shallow, ball-holding cavity, open at both ends as and for the purposes set forth. 35

3. A socket member of a sew-on fastener having a perforated fastening-flange  $a$  surrounding the socket-entrance  $a^2$  and providing a substantially flat face from said socket-entrance, the outward-expanding, integral wall extending inward from said socket-entrance, open at its inner end and expanded outward above said socket-entrance to form a shallow ball-holding cavity, open at both ends, and a slit extending entirely across said flange and said wall to provide the socket-entrance with a yielding action as and for the purposes set forth. 40 45 50

4. A socket member of a sew-on fastener having a perforated fastening-flange  $a$  surrounding the socket-entrance  $a^2$ , an integral wall extending inward from said socket-entrance, open at its inner end and expanded outward above said socket-entrance to form a shallow, ball-holding cavity, open at both ends, the said wall being bent at its inner end to form a relatively wide pressure-receiving bearing as and for the purposes set forth. 55 60

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Witnesses:

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