

(No Model.)

W. S. RICHARDSON & J. B. CHASE.

GLOVE FASTENING.

No. 382,903.

Patented May 15, 1888.



Fig. 1.

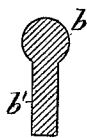


Fig. 2.

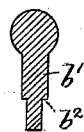


Fig. 3.

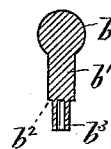


Fig. 4.



Fig. 5.

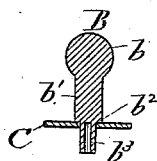


Fig. 6.

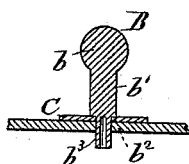


Fig. 7.

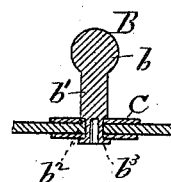


Fig. 8.

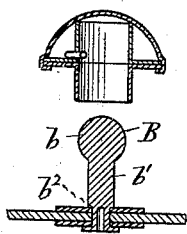


Fig. 9.

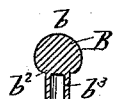


Fig. 10.

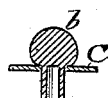


Fig. 11.

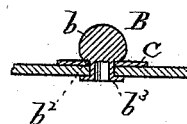


Fig. 12.

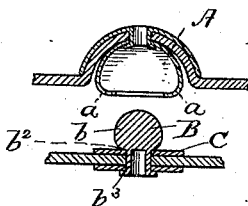


Fig. 13.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## GLOVE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 382,903, dated May 15, 1888.

Application filed December 31, 1885. Serial No. 187,250. (No model.)

### *To all whom it may concern:*

Be it known that we, WILLIAM S. RICHARDSON, of Boston, in the county of Suffolk, and JOSIAH B. CHASE, of Newton, in the county of Middlesex, both in the State of Massachusetts, citizens of the United States, have invented a new and useful Improvement in Fastenings 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.

The invention relates to the fastening known as the "ball-and-socket fastening," and it refers especially to the member of the fastening known as the "ball member." Heretofore such member has been made from capped eyelets; but in practice they have been found not to give entire satisfaction, principally because they cannot be applied easily and are expensive, and we have devised a fastening which overcomes these defects.

It consists of a stud having a rounded or spherical head, and a shank extending therefrom of substantially uniform diameter throughout, and provided with a shoulder and a tubular fastening-extension. Upon this tubular fastening-extension is placed a washer, which in use bears upon the upper surface of the material to which the stud is secured. The tubular extension is of sufficient length to extend through the material to which the post or stud is fastened, to receive a washer upon which it is upset.

Referring to the drawings, Figure 1 is a view in elevation of a blank from which one form of stud is made. Fig. 2 represents one step in the process of making the stud, the blank having been upset to form the spherical head. Fig. 3 shows the blank after it has been subjected to a turning operation to form a shoulder and a fastening-extension. Fig. 4 shows the stud provided with a tubular cavity or recess formed by drilling. Fig. 5 is a section of the washer used with the stud, showing its shape before its application to the stud. Fig. 6 represents the washer driven on the stud, its upper surface resting against the shoulder thereof. Fig. 7 shows the stud ap-

plied to material, but before its fastening end is upset. Fig. 8 represents it as fastened or secured by the upsetting of the end of its fastening projection upon the washer. Fig. 9 shows a stud and socket member of a fastening. Figs. 10, 11, 12, and 13 represent modified forms of the stud.

The fastening comprises two members—first, the socket member A, which has the yielding jaws *a* arranged about a circular opening, to form a grasping device and socket for the reception of the stud or other member of the fastening, and, second, said stud or ball member B. The stud or ball member is made of solid metal, and it has the enlarged head *b*, preferably rounded or spherical in shape, and the shank or post *b'*, which extends therefrom, the shoulder *b''*, and the tubular fastening-extension *b'''*. The stud may be made from wire or wire-rod blanks of suitable length, and the enlarged end formed by upsetting, the tubular extension formed by milling and drilling. Before application to the post the washer C is shaped as represented in Fig. 5, and it has the hole *c*, through which the extension of the post extends, and upon application to the post it is flattened, and thereby made to bite the extension and hug the shoulder.

In some forms of ball-and-socket fastenings it is not necessary that the post or section *b'* be used, and this form of the invention is represented in Figs. 10 to 13, inclusive. The tubular fastening-extension in this fastening extends from the base of the rounded or spherical end, and the washer is fitted close up to the base thereof.

To apply the fastening, a hole is formed in the material upon which it is used for the reception of the tubular fastening-extension, and this tubular fastening-extension is passed through the hole, the washer resting on the upper surface of the material. Another washer is then applied to the inner section or portion of the tubular extension, and the end of the tubular extension is upset or headed thereon, as represented. This form of fastening is comparatively cheap, is very easily applied, and provides a very strong and durable construction.

The fastening as prepared for use has the upward washer secured to the tubular fastening-extension with its upper surface against the shoulder formed on the post or stud.

5 Having thus fully described our invention, we claim and desire to secure by Letters Patent of the United States—

10 The combination, in a fastening device, of a socket member having yielding jaws about a circular or other shaped entrance, with a stud-fastening, B, having the solid rounded or spherical end  $b$ , the shoulder  $b^2$ , the tubular

fastening-extension  $b^3$ , and the independent over washer C, secured upon the tubular extension against the said shoulder, and the inner washer, upon which the end of the tubular extension of the stud is upset, as and for the purposes described. 15

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