

(No Model.)

W. S. RICHARDSON.

GLOVE FASTENING.

No. 300,508.

Patented June 17, 1884.



Fig. 1-

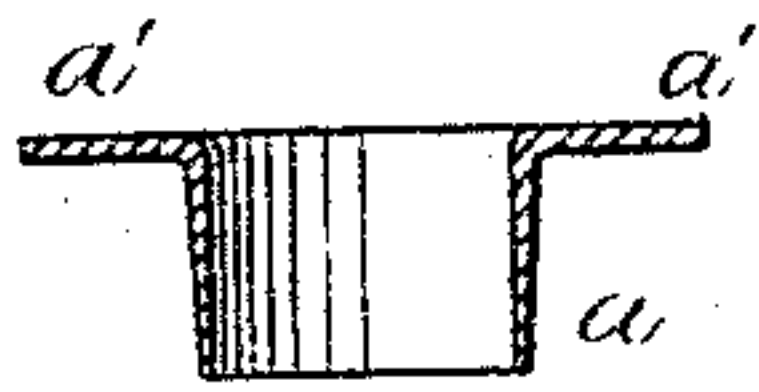


Fig. 2-

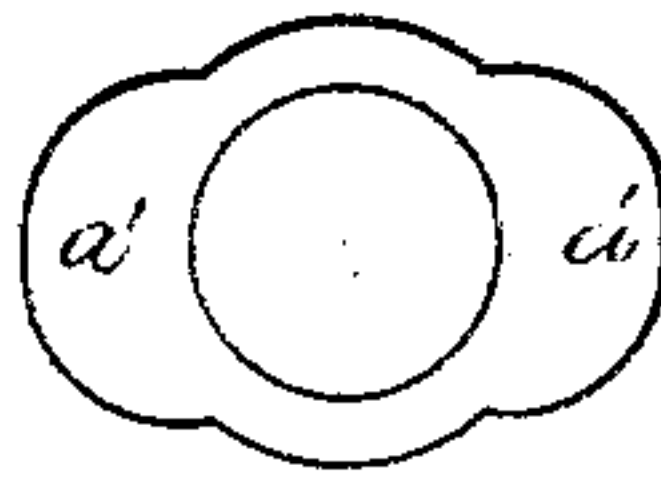


Fig. 3-

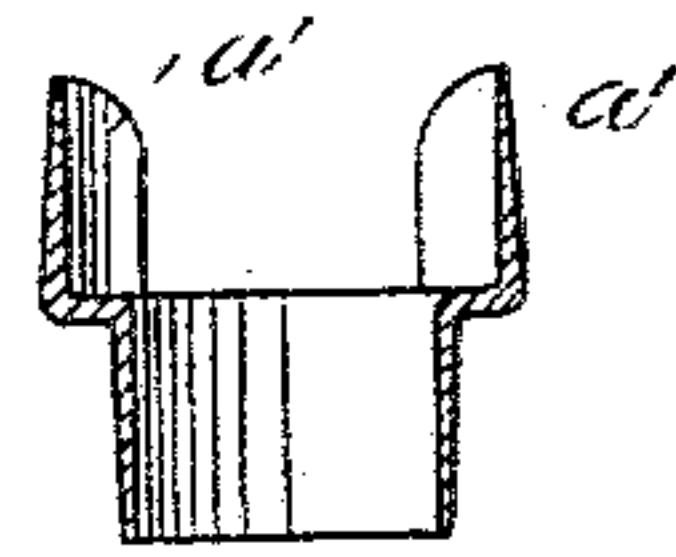


Fig. 4-

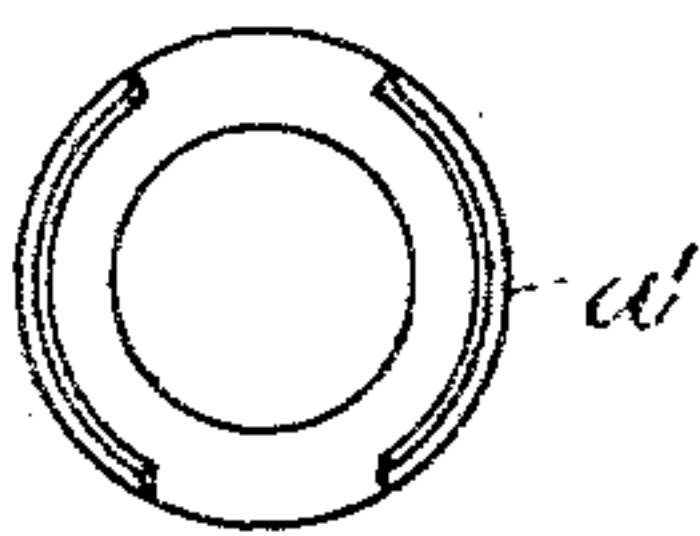


Fig. 5-

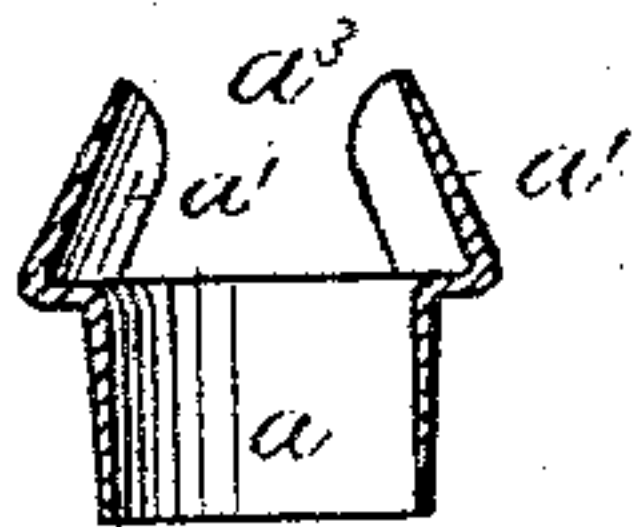


Fig. 6-

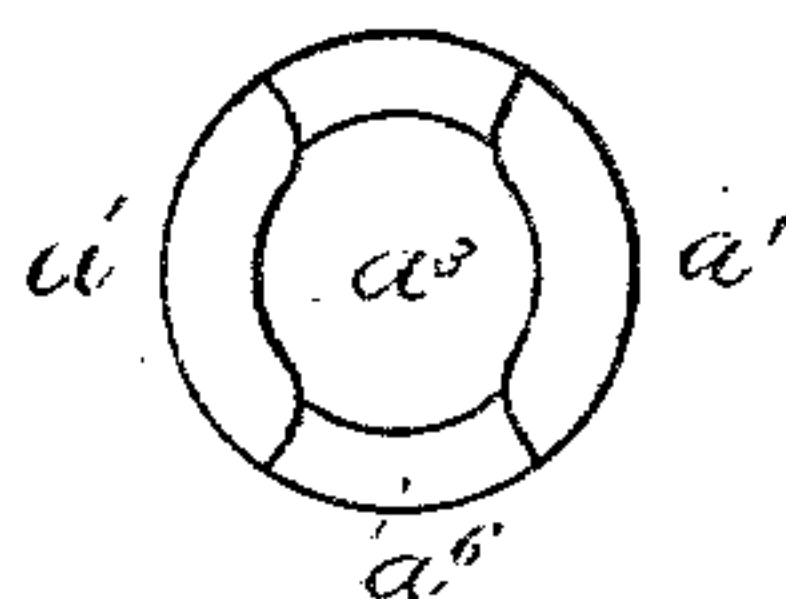


Fig. 7-

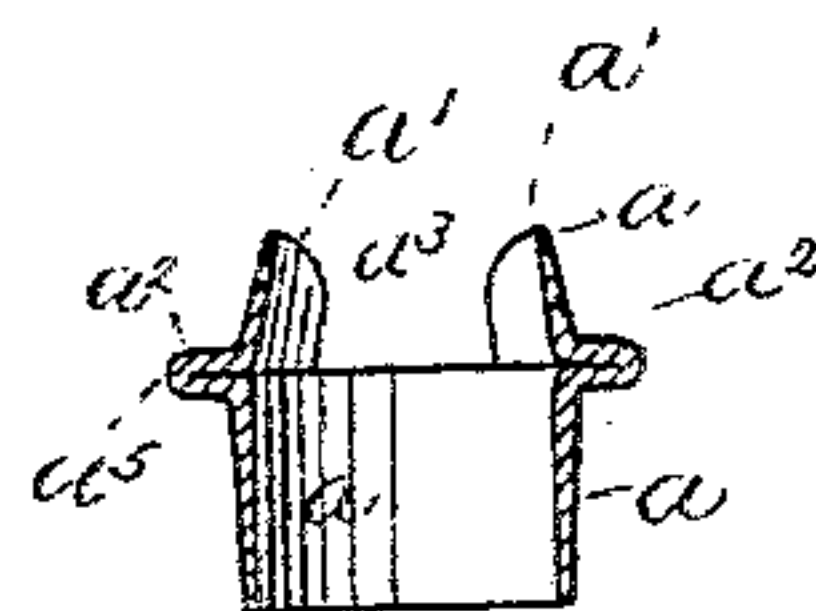


Fig. 8-

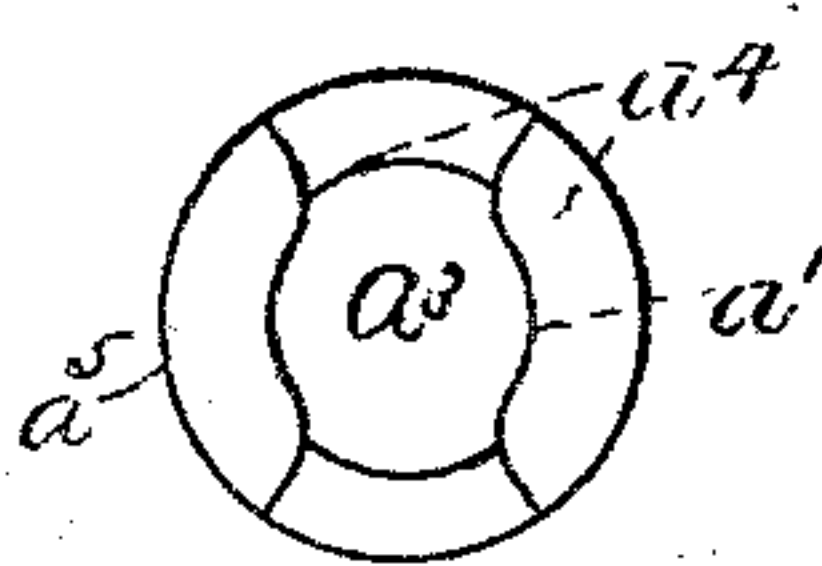


Fig. 9-

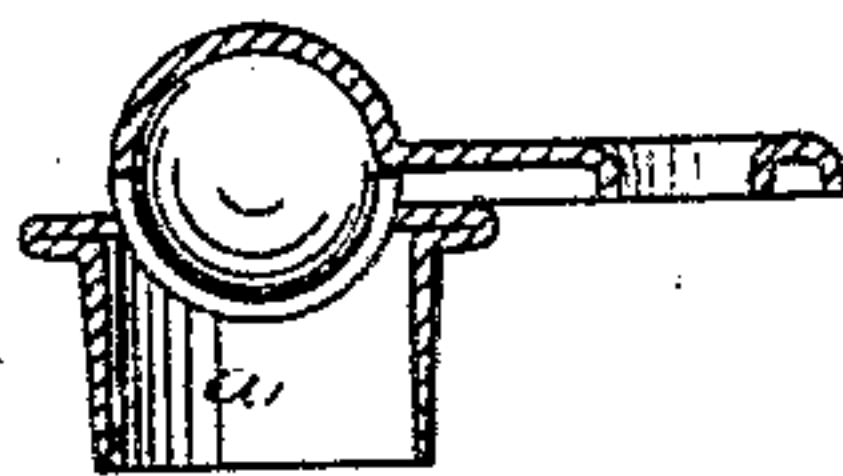


Fig. 10-

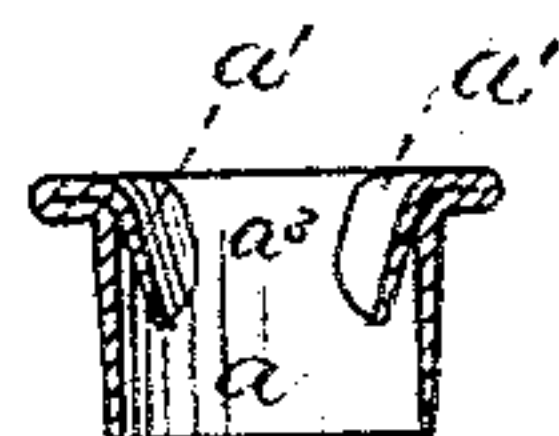


Fig. 11-

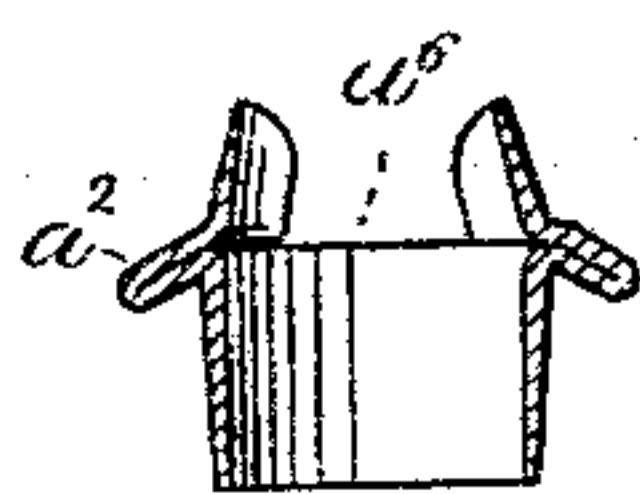


Fig. 12

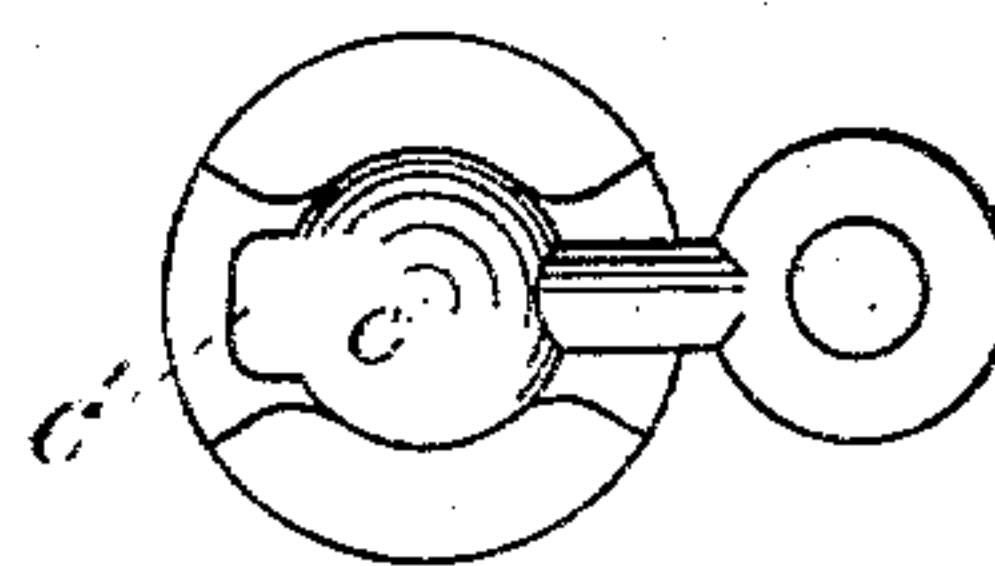


Fig. 13-

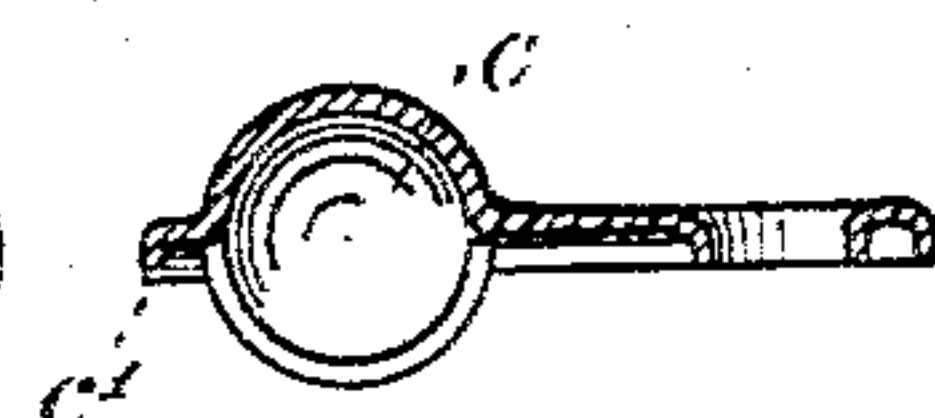


Fig. 14-

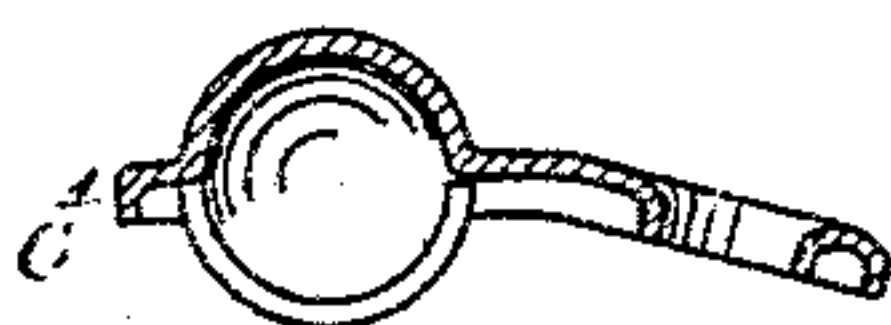


Fig. 15-

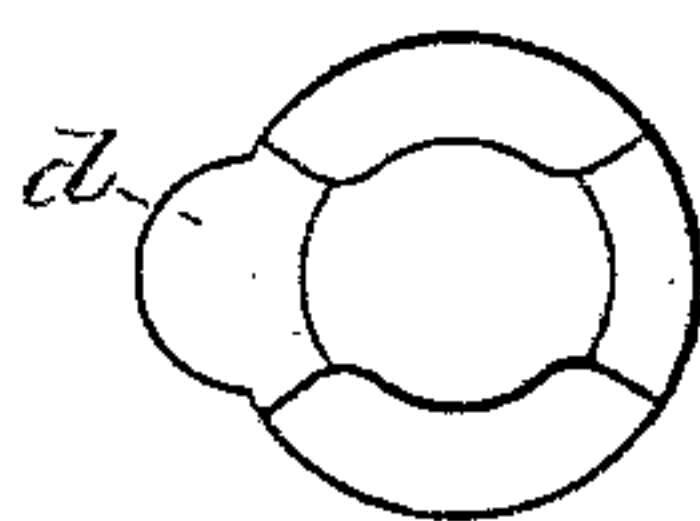


Fig. 16-

WITNESSES
Bowling S. Parker,
Fred. Harris

INVENTOR
Wm. S. Richardson, by
his attys
Parker & Raymond

UNITED STATES PATENT OFFICE.

WILLIAM S. RICHARDSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
BALL AND SOCKET FASTENER COMPANY, OF NASHUA, NEW HAMPSHIRE.

GLOVE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 300,508, dated June 17, 1884.

Application filed April 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. RICHARDSON, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a certain 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, in which—

Figures 1 to 10, inclusive, show the various steps in the process of manufacture of my fastening, Figs. 11 to 16, inclusive, representing special features of construction, all of which will hereinafter be more fully described.

The invention is an improvement on that described in my Letters Patent numbered 260,050, and dated June 27, 1882, and 276,714, dated May 1, 1883; and it consists in a cup or socket, preferably made from one piece of metal.

Referring to the drawings, Fig. 1 represents the form of a blank which I prefer to use when I desire to employ a tubular extension or eyelet integral with the cup or socket as my fastening medium. In forming a tubular fastening or eyelet from a blank of this construction, I prefer to strike down the central portion thereof in any suitable way to the desired shape, and the blank, having been submitted to this forming manipulation, assumes the shape shown in vertical section in Fig. 2, and in plan in Fig. 3, in which a represents the tube or eyelet. The projecting portions or wings a' of the blank are the parts from which I form the socket or cup; and after striking down or otherwise forming the tube or eyelet a , I bend or draw—and I prefer the latter process—the sides a' to the shape shown in section in Fig. 4, and in plan in Fig. 5. The next step in the process is to bend the folded or drawn sides toward each other to the shape or substantially the shape shown in section in Fig. 6, and in plan in Fig. 7. This step completes the shaping process, so far as to give me the fastening tube or eyelet and the socket or cup having yielding sides; but while I may consider the process as finished at this stage, I prefer to advance it another step or stage, in order to obtain the flanges a'' , and this is

done by breaking down the portions a' to the shape shown in section in Fig. 8, and in plan in Fig. 9. The complete fastening thus formed will have the eyelet or tubular fastening projection a , the yielding or spring sides a' , which form the socket a'' , the recesses a^4 , and shoulder a^5 . By providing the fastening with the flange a'' , I am enabled to readily set the eyelet or tube and secure the fastening in place, as the flange affords an abutment for one jaw of a setting-instrument; and I prefer that the spring or yielding sides be inside rather than outside the tube or eyelet, in order that the pressure exerted in setting it may be brought to bear upon the flange directly in line with it.

In Fig. 11 the yielding sides are turned into the eyelet or tube space and form a socket for the reception of the other member of the fastening within the tube or eyelet and below their under surfaces. The principle of the construction is, however, the same, the only difference being that the socket is made lower by bending the sides inwardly and downwardly, as shown.

In Fig. 13 the flanges a'' are represented as bent down. This construction is of value, because it brings the fulcrum-point a^6 , upon which the neck or arm of the other member of the fastening is brought to bear in the act of separating the two fastenings, nearer the ball than it is in the form shown in Fig. 8, as the inner edge of the flange then becomes the fulcrum-point instead of the outer edge. Of course, in lieu of the striking down or drawing from the blank represented in Fig. 1 an eyelet or fastening-tube, I may strike down or draw central fastening-prongs.

I have also found that by providing the ball member c of my fastening with a projection, c' , which is adapted to bear upon the flange of the cup or socket member of the fastening when in place, not only will the two members draw in line with each other, but the ball is thereby held in place and prevented from passing to and into the cavity of the cup or socket. If the cup or socket portion has a tendency to cant or tip, the ball is more likely to leave the socket, as it then draws against the upper edge or weakest portion of the spring-holding sides.

When the cup or socket is formed as herein

described, it will be an advantage to provide it with an extension or thumb-piece, d , provision for which may be made in the blank itself, which is illustrated in plan in Fig. 16.

5 This thumb-piece is used with the shank of the ball for separating the ball from the socket by pressing them downwardly and toward each other, causing the shank to fulcrum on the flange and to lift the ball from the socket.

10 I may use a ball having a curved or bent shank, like that shown in Fig. 15, for the purpose of assisting the removal of the ball from the cup.

In lieu of attaching the ball at the side of 15 the material by a shank or neck, I may fasten it by an eye or in any other way, much as a button is fastened in place on the material, and either on the outer or inner surface thereof, in which case the ball would have a vertical 20 movement to and from the socket, and the neck or means of fastening to the material with which it is used preferably would pass from its upper or, rather, under surface in line with the socket, and not from the sides.

25 In lieu of making the tubular extension or eyelet in one piece with the socket or cup, the same result is obtained if the edge of the socket or cup, which now makes the flange, incloses the flange of a separate tubular rivet or eyelet, 30 and the two parts may be united either before the fastening is secured in place for use or during the act of so securing it. The thumb-piece d may be bent downward, if desired, to bring it out of line with the shank of the ball and 35 permit the simple punching-pressure blow in disengaging the ball from the socket to always act to elevate the ball and socket and render the unfastening movement easy and natural.

Of course, it is not essential that the portion of the fastening which I call the "ball" be glob- 40 ular in shape, as it may be flattened or made oblong, cylindrical, or of any other desirable shape, as the sides and opening to form the cup portion can be changed to fit any of these shapes without departing from the spirit of 45 the invention.

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

1. A socket or cup-shaped member of a 50 glove or other fastening, having spring sides, the flanges a^2 , and an integral fastening or attaching device, all substantially as described.

2. A socket or cup member of a fastening 55 device, having the yielding sides a' , the recess a'' , the flange a^2 , and the integral tubular eyelet or prong-fastening extension, all substantially as and for the purposes described.

3. A socket or cup member of a fastening 60 device, having the thumb or finger piece d , all substantially as and for the purposes described.

4. The combination of the socket-member of a fastening device, having the yielding sides a' and the flange a^2 , with the ball member of 65 the fastening device, having the projection c' , all substantially as and for the purposes described.

5. The ball member of the fastening, having the bent shank, all substantially as and for the purposes described.

WILLIAM S. RICHARDSON.

Witnesses:

PHILIP DUMARESQ,
FRED. HARRIS.