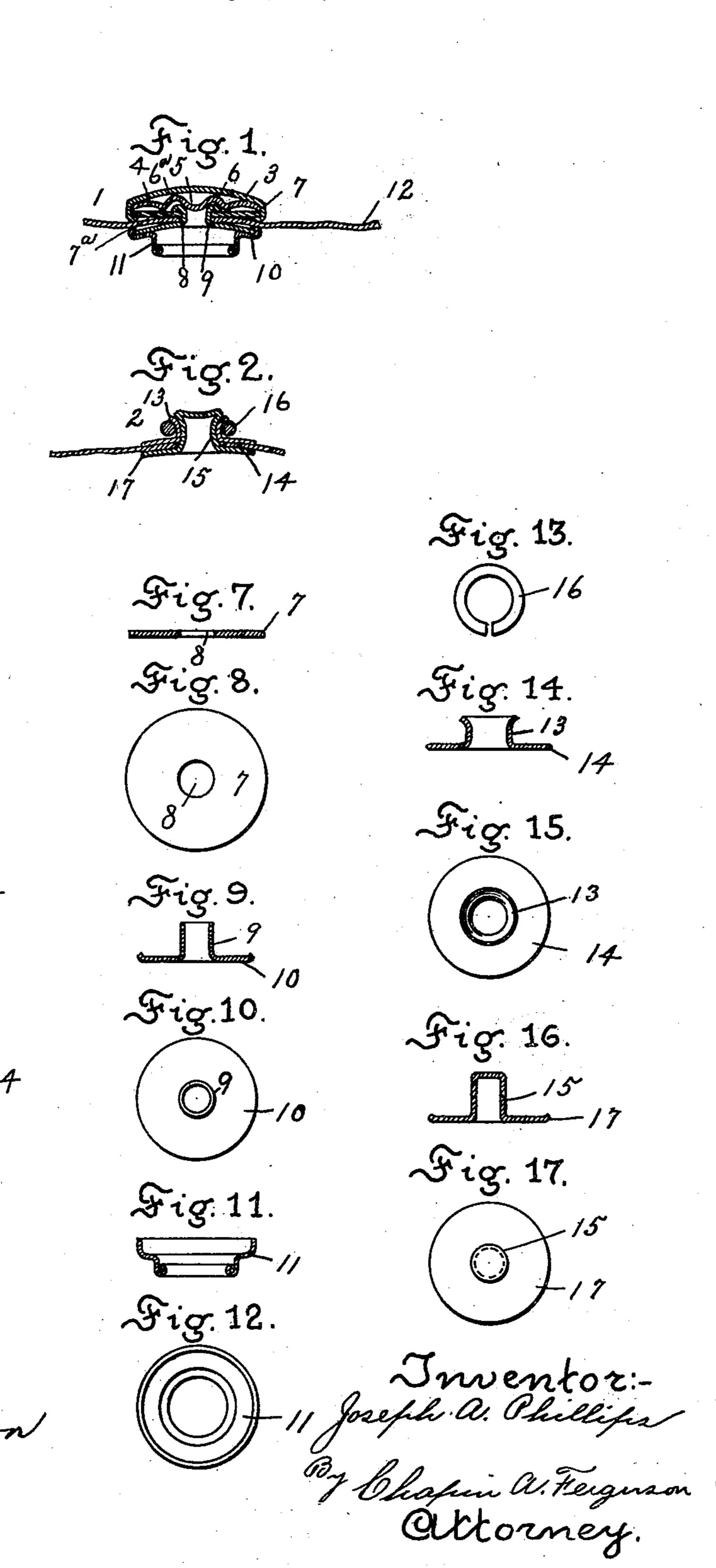
Fig. 6.

Witnesses:

J. A. PHILLIPS. GARMENT FASTENER.

(Application filed Aug. 20, 1900.)

(No Model.)



United States Patent Office.

JOSEPH A. PHILLIPS, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE RAY-MOND BUTTON COMPANY OF BALTIMORE CITY, OF MARYLAND.

GARMENT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 669,345, dated March 5, 1901.

Application filed August 20, 1900. Serial No. 27,373. (No model.)

To all whom it may concern:

Be it known that I, Joseph A. Phillips, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Garment-Fasteners, of which the following is a specification.

This invention relates to an improvement in garment-fasteners of that class which consists of a stud member and a socket member.

The object of the invention is to provide a device that will be simple, durable, and efficient for the purpose of connecting together two parts of a garment containing the stud and socket members, respectively, and to hold said parts securely fastened until it is desired to disconnect the same.

Other features of the invention will be fully set forth in the description of the accompany-

20 ing drawings, in which—

Figure 1 is a vertical central section of the socket member secured to a piece of fabric. Fig. 2 is a vertical central section of the stud member secured to a piece of fabric. Fig. 3 25 is a sectional view of the outer cap of the socket member. Fig. 4 is a top plan view of same. Fig. 5 is a vertical sectional view of the grooved disk of the socket member. Fig. 6 is a top plan view of same. Fig. 7 is a sec-30 tion of the flat disk of the socket member. Fig. 8 is a plan view of same. Fig. 9 is a sectional view of the hollow rivet for fastening the socket member to one side of the garment. Fig. 10 is a top plan view of same. Fig. 11 is 35 a sectional view of the hollow ring of the socket member in which the stud member fits. Fig. 12 is a plan view of same. Fig. 13 is a plan view of the resilient ring which fits around the hollow post of the stud member 40 and forms the means for holding the stud and socket members together. Fig. 14 is a sectional view of the flanged hollow post of the stud member, around which fits the resilient ring. Fig. 15 is a plan view of same. Fig. 45 16 is a vertical section of the hollow rivet for securing the stud member to the other side of the garment from that which contains the socket member. Fig. 17 is a plan view of same.

50 Similar reference-numerals designate like parts throughout the several views.

In the accompanying drawings, 1 designates the socket member, and 2 the stud member.

The socket member 1 is composed of an outer cap 3, a disk 4, having a central depression 5 and an annular groove 6 and two shoulders 6° and 7°, one of which impinges against the cap 3 and the other against the disk 7, a flat disk 7, having a central aperture 8, a hollow rivet 9, having an annular 60 flange 10, and a hollow ring 11, having its upper end bent over the flange 10 of the rivet 9 and its lower end bent upwardly and inwardly to form a smooth contacting surface for the ring of the stud member when the 65 latter enters and is removed from the socket member and also to reinforce the said edge.

In connecting the parts of the socket member together and securing the same to the garment the operation is as follows: The grooved 70 disk 4 is placed in the cap 3, with the flat disk 7 resting thereon, as shown in Fig. 1. The lower end of the cap 3 is then bent inwardly, thereby firmly securing the said disks 4 and 7 in their proper relative position. The 75 hollow rivet 9 is then placed with its flange 10 upon the hollow ring 11, the edge of the latter being bent inwardly, as shown in Fig. 1, and the two parts secured together. The hollow rivet 9 is then forced through the fab- 80 ric 12, through the central aperture 8 of the disk 7, the upper edge of the said rivet striking against the central depression 5 of the disk 4, forcing the said rivet outwardly and down against the said disk 7, as shown in 85 Fig. 1, thereby firmly securing the socket member 1 to one side of the garment.

By having the disk 4 formed with the shoulders 6° and 7° the fabric 12 will be gripped tightly between the flat surfaces of the disk 9° 7 and the rivet 9, close to the shank of the latter, thereby obviating the necessity of gripping the said fabric tightly around the outer edges of the socket, as is usually done. It will be seen that as the fabric is only gripped 95 by the flat surfaces of the said disk 7 and the rivet 9, close to the shank of the latter, the fabric will not be cut by the sharp outer edges of the parts forming the socket member.

The stud member 2 is composed of a hol- roc low post 13, having an annular flange 14 and a rivet 15 for securing the stud member to

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the other side of the garment from that to which the socket member is secured. The said rivet 15 is constructed of a single piece of metal, having its upper end closed and its 5 lower end open and forced outwardly to form the flat annular flange 17. Around the said post 13 is placed a resilient split ring 16, the upper edge of the said hollow post being bent laterally to hold the said ring thereon. The 10 stud member is secured to the garment by the rivet 15, which latter is forced through the fabric until the annular flange 17 impinges against the lower surface of the said fabric. The hollow post 13 is then placed over the 15 rivet, with the flange 14 resting upon the uppersurface of the fabric. The parts are then held securely together and the upper end of the said rivet forced laterally by the use of a suitable tool, thereby firmly securing the stud 20 member to the opposite side of the garment from that to which the socket member is secured.

The split ring 16 is slightly larger in circumference than the opening in the socket member and when forced into the said opening will hold the socket and stud members firmly together until it is desired to disconnect the said parts.

Having thus described my invention, what 30 I claim is—

1. A socket member for garment-fasteners comprising a cap; a flat disk having a central aperture therein; a grooved disk having a central depression and two shoulders one of which latter impinges against the cap and the other against the flat disk; a hollow rivet having one end extending through the central aperture in the flat disk and around the central depression of the grooved disk, and an annular flange at its lower end; and a hollow ring having its upper end bent over the flange of the said hollow rivet.

2. A socket for garment-fasteners comprising a cap; a flat disk having a central aperture therein; a grooved disk having a central depression and two shoulders, one of which

latter impinges against the said cap and the other impinges against the flat disk; a hollow rivet having its upper end extending through the aperture in the flat disk, and an annular 50 flange at its lower end; a hollow ring having its upper end bent inwardly over the flange of the hollow rivet and the lower edge bent inwardly and upwardly to reinforce said edge.

3. A socket member for garment-fasteners 55 comprising a flat disk having a central aperture therein; a disk having a central depression, a groove around said depression, and two shoulders, one of which latter impinges against the said cap and the other against the 60 flat disk; a cap fitted over the said disks and having its lower edge bent inwardly to hold said parts together; a hollow rivet having its upper end extending through the central depression of the flat disk and bent around the 65 central depression of the grooved disk; and a hollow ring secured to the said rivet and having its lower edge bent upwardly and inwardly to reinforce said edge.

4. In a garment-fastener, the combination 70 with a socket member comprising a cap; a flat disk having a central aperture therein; a disk having a central depression and two shoulders, one of which latter impinges against the said cap and the other against the flat disk; 75 a hollow rivet having its upper end secured within the said cap, and an annular flange at its lower end; a hollow ring secured by one end to the said rivet; of a stud member comprising a hollow post having its upper end 80 bent laterally and an annular flange at its lower end; a resilient ring around said post; and a rivet extending through said post and having its upper end closed and bent laterally and its lower end open and forced outwardly 85 to form a flat annular flange.

In testimony whereof I affix my signature in the presence of two witnesses.

JOSEPH A. PHILLIPS.

Witnesses:

CHAPIN A. FERGUSON, JEAN JOYES.