

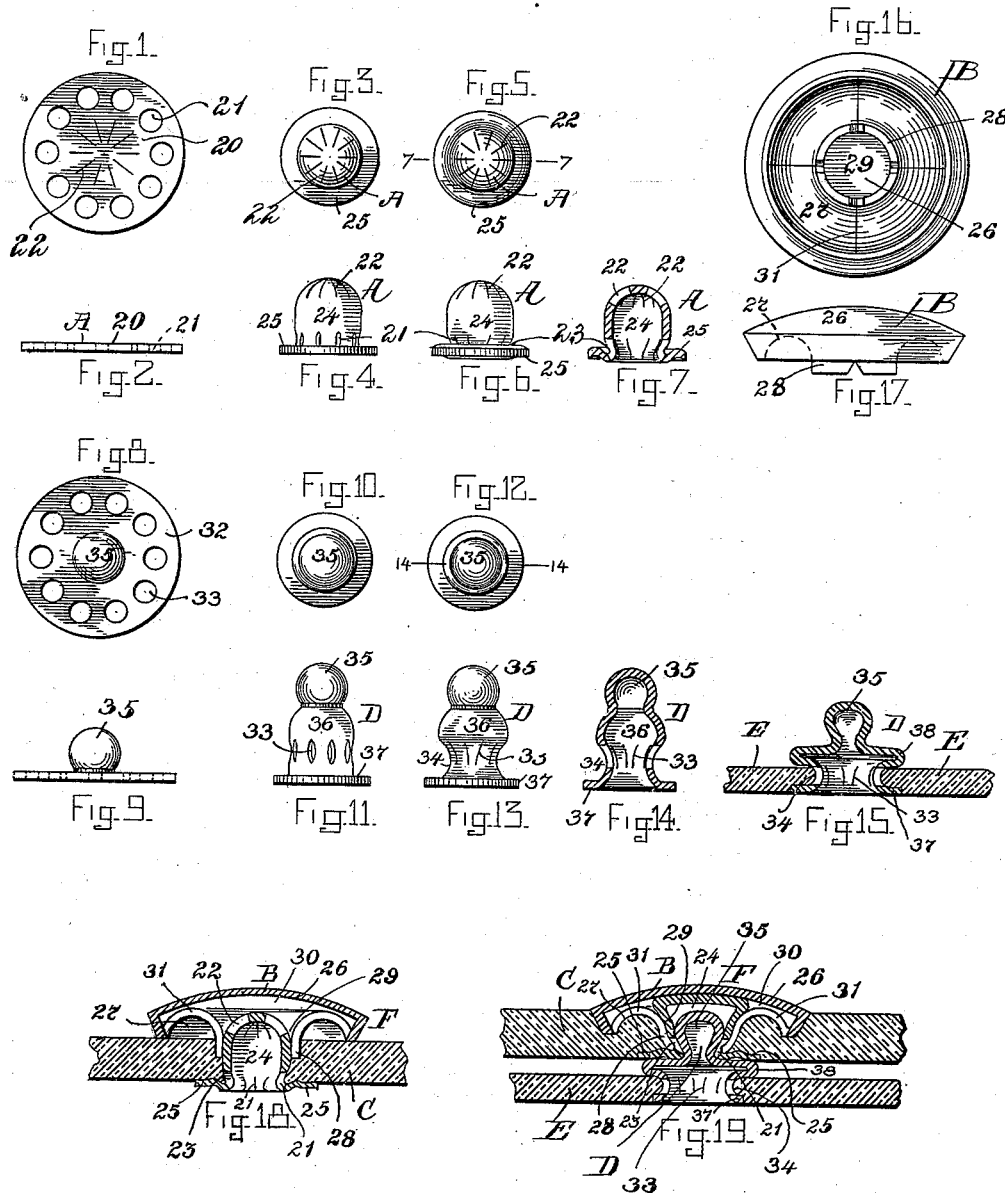
No. 647,889.

Patented Apr. 17, 1900.

J. D. STIRCKLER.  
GLOVE FASTENER.

(Application filed Dec. 4, 1899.)

(No Model.)



WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## GLOVE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 647,889, dated April 17, 1900.

Application filed December 4, 1899. Serial No. 739,174. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN D. STIRCKLER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Glove-Fasteners, of which the following is a specification.

The object of this invention is to produce a cheap, durable, and resilient fastener for gloves or fabrics.

The invention consists in a fastener-stud made of a single piece of sheet metal.

The invention further consists in a fastener-socket formed of two pieces of sheet material, a socket member, and a button-cap joined together, and certain details of construction described in the following specification, and particularly pointed out in the claims thereof.

Referring to the drawings, illustrating the preferred form of my invention, Figure 1 is a plan, and Fig. 2 an edge view, of the blank from which my improved socket member is made. Fig. 3 is a plan, and Fig. 4 is a side elevation, of the socket-member blank, partly formed. Fig. 5 is a plan, and Fig. 6 a side elevation, of the socket-member blank formed in proper shape to be driven through the fabric and into the button-cap. Fig. 7 is a vertical central section taken on line 7 7, Fig. 5. Fig. 8 is a plan view, and Fig. 9 an edge view, of the blank from which my improved fastener-stud is made. Fig. 10 is a plan view, and Fig. 11 a side elevation, of the fastener-stud blank, partly formed. Fig. 12 is a plan, and Fig. 13 a side elevation, of the fastener-stud formed in proper shape to be driven through and set in the fabric. Fig. 14 is a vertical central section taken on line 14 14, Fig. 12; and Fig. 15 is a vertical central section showing the fastener-stud attached to the fabric. Fig. 16 is an underneath plan view, and Fig. 17 a side elevation, of a button-cap before the socket member is attached thereto. Fig. 18 is a vertical central section showing the socket member passed through the fabric and entering the button-cap, and Fig. 19 is a vertical central section of the socket member driven into the button-cap and through the fabric with

the fastener-stud attached to the fabric and inserted in the fastener-socket as it appears when in use.

Like letters and numerals refer to like parts throughout the several views of the drawings.

In the drawings, 20 is the blank from which the socket member A is formed. Said blank is preferably provided with holes 21, arranged in a circle about the center of said blank. 22 are radial slits in said blank. The blank is first formed into the shape shown in Figs. 3 and 4 in a manner well-known to those skilled in the art, the holes 21 partly closing up, as shown in Fig. 4. The socket member is next drawn in with a spring-chuck to form a neck at 23, closing up the holes 21, as shown in Figs. 6 and 7, the completed socket member A consisting of a standard 24, flange 25, and neck 23, the standard having slits 22 therein and the neck having slits formed by the closed holes 21.

The button-cap B is formed of sheet metal having a top 26 and base 27, said base having a shank 28 formed thereon, with a central hole 29 therein and a space 30 between the base and top of said button-cap. The base 27 is divided into four parts by radial slits 31.

The button-cap B is attached to the socket member A and to the fabric C by forcing the socket member A through a hole in said fabric and into the opening 29 in the shank of the button-cap to the position shown in Fig. 18. The socket member is then forced still farther into the button-cap until the top of the standard 24 strikes the under or inner side of the top 26, when it spreads out into the space 30, and at the same time the lower edge of the shank 28 enters and is forced into the neck 23 upon the socket member A, said socket member and button-cap when thus joined forming as a whole the fastener-socket F. The base of the button-cap B being divided by slits 31 into four segments forms a resilient support for the neck of the socket member A, and said neck is also rendered resilient by the slits 21, which in the blank were perforations 21.

It will be noted that the slits 22 on the end of the socket-member standard allow the said standard to spread into the space 30 and lock

the socket member A to the cap B, the cap B and socket member A forming as a whole a fastener-socket.

The fastener-stud D is formed of one piece of sheet metal. The blank 32, from which it is formed, is provided with perforations 33, Fig. 8, arranged in a circle about the center of said blank. The blank is first formed into the shape shown in Figs. 10 and 11 in a manner well known to those skilled in the art, the holes 33 partly closing up, as shown in Fig. 11. The stud is next drawn in with a spring-chuck, forming a contracted portion or neck at 34 and closing up the holes 33 to form slits, Fig. 13. The completed fastener-stud D consists of a head 35, a standard 36, having a contracted portion or neck 34, with slits 33 therein, and a flange 37. The fastener-stud is forced through a hole in the stock E and upset, as shown in Fig. 19, the flange 37 forming a finish on one side of the material and the standard 36 spreading out, as shown, forming a rim 38 or a finish on the opposite side of the stock, the material E being firmly held between said flange 37 and rim 38.

The advantages secured by my invention consist in the strength, simplicity, durability, and cheapness of the parts, the fastener-stud being formed of one piece of sheet metal and the fastener-socket of two pieces of sheet metal.

It will be noted that the socket member at the contracted portion or neck 23 is resilient on account of the slits 21 therein and is rendered still further resilient by being supported in the resilient shank 28 on the button-cap B.

I do not wish to limit my invention to the details of construction herein shown and described, as it is evident to those skilled in the art that, for example, the standard portion of the ball member might be contracted without forming the perforations 33 in the blank thereof and also that, for example, the blank 20 of the socket-piece need not necessarily be provided with perforations and slits which are entirely separate from each other.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A stud member for a ball-and-socket fastener consisting of a single piece of sheet metal having a head, a standard and a flange, all so formed and constructed that upon the application of end pressure a portion of said standard will expand and form a rim or second flange between which and the said first-named flange the material will be held.

2. A stud member for a ball-and-socket fastener consisting of a stud formed from a single piece of sheet metal having a head, a neck and two flanges, one above the other, said flanges serving to hold the material between them and thus secure said stud member to the material.

3. A stud member for a ball-and-socket fastener formed from a single piece of sheet metal

having a head, a standard and a flange, said standard being adapted to form, on the application of end pressure, a second flange or rim between which and said first-named flange the material will be gripped.

4. A stud member for a ball-and-socket fastener formed from a single piece of metal and having a head, a standard, and a flange, said standard comprising a contracted portion adjacent to said flange and an enlarged portion adjacent to said head, and which enlarged portion is adapted to form, on the application of end pressure to said stud member, a second flange or rim between which and the first-named flange the material is gripped.

5. In a fastener, a stud formed of a single piece of sheet metal, having a head, a standard with a contracted neck portion, slits in said neck portion, and a flange adjoining said neck portion.

6. In a fastener, a stud formed of a single piece of sheet metal having a head, a standard with a contracted neck portion, slits in said neck portion, and a flange adjoining said neck portion, all so formed and constructed that when driven into a piece of material, said standard will expand forming a rim and holding said material between said flange and rim, substantially as described.

7. A fastener-socket formed of two pieces of sheet material, a button-cap, and a socket member, said socket member formed of a single piece of sheet material having a standard, an integral, one-piece flange, and a contracted neck portion joining said standard to said flange with slits therein.

8. A fastener-socket formed of two pieces of sheet material, a button-cap, and a socket member, said socket member formed of a single piece of sheet material having a standard, an integral, one-piece flange, and a contracted neck portion joining said standard to said flange, with a series of slits in said neck portion and another series of slits in the top of said standard.

9. A fastener-socket, formed of two pieces of sheet material, a button-cap and a socket member, said socket member formed of a single piece of sheet material having a standard, an integral, one-piece flange, and a contracted neck portion joining said standard to said flange, said button-cap formed of a single piece of sheet material having a top and a base with a shank formed to embrace the neck portion of said socket member with a resilient pressure.

10. A fastener-socket formed of two pieces of sheet material, a button-cap and a socket member, said socket member formed of a single piece of sheet material having a standard, an integral, one-piece flange, and a contracted neck portion joining said standard to said flange, with slits therein, said button-cap formed of a single piece of sheet material having a top and a base, with a shank formed thereon having a central hole therein said

base slitted and formed to embrace the neck portion of said socket member with a resilient pressure.

11. A fastener-socket formed of two pieces  
5 of sheet material, a button-cap and a socket member, said socket member formed of a single piece of sheet material having a standard, an integral, one-piece flange, and a contracted neck portion joining said standard to said  
10 flange, with a series of slits in said neck portion and another series of slits, in the top of said standard, said button-cap formed of a single piece of sheet material having a top, and a base with a shank formed to embrace  
15 the neck portion of said socket member with a resilient pressure.

12. In a fastener, a stud formed of a single

piece of sheet metal, having a head, a standard, slits in said standard and a flange adjoining said standard.

13. A socket-piece comprising a preformed, integral flange having a non-slitted edge portion and a contracted and slitted standard, the latter being adapted to spread outward upon the application of end pressure and  
20 thus form means of attachment.  
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In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN D. STIRCKLER.

Witnesses:

CHARLES S. GOODING,  
SYDNEY E. TAFT.