

No. 615,776.

Patented Dec. 13, 1898.

G. E. ADAMS.

SOCKET MEMBER FOR SEPARABLE FASTENERS.

(Application filed Jan. 5, 1898.)

(No Model.)

Fig. 1.



Fig. 2.

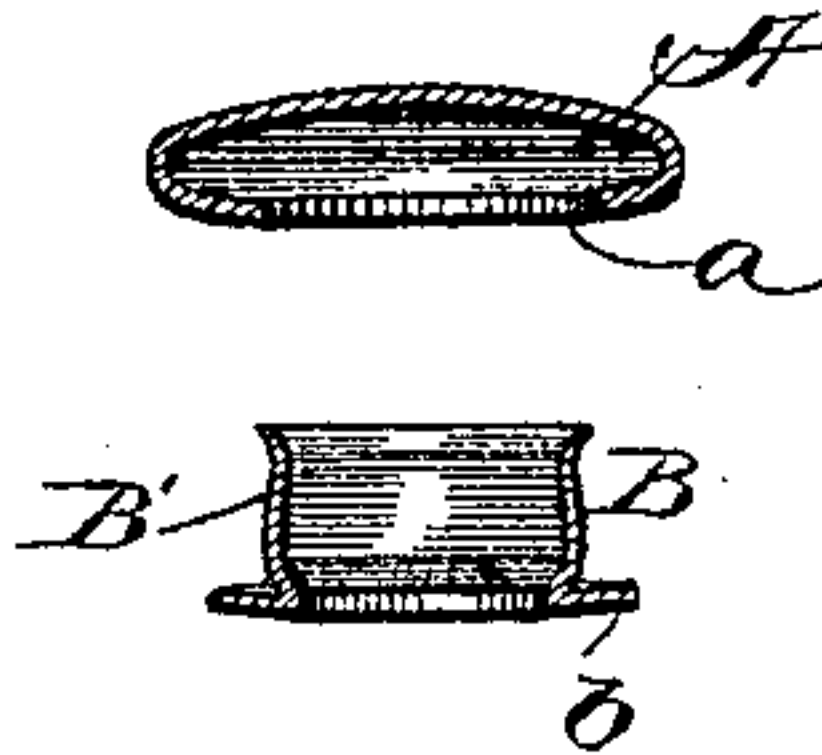


Fig. 3.



Fig. 4.

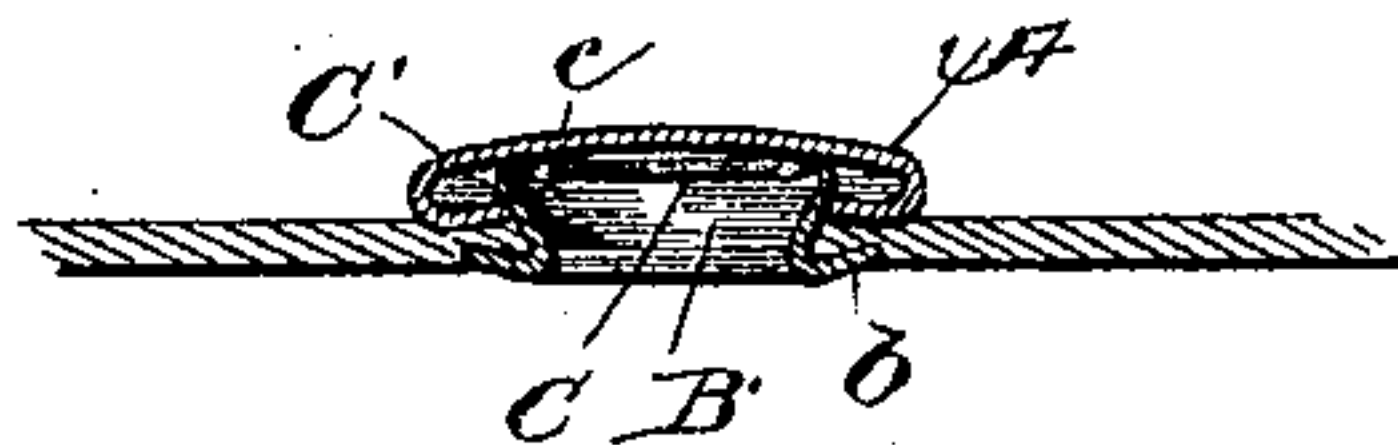


Fig. 5.

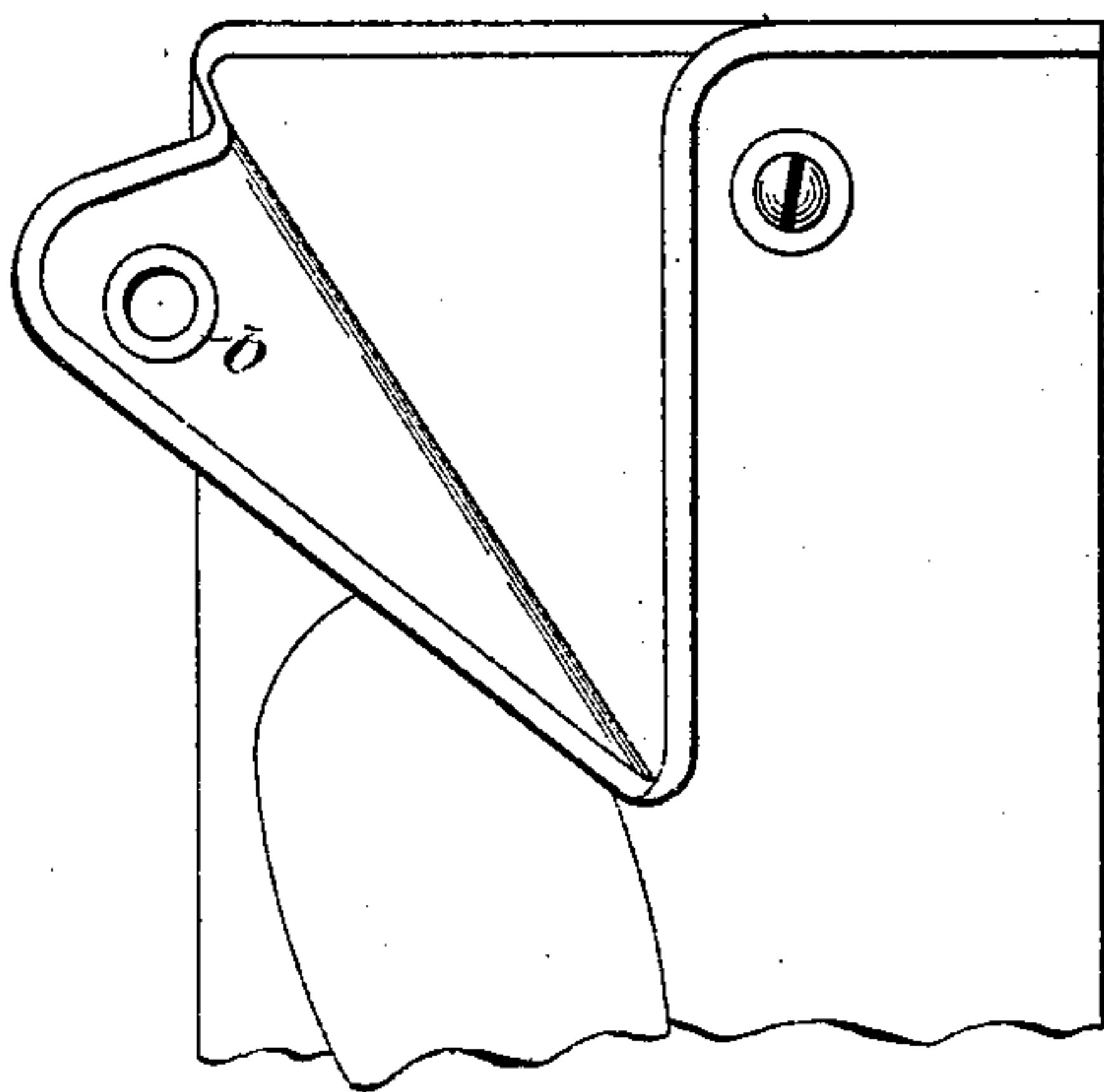
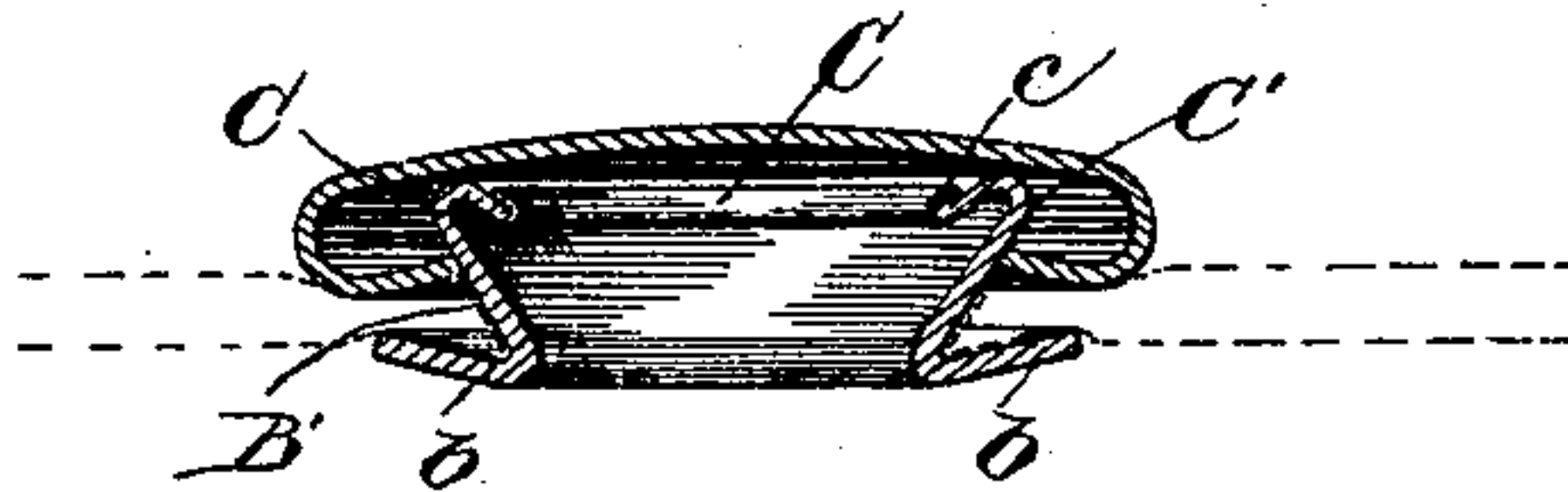


Fig. 6.



Witnesses.

J. M. Fowler Jr.
Alex. Stewart.

Inventor:

George E. Adams,
by Chas. H. Church
his Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE E. ADAMS, OF NEW BRITAIN, CONNECTICUT.

SOCKET MEMBER FOR SEPARABLE FASTENERS.

SPECIFICATION forming part of Letters Patent No. 615,776, dated December 13, 1898.

Application filed January 5, 1898. Serial No. 665,695. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. ADAMS, a citizen of the United States, and a resident of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Socket Members for Separable Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to that class of devices commonly known as "separable fasteners" and adapted more especially for use upon gloves and other articles of wearing-apparel, although its use is by no means confined to this class.

The object of the invention is to produce an exceedingly simple and strong device composed of a minimum number of parts and of such character that it may be readily attached to the goods by means of the well-known appliances.

Referring to the accompanying drawings, Figure 1 is a sectional view through a blank for the cap-piece of the fastening. Fig. 2 is a similar section through the cap-piece and its cooperating eyelet with the parts separated. Fig. 3 is a side elevation of the eyelet shown in Fig. 2 in section, which constitutes the chamber for the reception of the stud member. Fig. 4 is a sectional view taken through the two members, the cap and eyelet, showing their form after having been assembled and attached to the goods. Fig. 5 is a diagrammatic view showing one use of the device, the same being applied to a glove. Fig. 6 is a sectional view corresponding to Fig. 4, but on an enlarged scale and with the goods shown in dotted lines.

Like letters of reference in the several figures indicate the same parts.

In the preferred embodiment of the invention and as illustrated the entire socket member is composed of but two simple parts—to wit, a cap-piece and an eyelet. The cap-piece has the usual curved or crowned top with a reduced entrance-opening, and the eyelet, which forms, in effect, the chamber for the stud member, is constructed of such shape that when passing into the cap-piece pressure

upon the two parts will cause it to assume a shape which will effectually lock it in place, clamping the goods between its flange and the cap-piece and entirely without the use of an anvil or spreading member, such as has been heretofore commonly used in securing the parts of a separable fastener together.

The cap-piece is preferably formed up from sheet metal first into a cup A, as shown in Fig. 1, the edges of which are subsequently drawn in to form an annulus or circular entrance-opening *a*, Fig. 2, of a diameter which will admit the barrel of the eyelet, to be now described.

The eyelet B is formed with an outwardly-extending base-flange *b*, of any usual contour, on the external periphery and surface and with an upwardly-extending barrel or body portion, the walls B' of which in cross-section are of substantially ogee-curve form. At the point of union between the body or barrel B' and the flange *b* the opening within the eyelet is consequently somewhat reduced and forms the engaging edge of the socket member, and the enlargement immediately above the engaging edge constitutes the chamber for the head of the stud member.

Experimentation has demonstrated that when an eyelet of this peculiar form is pressed into the cap-piece and against the top surface thereof the pressure will cause the upper portion of the eyelet-body to fold inwardly, making an annulus C, Fig. 6, the extreme edge of which is usually folded back upon itself, as at *c*, and in the formation of this annulus C the portion of the eyelet adjacent and below the same is bulged outwardly, as at C', causing the body portion of the eyelet to expand against the edge of the cap-piece at *a*, with the portion of larger diameter within the cap-piece. The result of this is that not only are the two parts locked firmly together, but there is a positive tendency of the eyelet to draw into the cap-piece, and thereby grip the goods held between the cap-piece and the flange *b* of the eyelet. The cap-piece by the pressure exerted in clamping the two parts together may be set down a little, so as to present a somewhat flattened appearance as compared with it before the parts are assembled and as shown in Figs. 2 and 4. The effect of this flattening of the cap-piece is to form between

the flange of the eyelet and the rim or edge of the cap-piece a gripping edge at the periphery of the flange of the eyelet, permitting the goods to expand slightly adjacent the body of the eyelet, thereby overcoming any tendency to tear out, and so permit the socket member to become released from the goods.

The entrance-aperture formed by the angle between the flange *b* and body *B'*, it will be observed, is a rigid aperture, the device being adapted for the accommodation of a resilient stud, while the chamber above such aperture is of larger diameter. Furthermore, the annulus *C* is of larger diameter than the said entrance-aperture and does not obstruct the chamber, but, on the contrary, the head of the stud may pass into the annulus when the parts are assembled and its surface approach close to the cap, thereby producing a device which is but little thicker than the goods to which it is applied. In this connection it will also be noted that the edge of the eyelet turning back on itself at *c* insures a large diameter for the annulus *C* for the accommodation of the stud and at the same time the edge being double affords sufficient strength to resist any inward bending or collapsing of the enlarged portion of the eyelet under excessive strain tending to draw the eyelet out of the cap.

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

1. A socket member for a separable fastener, comprising the cap-piece having its edge turned inwardly to form an annular entrance-opening, an eyelet forming the entrance-opening for the stud having an out-

wardly-extending base-flange and an upwardly-extending body portion, bulged outwardly within the annular entrance-opening of the cap-piece to unite the parts and with its upper portion above such outwardly-bulged portion turned inwardly in the form of an annulus, said annulus being of greater diameter than the entrance-opening in the eyelet; substantially as described.

2. A socket member for a separable fastener comprising the cap-piece having its edge turned inwardly to form an annular entrance-opening, an eyelet forming the entrance-opening for the stud having an outwardly-extending base-flange and an upwardly-extending body portion, bulged outwardly, within the annular entrance-opening of the cap-piece to unite the parts, with its upper portion above such outwardly-bulged portion turned inwardly in the form of an annulus of greater diameter than the entrance-opening in the eyelet and the extreme edge of said body portion doubled back on itself around the said annulus; substantially as described.

3. An eyelet for forming one of the parts of one member of a separable fastener, having a base-flange and an upwardly-extending body portion, having a greater diameter than the opening through said flange, at a point immediately above and adjacent thereto, a restricted portion above said enlarged portion and with its upper edge flared or turned outwardly; substantially as described.

GEORGE E. ADAMS.

Witnesses:

WM. A. PIMM,
HENRY C. HINE.