(No Model.)

D. A. CARPENTER.

GLOVE FASTENER.

No. 383,702. Patented May 29, 1888.

Fig: 1.

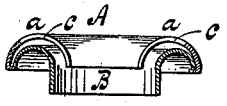
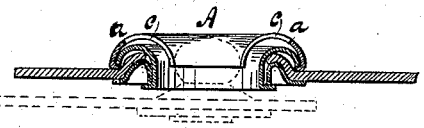


Fig: 2.



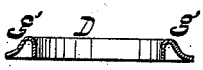
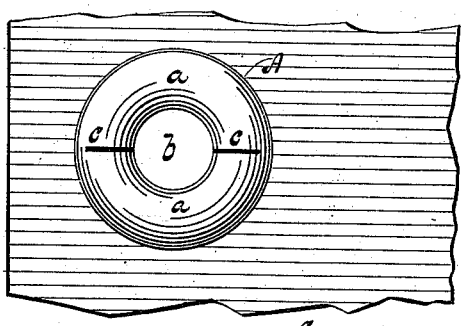


Fig: 3.



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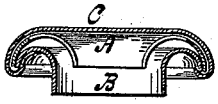


Fig: 14.

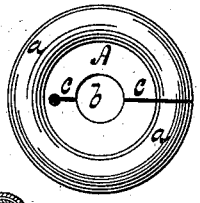


Fig: 5.

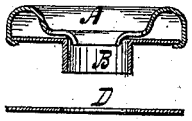


Fig: 6.

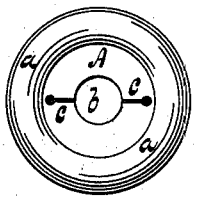


Fig: 7.

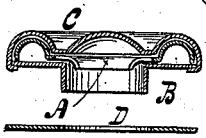


Fig: 8.

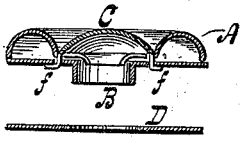


Fig: 9.

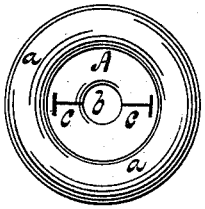


Fig: 10.

Fig: 11.

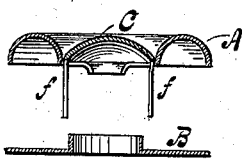


Fig: 12.

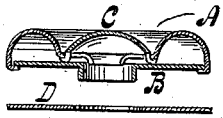
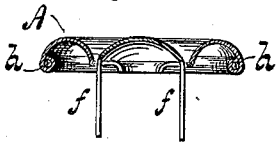


Fig: 13.



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Geo. M. Field.

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UNITED STATES PATENT OFFICE.

DANIEL A. CARPENTER, OF NEW YORK, N. Y.

GLOVE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 383,702, dated May 29, 1888.

Application filed March 6, 1888. Serial No. 266,357. (No model.)

To all whom it may concern:

Be it known that I, DANIEL A. CARPENTER, of New York city, in the county and State of New York, have invented a certain new and useful Improvement in Fasteners for Gloves and other Articles, of which I declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in two-part fastening devices, one of whose members is a spring member; and the object of the invention is to improve the construction of this member, substantially in the manner and for the purpose herein described.

In the accompanying sheet of drawings, Figure 1 is a vertical section of the spring portion, eylet, and washer; Fig. 2, a vertical section of the same parts attached to a piece of fabric, and the outline of a post. Fig. 3 is a plan view of the spring portion and fabric; Fig. 4, a vertical section of spring portion, eyelet, and top united; Fig. 5, a vertical section of a modification containing spring portion, eyelet, and washer; Fig. 6, a plan view of the same; Fig. 7, a vertical section of the same parts with the addition of a top; Fig. 8, a vertical section of another modification; Fig. 9, a plan view of the spring portion, shown in section in Figs. 8, 11, 12, and 13; Fig. 10, an under side view of the top, shown in section in Figs. 8, 11, 12, and 13. Figs. 11 and 12 are vertical sections of other modifications. Fig. 13 is a vertical section showing the outer edge of the spring portion turned over a wire ring. Fig. 14 is a plan view of a modified spring portion.

Similar letters of reference indicate like parts in the several views.

The design of this invention is, generally, to increase the usefulness of these fasteners, and particularly to render them suitable for various articles and classes of articles to which they have not thus far been applied.

In some cases the spring member of such fasteners is the stud, and in others the part by which the stud is received; but this invention relates to the construction of the stud-receiving member when that member constitutes the spring member. The stud thus employed is ordinarily rigid, and may be formed of any suitable material and in any desirable manner. Its chief requirement is that it shall have a head which cannot pass between the jaws of the spring member except by forcing them slightly outward, and about which the jaws can so contract as to prevent the head from escaping without assistance. An illustration of this part appears in Fig. 2 of the drawings.

The member which receives the stud, and which is the part embodying the invention, is constructed as now described. A blank is cut out of suitable sheet material—as for instance, brass or steel—and may be either circular or elliptical. The blank is formed by proper dies into a spring portion, A. This spring portion, when it is struck from a circular blank, consists of an annulus, a part or all of the material composing which is pressed into a concavo-convex ring, *a*, and it is slit from two diametrically-opposite points upon the edge of the opening *b* toward the outer edge of the annulus, as shown at *c c*. The margin of this portion is thus formed into an annular spring, while the material around the central opening between the slits *c c* constitutes yielding jaws, which are adapted to engage the stud. Of course, when the blank is made elliptical a corresponding change in the shape of the completed spring member is occasioned.

With the spring portion A is combined an eyelet, B, and with these parts may also be combined a top, C, if desired. The eyelet and spring portion may be united, as shown in Figs. 1, 2, and 5, by having the edge of the latter turned under the flange of the eyelet; or when the top C is made a part of the spring member the edge of the top may be turned under both the edge of the spring portion A and the flange of the eyelet, as shown in Figs. 4 and 7, all three of the parts being thus held together; or the top C may be provided with prongs or tongues *f*, which pass through corresponding slots in the spring portion and flange of the eyelet, and have their ends clinched, as shown in Fig. 8; or, as shown in Fig. 12, the prongs or tongues may be inserted in slots in the spring portion alone and clinched and afterward the edge of the spring portion be turned under the flange of the eyelet. The

member, when constructed in any of these forms, is attached to a glove, for example, by passing the material of the glove and a washer, D, over the tubular part of the eyelet and upsetting the latter in the ordinary manner. It will be observed that the several parts fit together in such a way that when the member rests in a proper seat during the operation of upsetting the eyelet there is no danger of crushing any of the parts. When the spring portion is shaped as represented in Figs. 1, 2, 3, and 4, the washer should also be drawn up, as shown at *g*, to make it conform to the parts above it, so that the cloth or other material may be firmly clamped between the washer and flange of the eyelet.

Still another way of uniting the spring portion, top, and eyelet and of attaching them to the glove is illustrated in Fig. 11. In this case the eyelet is first inserted in the material of the glove from the under side and upset. Then the prongs with which the top is provided are passed through slots in the spring portion and flange of the eyelet and clinched, depressions being made in the flange to allow the clinched ends of the prongs to lie flush with the surface.

Should it be desired to make the fasteners very stiff and strong, the edge of the material of the spring may be turned over an elastic ring, *h*, of brass or steel wire, as illustrated in Fig. 13, by which means the fasteners can be rendered serviceable for various heavy articles which require fastenings capable of resisting a severe strain. Moreover, a covering of cloth or leather is readily applied to the top C, so that either the whole or a portion of the upper surface of the spring member may consist of material like that of the article to which the fastener is attached. The covering is placed over and secured by its edge to the top, either being clamped between the top and spring portion or spring portion and eyelet, in which case nothing but the covering is visible on the upper surface of the member, or being clamped between the top and a disk or ring on the under side of the same when the top is of less diameter than the spring portion, in which case a ring formed by the spring portion is visible surrounding the covered center.

In Fig. 14 the spring portion A is shown with one of the slits *c* extended to the outer edge of the material. This form of spring is also useful, and may be employed in several or even all of the ways above indicated.

The changes herein described in the construction of the spring member of these fasteners do not render the method of their operation any different from what it was before. The two members are made to engage by being pressed together, the head of the stud entering the opening of the opposite member, and are separated by being pulled apart, as is commonly the practice in the use of such fasteners.

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

1. In the spring member of a fastening device, the combination of the portion A, having the concavo-convex ring *a*, and slits *c c*, extending in opposite directions from the opening *b*, whereby is formed a pair of yielding jaws inclosed by an annular spring, and the eyelet B, the sides of the opening *b* being drawn downward to the tubular part of the eyelet and adapted to alternately engage and release a stud, substantially as and for the purpose described.

2. In the spring member of a fastening device, the spring portion A, having the concavo-convex ring *a*, an eyelet, B, with a concavo-convex flange conforming to the ring *a*, said spring portion having an opening, *b*, with yielding sides, which are drawn downward to the tubular part of the eyelet and adapted to alternately engage and release a stud, and a washer, D, drawn up, substantially as shown, to fit the recess on the under side of the flange of the eyelet, said parts being severally constructed and combined in the manner and for the purpose set forth.

DANIEL A. CARPENTER.

In presence of—
FRED HENNING,
GEO. M. FIELD.