(No Model.)

G. E. ADAMS.

GLOVE FASTENER.

No. 489,890. Patented Jan. 10, 1893.

Fig. 1.

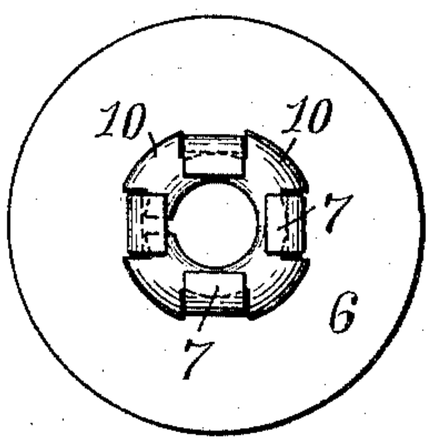


Fig. 2.

Fig. 3.

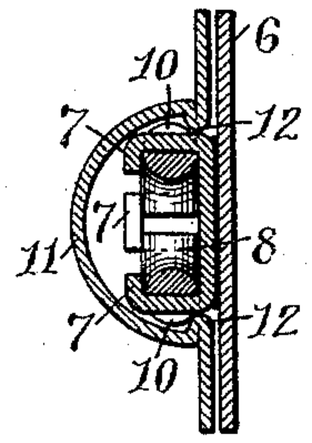


Fig. 4.

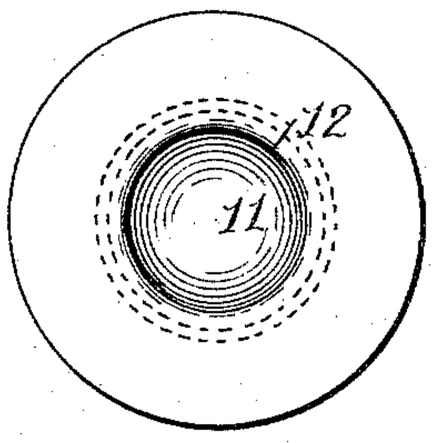


Fig. 5.

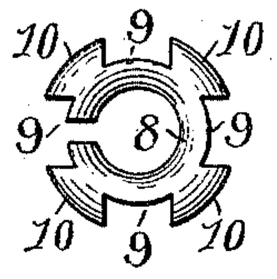


Fig. 6.

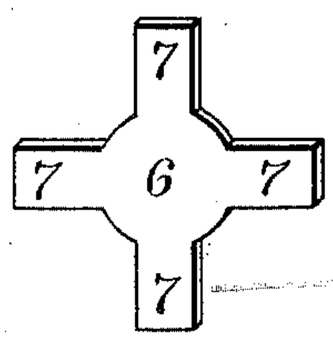


Fig. 7.

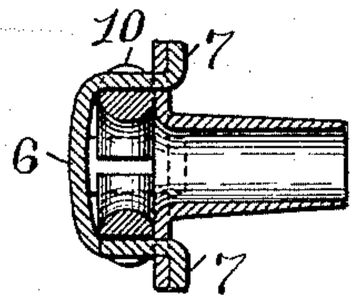
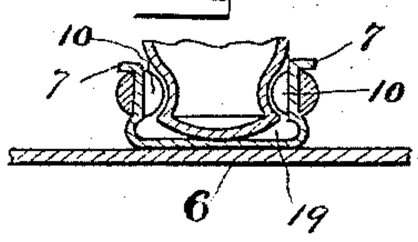


Fig. 8.



WITNESSES:

Chas. H. Luther Jr.

M. F. Bligh.

INVENTOR:

George E. Adams

by Joseph A. Miller & Co.,

attorneys.

UNITED STATES PATENT OFFICE.

GEORGE E. ADAMS, OF PROVIDENCE, RHODE ISLAND.

GLOVE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 489,890, dated January 10, 1893.

Application filed August 9, 1892. Serial No. 442,553. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. ADAMS, of the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Clasps; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in spring-clasps which are adapted to be secured to, or formed in part with, suspender-buckles, or other garment-supporting devices, but may be secured to gloves, shoes, &c., as fastening-devices for the parts of the same.

The object of the invention is to produce a substantial and durable clasp the separable parts of which may be held together from any side strain, while the same are readily separated when desired.

The invention consists in the peculiar construction of the spring, clamping the arms for holding the same and the combination therewith of a suitable cap having a rib adapted to be engaged by the spring-ring, as will be more fully described hereinafter.

Figure 1 represents a plan view of the spring clamping-ring secured by arms to a base-plate. Fig. 2 represents a bottom view of the cap adapted to fit over the clamping-ring. Fig. 3 represents a vertical sectional view of the complete clamping-device. Fig. 4 representing the clamping-ring removed from its setting, and Fig. 5 representing the blank from which the arms are turned up to form said setting. Fig. 6 illustrates a modified construction of the improved clasp, the frame or setting for holding the spring-ring being inverted and the ends of the arms inserted through slots in an eyelet-flange and bent over. Fig. 7 represents a longitudinal sectional view of the same. Fig. 8 is a sectional view of a modification.

Similar numbers of reference designate corresponding parts throughout.

In the drawings 6 indicates a piece of sheet-metal which may form a portion of a buckle or other garment-supporting device, or it may represent a strip of metal secured to one side of a shoe, or glove, opening. Secured to, or stamped out and bent up from, the plate 6 is a setting formed of the arms 7—7 inclosed within which is a ring 8, of spring-metal, the ends of which are slightly separated to allow for the contraction of the ring. The circumferential portion of the ring is cut away at 9—9 to form depressions therein, in which the arms 7—7 are recessed, and intermediate these depressions the metal is left to form the outwardly-extending shoulders 10—10. After the ring 8 has been placed in position in the setting formed by the arms 7—7, the upper ends of these arms are bent over the same firmly holding it in position while allowing the contraction and self expansion thereof.

The cap 11 is formed in part with a piece of metal which may be a portion of a buckle cast-off, or may be a portion of any device which it is desired to secure to the plate 6 or to the article to which that plate is secured; this cap is of a size to contain within itself the clamping-ring 8 and the setting holding the same, and at its lower circumference the cap is provided with an internal lip 12 which, when pressed down over the convex surface of the shoulders 10—10, tends to force the same inward and to contract the ring, which, when the lip 12 passes the center of the shoulders, is expanded by its own resiliency and the shoulders 10—10 are forced outward to engage the lip 12, as is shown in Fig. 3. The construction shown in Figs. 6 and 7 is particularly adapted for small clasps where it is necessary, or desirable, to secure the clasp by an eyelet.

It is evident that, without departing from the spirit of my invention, the shoulders 10—10 may be formed on the inner circumference of the spring-ring and the arms 7—7 extend up between them, the upper ends being bent outward, as shown in Fig. 8—in this case a stud having a tapering circumferential shoulder 19, to be inserted within the ring, would be employed in place of the cap 11 for the engaging-device.

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

1. In a clasping-device, a contractible spring-ring having radial segmental arms extending out from the body of the ring, and a setting adapted to secure said ring in place, passing

through the spaces between the arms as described.

2. In a clasp, the combination with the split contractible spring ring having the radial arms extending out from the body of the ring with the ends convex and a setting for holding the ring in place passing through the spaces between the arms, of an engaging device adapted to bear against the convex surfaces of the ends of the arms to spring the ring and allow the engaging device to pass, substantially as described.

3. In a clasp, the combination with the ring 8 having the segmental arms 10 the surfaces of which are convex, and a setting formed by the arms 7—7 for containing the ring, of the cap 11 having the lip 12 adapted to be engaged by the arms 10, as and for the purpose described.

In witness whereof I have hereunto set my hand.

GEORGE E. ADAMS.

Witnesses:
HENRY J. MILLER,
M. F. BLIGH.