No. 649,952. Patented May 22, 1900.

P. A. RAYMOND.

FASTENER.

(Application filed Oct. 1, 1898.)

(No Model.)

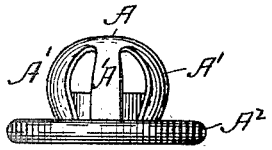

Fig. 1.

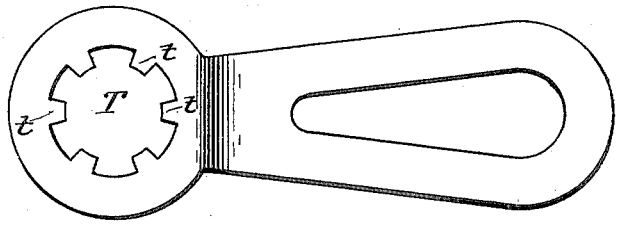

Fig. 2.

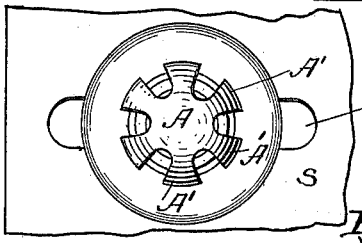

Fig. 3.

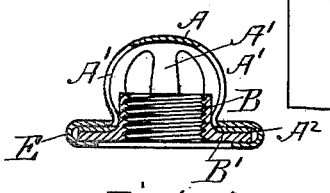

Fig. 4.

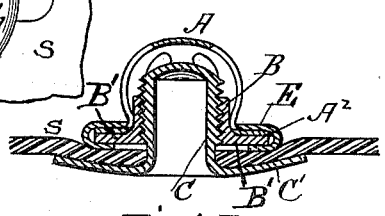

Fig. 6.

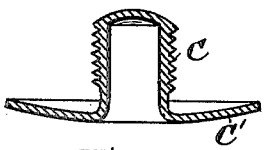

Fig. 5.

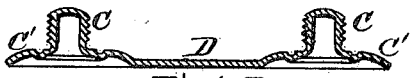

Fig. 7.

Fig 8

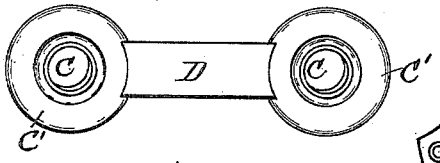

Fig. 9.

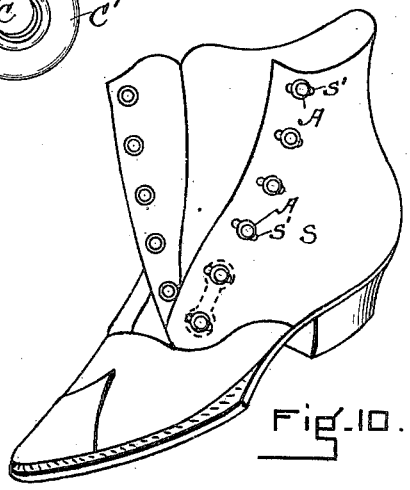

Fig. 10.

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UNITED STATES PATENT OFFICE.

PIERRE ALBERT RAYMOND, OF GRENOBLE, FRANCE, ASSIGNOR TO THE CONSOLIDATED FASTENER COMPANY, OF PORTLAND, MAINE.

FASTENER.

SPECIFICATION forming part of Letters Patent No. 649,952, dated May 22, 1900.

Application filed October 1, 1898. Serial No. 692,447. (No model.)

To all whom it may concern:

Be it known that I, PIERRE ALBERT RAYMOND, a citizen of the Republic of France, residing at Grenoble, Isère, France, have invented a new and useful Improvement in Fasteners, of which the following is a full specification.

My invention relates to that class of fasteners in which it may be desirable to have them so constructed as to be readily detachable or adjustable; and it consists in so constructing and arranging the parts that the button or fastening member may be detached from its base-piece and so that the said button member and base-piece may be adjustably connected to a portion of the article for which the device acts as a fastener.

My invention is illustrated in the following drawings, in which—

Figure 1 is an elevation of the ball member of my fastening. Fig. 2 is a plan showing a wrench especially adapted for use in turning the ball member so as to cause it to unite by means of its internal screw to a screw-post formed on a plate which is attached to the article for which my device is used as a fastener. Fig. 3 is a plan showing one of my devices and a part of the article to which it is adjustably connected. Fig. 4 is a vertical section of the ball member of my fastener. Fig. 5 is a vertical section showing the base-piece, including the screw-post. Fig. 6 is a vertical section of all the parts of my device and a part of the article to which it is attached. Fig. 7 is a vertical section showing two base-pieces united. Fig. 8 is a vertical section showing three base-pieces united. Fig. 9 is a plan showing two base-pieces united. Fig. 10 is a view in perspective of a shoe having my fastening device attached.

In the drawings I have shown the fastener applied to a shoe, but it is equally adapted for use on a great variety of articles, and its construction and form may be varied and still be within the scope of my invention.

The button member A of the device is shown in the drawings as nearly globular, and consists of a single piece so cut out as to form arms A′ A′, united at both ends, as shown, and made resilient. The lower ends of the arms A′ A′ are united to the annular flange A^2 and are integral with it. An annular plate E is folded in such a manner that it will embrace both the flange A^2 and the flange B′ of the vertical hollow screw member B, (see Figs. 4 and 5,) holding them firmly together.

The locking or clamp part is shown in Fig. 5. This consists of a post C, provided with exterior screw-threads, as shown, to engage the interior screw-threads of the member B. The post C is preferably vertically extended from or mounted upon a dished or concave disk C′. (See Figs. 5 and 6.) The post C is hollow, with closed upper end, and is of greater length than the open-ended socket-piece B, so that it projects ordinarily above the end of the socket in order that the attachment may be made to materials of different thicknesses and still be engaged throughout the entire length of the threaded socket, so as to always make the relative and proper engagement complete for the length of the socket-piece. It will also be perceived that the particular construction of the base or flange C′ and the horizontal disposition of the flange B′ make a contracted annular opening between them, whereby the material is securely clamped at the convergent point between them.

To attach my device, a hole is made in the article to which it is to be applied and the post C is passed through it, the disk C′ occupying the position shown in Fig. 6—that is, under the fabric. Now the button member, Fig. 1, is screwed on, as shown in Fig. 6. For convenience in screwing the parts together a key or wrench (see Fig. 2) may be used. The opening at T is so formed as to fit the button, the detents *t t* being adapted to enter the spaces between the arms A′ A′, so that the wrench in turning causes the button to turn with it. By the aid of the wrench the parts may be made to firmly clamp the fabric S between them, (see Fig. 6,) and thus be firmly connected to the article.

In Figs. 7, 8, and 9 I have illustrated certain modifications. Thus in Figs. 7 and 9 I have shown in section and plan two screw-posts mounted on or made a part of a single base-plate D. In Fig. 8 three posts are shown in connection with a single plate. In case the intermediate plate D is made sufficiently light to be elastic then any number of the

screw-posts may be connected to or formed on the same piece.

Adjustability as to position may be obtained by making a slot, as S' S', Figs. 3 and 10, in the fabric and attaching the button by its screw clamp device at any desired position in the said slot.

I claim—

1. A fastener comprising, a button member consisting of a globular resilient head formed with an annular base-flange, a hollow interior screw-threaded socket having an annular base-flange, and an annular clamping-ring to hold the said parts together; and a screw-threaded post longer than the height of the socket-piece to engage in the said screw-threaded socket, and formed with an annular base-flange, substantially as shown and described.

2. A fastener of the character described, comprising a spring top or stud of globular form, formed with an annular base-flange, a screw member B consisting of a vertical hollow stem provided with interior screw-threads, and formed with an annular base-flange B', an annular ring clamping said base-flanges together, and a locking member consisting of a hollow post provided with exterior screw-threads and formed with an annular base-flange, the said post being of greater length than the said socket, whereby the said socket is at all times engaged throughout its length, substantially as and for the purpose specified.

3. In a fastener of the kind described, the combination of a resilient globular stud formed with an annular base-flange a hollow interiorly-screw-threaded member B formed with an annular base-flange, an annular clamping-ring to hold said base-flanges together, and a vertical clamping part consisting of a vertical hollow post longer than the member B, and having exterior screw-threads, and a base-flange of dished or concave upper surface, substantially as described.

In witness whereof I have hereunto set my hand and seal.

PIERRE ALBERT RAYMOND. [L. S.]

Witnesses:
H. FISCHER,
JULES MATAGRIN.