Dec. 2, 1924. 1,517,708

M. V. CLARK ET AL

SNAP FASTENER ATTACHMENT

Filed May 5, 1924

Fig. 1.

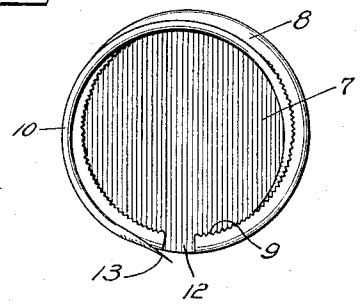


Fig. 2.

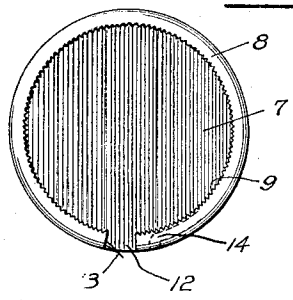


Fig. 3.

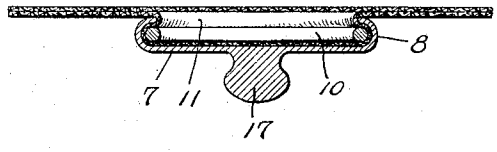


Fig. 4.

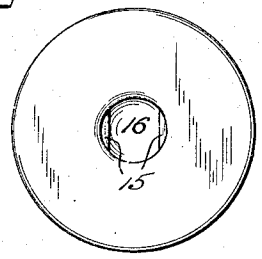


Fig. 5.

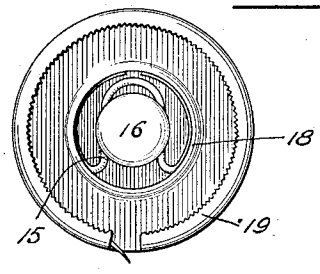
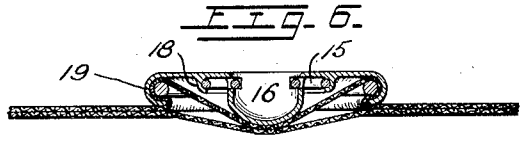


Fig. 6.



Inventors;
Mabel V. Clark and
Cecil F. Clark,

per Arthur J. Farnsworth.
their Attorney.

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UNITED STATES PATENT OFFICE.

MABEL V. CLARK AND CECIL F. CLARK, OF LONG BEACH, CALIFORNIA.

SNAP-FASTENER ATTACHMENT.

Application filed May 5, 1924. Serial No. 711,127.

To all whom it may concern:

Be it known that we, MABEL V. CLARK and CECIL F. CLARK, citizens of the United States, residing at Long Beach, in the county of Los Angeles and State of California, have jointly invented a new and useful Snap-Fastener Attachment, of which a specification is set forth below.

In this specification, and the accompanying drawing, we will describe and show a preferred form of our invention, and specifically mention certain of its more important objects. We do not limit ourselves to the forms disclosed, since various changes and adaptations may be made therein without departing from the essence of our invention as hereinafter claimed; and objects and advantages, other than those specifically mentioned, are included within its scope.

Our invention relates to means for attaching snap fasteners and the like to garments. One of its objects is to provide a convenient way for attaching such articles without sewing; another object is to make it possible to conceal the attaching means entirely when the application is made on double thickness fabrics; a third object is to afford facilities for obtaining a very strong grip upon the fabric in such a manner that there is no tendency for it to become released unintentionally; and a fourth objective is to accomplish the above by means of a very simple and relatively inexpensive construction.

Our objects are attained in the manner shown in the accompanying drawing wherein we have selected a somewhat common type of snap fastener to illustrate the application of our attaching means. In the drawing—

Figure 1 is a bottom view of the male element of such a fastener with our attaching means applied thereto and ready for insertion in a fabric;

Figure 2 is a similar view after the attaching means has been closed into its normal gripping position;

Figure 3 is a central section of this element in elevation, attached to a double thickness fabric;

Figure 4 is a top view of a female element of a fastener of this particular type;

Figure 5 is a bottom view of this same part, or the reverse side of Figure 4; and

Figure 6 is a central section of this element in elevation, attached to a double thickness fabric.

Similar reference numerals refer to similar parts throughout the several views and the latter are greatly enlarged for convenience of illustration.

It is to be understood first of all that our invention comprises only a new and improved means for attaching such devices as snap fasteners, buttons, and the like to garments. It does not concern itself with the construction of these articles except to apply the attaching means to them, and therefore involves only the construction of their bases.

In the drawing the base of a male element of a snap fastener is shown at 7. The base is circular in form and has an internally flanged, or annularly recessed rim 8. The edge of the rim flange is serrated, as shown at 9, and a circular pin-pointed spring 10 is adapted to lie normally within the recessed rim to grip a fabric 11 by its outward pressure against the rim.

The rim has a gap 12 through which the point 13 of the spring normally protrudes slightly. The other end of the spring is fixed in the recess of the rim in the manner indicated by dotted lines at 14. By pressing inwardly on point 13 the greater portion of the length of the spring may be taken out of the recess and made to assume the position shown in Figure 1. When in this position its point may be made to pierce a fabric, and the latter made to underlie the spring for nearly the whole of its length by turning the device as a whole. When the fabric so underlies the spring the latter is pressed down into its recess so as to assume the position shown in Figures 2 and 3, with the fabric between the spring and the recessed rim. Serrations 9 prevent the fabric from being pulled in such a manner as to release the spring from its recess unintentionally.

Our attaching means are applied to the female element of a snap fastener in an entirely similar manner, and the attaching operation is the same. Figures 4, 5, and 6 have been included in the drawing mainly to show one of the several ways in which our invention may be applied to such devices without interference with their other features or functions. Such articles usually have some form of snap spring 15 adapted to protrude into socket 16 through

slits in the walls of the latter provided for that purpose. When the button 17 of the male element is inserted in the socket this spring resiliently engages the neck of the button and tends to hold the two elements of the fastener in engagement. These and similar snap fastening arrangements may be made entirely independent of our invention by locating them centrally, as shown, inside of a recessed rim 18 of their own. Another practical construction (not illustrated) is to allow the snap spring 15 to underlie our attaching spring in recessed rim 19. In this event it is frequently necessary to make this rim wider for the accommodation of these two springs and the element becomes somewhat thicker in appearance.

It is to be understood that our invention contemplates resilient means for gripping a fabric within a flanged or grooved recess. The flange and recess may be either internal to the base rim, as shown, or external thereto. In the latter case the spring 10 tends to contract rather than to expand. Such construction may have advantages in certain cases over that shown in the drawing.

We desire to call special attention to the fact that where double thickness fabrics are used, as in Figures 3 and 6, the attaching means may be entirely concealed by allowing spring 10 to pierce only the outer layer of the fabric. This gives the device a very neat appearance not attainable by sewed-on articles; or articles having visible attaching means.

We claim as our invention;

1. In a device of the character described having a flange or grooved base rim, a spring member normally contained in said groove having one end fixed therein, and the other end adapted for being sprung outward therefrom and for gripping a fabric in said groove.

2. In a device of the character described having an internally flanged or recessed base rim, a spring member normally contained in said recess having one end fixed therein, and the other end pointed and adapted for being sprung outward therefrom for piercing a fabric and gripping it in said recess.

3. In a device of the character described having an internally flanged or recessed base rim, a spring member normally contained in said recess having one end fixed therein and the other end pointed and adapted for being sprung outward therefrom for piercing a fabric and gripping it in said recess; the edge of said flange being serrated.

4. In a device of the character described having an internally flanged or recessed base rim, a circular spring member normally contained in said recess having one end fixed therein and the other end adapted for being sprung outward therefrom; the edge of said flange being serrated, and said spring being adapted for exerting a pressure against said rim for gripping a fabric in said recess.

5. In a device of the character described having an internally flanged or recessed base rim, a circular spring member normally contained in said recess having one end fixed therein and the other end pointed and adapted for being sprung outward therefrom; the edge of said flange being serrated and said spring being adapted for piercing a fabric and retaining it in said recess by outward pressure against it.

6. In a device of the character described having an internally flanged or recessed circular base rim, a circular spring member normally contained in said recess having one end fixed therein and the other end pointed and adapted for being sprung outward therefrom; the edge of said flange being serrated, and said spring being adapted for piercing a fabric and retaining it in said recess by outward pressure against it; and said device being adapted for causing said fabric to underlie said spring by rotating the device after the fabric has been pierced by said point.

MABEL V. CLARK.
CECIL F. CLARK.