June 15, 1948. F. A. BERTRAM 2,443,372

FASTENER

Filed Aug. 4, 1947

Fig. 1.

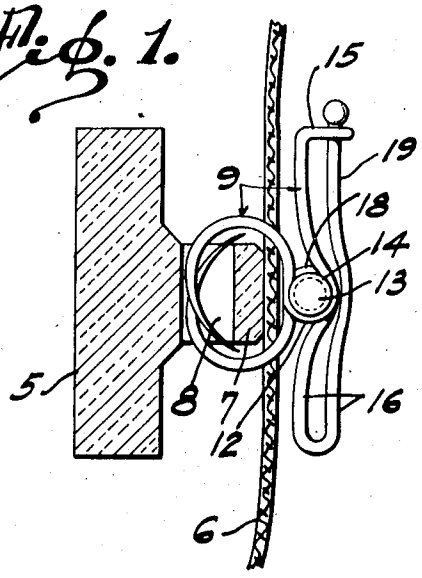
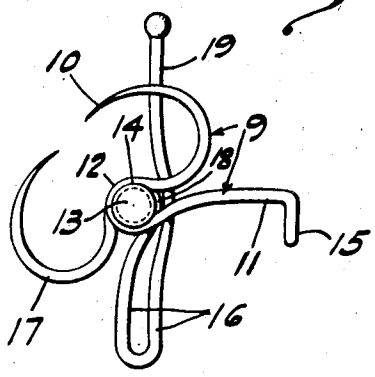


Fig. 2.



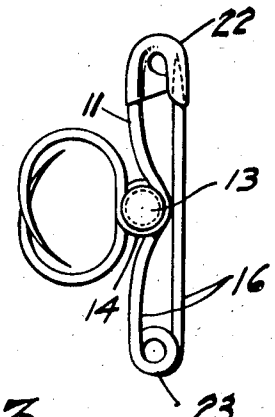


Fig. 3.

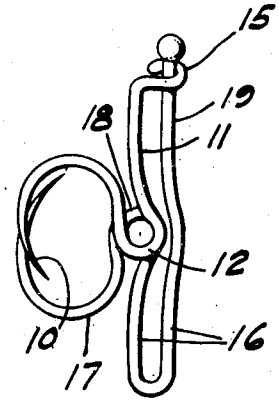


Fig. 4.

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FASTENER

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2 Claims. (Cl. 24—104)

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This invention relates to a fastener and particularly to a button attaching fastener.

Owing to the desirability of removing buttons, particularly such as are of an ornamental type, from garments before the garments are cleaned or laundered, and also to facilitate button removal and replacement for various other reasons, numerous devices have been constructed, patented and marketed with a view to meeting this need. However, many of said devices have been found, in practice, to possess certain objectionable features, such as forming undesirably large apertures through the parts of garments underlying buttons; or being inconvenient to operate; or lacking the simplicity and fewness of parts necessary to make it possible to manufacture them at the low cost desired.

It is among the objects of the present invention to overcome the above noted defects by providing a button attaching means that will minimize the size of apertures required for attaching buttons; to provide a more conveniently operable button-attaching means; and so to simplify the construction of such a means as to render its manufacture possible at a very low cost.

Another and more specific object is to provide an improved combination of a safety-pin-like structure with button-holding jaws which open when the safety-pin part is opened and close when the safety-pin part is closed.

Other objects, advantages and features of invention will hereinafter appear.

Referring to the accompanying drawing, which illustrates a preferred embodiment of the invention,

Fig. 1 is a view showing the applied device in side elevation, the attached button and adjacent portion of the garment being shown in section.

Fig. 2 is a side elevation of the device shown separately and in the button-releasing position.

Fig. 3 is a side elevation of a modification wherein the tongs thereof are made integral with a safety-pin-like structure.

Fig. 4 is a view slightly in perspective of the device per se with the tongs thereof closed and the rivet omitted.

Referring in detail to the drawing, the device may be used to attach a button 5 to a garment section 6, in which case the button will have a shank 7 furnished with a transversely extending aperture 8. Or the device may be used to attach various ornaments to a garment, or to attach to each other two overlying sheets of fabric.

The attachment comprises an arm 9 having an end portion 10 pointed to penetrate sheets of

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fabric, this pointed part being bent to a C-shape with a widely open side, the remaining portion 11 of the arm being directed oppositely to the side to which the C opens and being joined to the C part at a curve which extends through more than 180 degrees, thus forming an eye 12 to receive a pivot member 13 which may consist of an open-ended rivet having a circumferential retaining flange 14 around each end. In Fig. 1 the end portion 11 of the arm 9 is shown terminating in a hasp-forming hook 15 which is directed oppositely to the C-forming part of the arm.

In order to complete the tongs-like structure afforded by the device a bar 16 is provided which, like the arm 9, is made of a resilient piece of wire. This bar, throughout the greater portion of its length, is bent to substantially the same shape as the arm 9, thus providing in one of the end portions of the bar a second pointed C-shaped part 17 disposed oppositely to the other C, and having also an eye portion 18, the pivot member 13 extending through both of said eyes. Opposite to its C-shaped end said bar has a rebent end portion 19, the knobbed extremity of which cooperates with the aforesaid hasp 15 to form a closed loop when the bar and arm are swung to one limit of their movement upon the pivot member, at which time the two C-shaped parts are in a closed, overlapping relation to each other, thus cooperating in a tongs-like fashion to hold in place the button, said C-shaped parts moving to an open relation to each other when said arm and bar are swung about the pivot member to the opposite limit of their movement.

The eye portion 18 of the bar 16 is in a parallel, abutting relation to the eye portion 12 of the other swingable member thus forming a compact turnable structure between the flanged ends 14 of the pivot member 13.

In Fig. 3 is shown a modification wherein a sheet metal safety-pin hasp 22 is substituted for the hasp extension of the arm run 11 of Fig. 1, the bar portion which is interlockable with said hasp 22 being pointed instead of knobbed. Also, in said modification, the bar 16 is shown with a coil 23 located at its rebent portion so as to add to its resiliency.

It is to be observed that, in both embodiments of the device the slender, pointed terminal portions of the C-shaped members 9 and 17 are well adapted for being projected through whatever layer of fabric it is desired to attach the buttons, ornaments, etc., to be held in place upon the garment by the device.

When it is desired to detach the button, for

example, for the purpose of cleaning the garment, the arm 9 is swung in a clockwise direction about the pivot 13 to the open position of Fig. 2, thereby releasing said arm from the button, whereupon the arm 17 is likewise released by giving it a counter-clockwise swing. To attach the button the arms 9 and 17 will be swung in the opposite manner to that above stated, their points first being projected through the fabric 6 and then through the apertured button shank. When these arms are in their inswung position they interlock as shown in Fig. 1 positively locking the button in its applied position.

From Fig. 4 it will be seen that the hook 15 of the arm 11 has a contracted mouth portion. This contracted mouth of the hook is sufficiently narrow frictionally to oppose the outswing of said arm, thus preventing it from an undesired swinging to the button-releasing position. When the safety-pin-like structure of Fig. 3 is used the hasp 22 likewise frictionally retains the arm 11 in its inswung position.

It should be understood that the present disclosure is for the purpose of illustration only and that this invention includes all modification and equivalents which fall within the scope of the subject matter claimed.

I claim:

1. In an attaching means for a button having a transversely apertured attaching shank, a pair of tongs comprising two oppositely arcuate fingers, a pivotal mounting member common to said fingers and about which they are swingable to and from an opposed entrant relation to the aperture through the aforesaid button shank, a bar having a rebent end portion forming an integral continuation of the pivoted part of one of said fingers, and an arm forming an integral continuation of the pivoted part of the other of said fingers, said arm having a free end portion

which is interlockable with said bar to form an anchoring loop for the tongs when the fingers of the latter are in their entrant relation to the aforesaid apertured button shank.

2. An attaching means of the kind described comprising an arm having a pointed end portion which is bent to a generally C-shape with a widely open side, the remaining portion of said arm being directed oppositely to the side toward which the C opens and being joined to the C at a curve which extends through more than 180 degrees, thus forming an eye for a pivot, the end of said arm opposite to said C being provided at its extremity with a hasp, a bar a portion of which is bent to substantially the same shape as said arm thus providing at one of the end portions of the bar a second pointed C disposed oppositely to the other C, and providing also an eye; and a pivot member common to said eyes, said bar having opposite to its C-shaped end a rebent end portion the extremity of which cooperates with said hasp to form a closed loop when the bar and arm are swung to one limit of their movement upon said pivot member, at which limit of movement the two C-shaped parts are in a closed relation to each other thus cooperating in a tongs-like fashion, said C-shaped parts moving to an open relation to each other when said arm and bar are swung about said pivot member to the opposite limit of their movement.

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The following references are of record in the file of this patent:

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