Aug. 18, 1959 J. CIRONE 2,900,205

SLIDE FASTENER HANDLE

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Fig.1

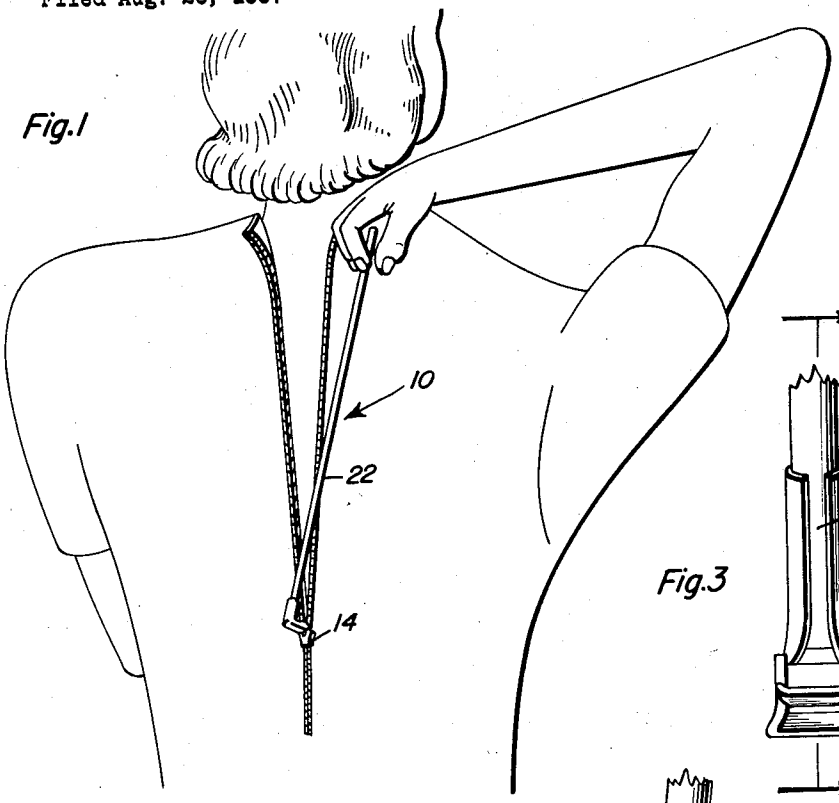


Fig.3

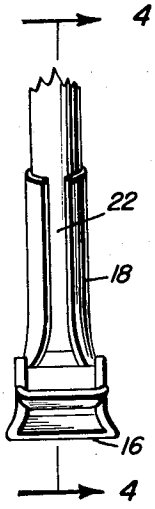


Fig.2

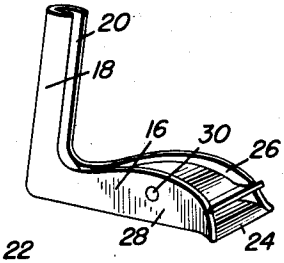


Fig.4

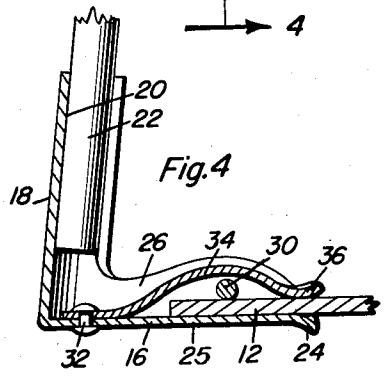


Fig.5

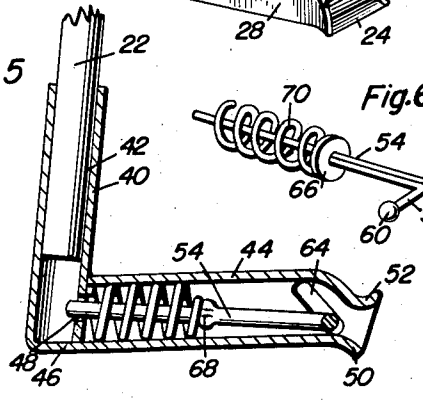


Fig.6

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Fig.7

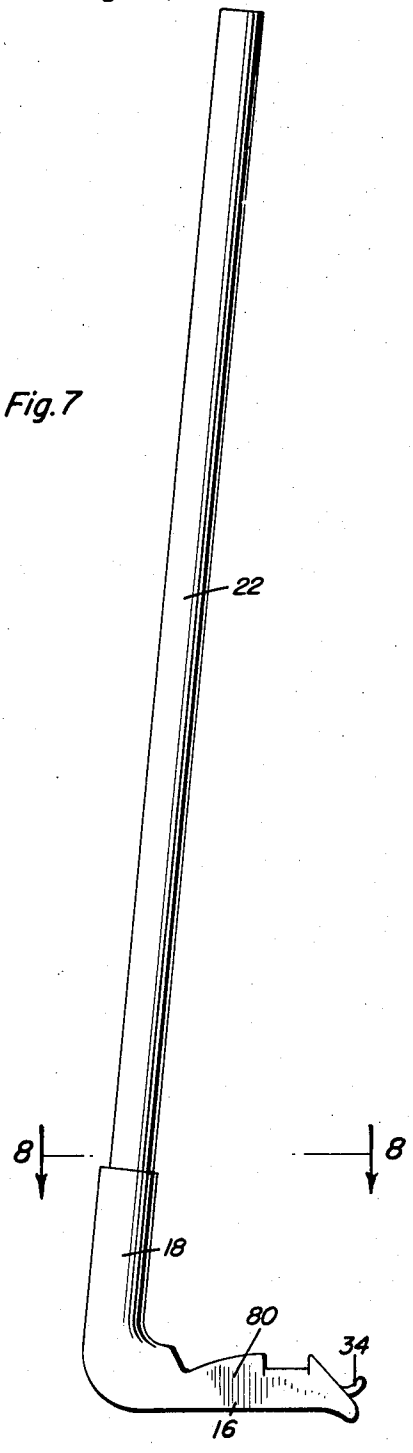


Fig.8

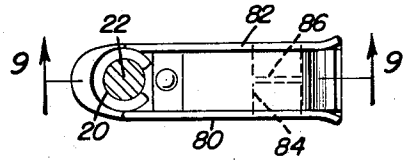


Fig.9

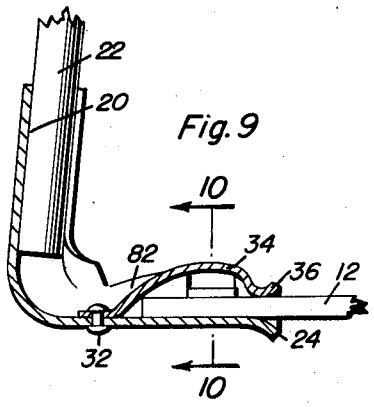
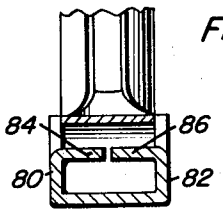


Fig.10



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SLIDE FASTENER HANDLE

Joseph Cirone, Jersey City, N.J.

Application August 26, 1957, Serial No. 680,303

5 Claims. (Cl. 294—1)

This invention relates to a closure operator and more particularly to a novel slide fastener actuating handle.

Slide fasteners are frequently used on portions of clothing such as womens garments and the like along the sides or at the back thereof where the finger piece cannot be easily grasped and manipulated. The primary object of the present invention therefore resides in the provision of a handle for a slide fastener into which the finger piece is adapted to be detachably inserted whereby the slide fastener may be easily operated.

The concept of the present invention resides in the provision of a handle having an arm provided with clip means for engagement with the finger piece and having a leg extending at an angle relative to the arm into which a handle member is secured whereby convenient means are provided for operating the slide fastener.

Still further objects and features of this invention reside in the provision of a slide fastener handle that is simple in construction, easy to attach to the finger piece of the slide fastener, and which is inexpensive to manufacture thereby permitting wide use and distribution.

These, together with the various ancillary objects and features of the invention which will become apparent as the following description proceeds, are obtained by this slide fastener handle, preferred embodiments of which have been illustrated in the accompanying drawings, by way of example only, wherein:

Figure 1 is a perspective view illustrating the manner in which the present invention is utilized;

Figure 2 is a perspective view of one embodiment of the invention;

Figure 3 is an elevational view of the embodiment of the invention shown in Figure 2;

Figure 4 is a sectional detail view as taken along the plane of line 4—4 in Figure 3 illustrating the invention with a finger piece of a slide fastener engaged therein;

Figure 5 is a sectional detailed view of a modified form of the invention;

Figure 6 is a perspective view of the clip means utilized in the embodiment of the invention shown in Figure 5;

Figure 7 is an elevational view of another modified form of the invention;

Figure 8 is a horizontal sectional detail view as taken along the plane of line 8—8 in Figure 7;

Figure 9 is a vertical sectional view as taken along the plane of line 9—9 in Figure 8 illustrating the invention with the finger piece of a slide fastener disposed therein; and

Figure 10 is a sectional detail view taken along the plane of line 10—10 in Figure 9.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, and with initial attention directed to the embodiments of the invention as is shown through Figures 1 through 4, reference numeral 10 generally designates one embodiment of the slide fastener handle comprising the present invention which is

adapted to engage the finger piece 12 of a slide fastener having a slide 14.

The slide fastener handle includes an arm 16 and an upwardly extending leg 18, the arm 16 extending laterally towards the slide fastener while the leg 18 extends upwardly. The leg 18 is configurated to form a socket 20 for reception of an elongated rod 22 which is secured in the socket 20. It is noted that the leg 18 extends at an angle with respect to the arm 16. The arm 16 is generally of a channel shaped configuration and has the lower end terminating in a lip 24 integral with the base 25 of the channel shaped arm which also has flanges 26 and 28 integrally formed therewith. Extending between the flanges 26 and 28 above the base 25 is a pin 30 forming retaining means. By means of a rivet 32 or other suitable means an arcuate resilient clip 34 is secured to the base 25 and has a medial portion thereof overlying the pan 30 while having a downwardly extending lip 36 cooperating with the lip 24 to form an entrance for the finger piece for guidingly receiving the finger piece into the interior of the arm 16. By means of the resilient action of the clip 34, the lip 36 engaging the finger piece in conjunction with thel ip 24 and the position of the pin 30, the finger piece is securely grasped against movement once it has been inserted into position whereby upon pulling of the rod 22, the slide 14 may be made to move to close the slide fastener.

Shown in Figure 5 is a modified form of the invention which includes a leg 40 having a socket 42 for receiving the rod 22 and having an arm 44 terminating in an end wall 46 having an aperture 48 therethrough. The tubular arm 44 terminates in upper and lower lips 50 and 52 and disposed therein is a clip 54 of generally T-shaped configuration having limbs 56 and 58 provided with heads 60 and 62 respectively with the limbs extending through opposed slots 64 in the arm 44 and with the heads 60 and 62 disposed outwardly of the slots. A stop such as the disk shown in Figure 6 at 66 or the knob 68 as shown in Figure 5 is provided for the T-shaped clip. Disposed on the T-shaped clip is a spring 70 which engages the stop 66 or 68 and the end wall 46 continuously urging the clip to a forward and lowered position as can be seen best in Figure 5. In order to insert the finger piece 12 within the handle it is merely necessary to pull up on the T-shaped clip using the headed portions 60 and 62 for finger engagement and insert the finger piece 12 between the lips 50 and 52. Then, upon release the clip 54 will hold the finger piece in position. As shown, the stem of the T-shaped clip 54 is slidable in the aperture 48.

Referring to the embodiment shown in Figures 7 through 10, this embodiment is substantially similar to the embodiment shown in Figures 1 through 4 with the exception that in lieu of the pin 30, the flanges 80 and 82 thereof are provided with crimped retaining detents 84 and 86 which function in the same manner as the pin 30 to hold the slide fastener finger piece 12 in position. It is to be noted that in this form of the invention the larger width of the detents 84 and 86 then the pin 30 suffices to provide additional retention for the finger piece 12.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A slide fastener actuating handle comprising a body having a laterally extending arm integrally formed with an upwardly extending leg, clip means secured to said

arm for engaging the finger piece of a slide fastener, said leg forming a socket, and an elongated rod secured in said socket, said arm having an end wall at the juncture thereof with said leg and having lips at the front end thereof, said arm having opposed side walls with slots formed therein, said clip means including a substantially T-shaped member having a stop thereon, said T-shaped member having portions thereof extending through said slots, and a spring disposed about said T-shaped member yieldingly engaging said stop and said end wall.

2. A slide fastener actuating handle comprising a body having a laterally extending arm integrally formed with an upwardly extending leg, said leg forming a socket, an elongated rod secured in said socket, said arm including a base having side flanges integrally formed therewith, said base terminating in a lower lip, clip means secured to said arm for engaging and initially retaining the finger piece of a slide fastener to the arm, said clip means terminating in an upper lip in alignment with said lower lip, said lips diverging outwardly of said arm for guiding the finger piece between said clip means and said base, means secured to said flanges and spaced from said base a distance as great as the thickness of the finger piece for retaining the finger piece to said arm when said rod is moved in a direction to close the slide fastener.

3. A slide fastener actuating handle comprising a body having a laterally extending arm integrally formed with an upwardly extending leg, said leg forming a socket, an elongated rod secured in said socket, said arm including a base having side flanges integrally formed therewith, said base terminating in a lower lip, clip means secured to said arm for engaging and initially retaining the finger piece of a slide fastener to the arm, said clip means terminating in an upper lip in alignment with said lower lip, said lips diverging outwardly of said arm for guiding the finger piece between said clip means and said base, means secured to said flanges and spaced from said base a distance as great as the thickness of the finger piece for retaining the finger piece to said arm when said rod is moved in a direction to close the slide fastener, said clip means including a resilient strip secured to said base and having a medial portion overlying said retaining means.

4. A slide fastener actuating handle comprising a body having a laterally extending arm integrally formed with an upwardly extending leg, said leg forming a socket, an

elongated rod secured in said socket, said arm including a base having side flanges integrally formed therewith, said base terminating in a lower lip, clip means secured to said arm for engaging and initially retaining the finger piece of a slide fastener to the arm, said clip means terminating in an upper lip in alignment with said lower lip, said lips diverging outwardly of said arm for guiding the finger piece between said clip means and said base, means secured to said flanges and spaced from said base a distance as great as the thickness of the finger piece for retaining the finger piece to said arm when said rod is moved in a direction to close the slide fastener, said retaining means including a pin secured to said flanges, said pin being disposed nearer said socket than the outermost portion of said base which contacts the finger latch so that the finger latch will be cam locked in said arm when the rod is moved in a direction to close the slide fastener.

5. A slide fastener actuating handle comprising a body having an upwardly opening socket formed therein, an elongated handle received and held at its lower end in said socket, said body being provided with a portion engageable with the underside of a finger piece of a slide fastener and with abutment means spaced from said portion by an amount slightly greater than the thickness of an associated finger piece and positioned to engage the upper surface of the finger piece at a point remote from the forwardmost part of the finger piece engaged by said body portion, said portion and abutment means being positioned to hold the finger piece at an acute angle with respect to the longitudinal axis of said handle such that the abutment means and body portion cooperate to hold the finger piece in functional engagement therebetween in response to an upward pull on said handle.

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