March 3, 1964 W. S. SHEE 3,122,809

ACTUATOR FOR ZIPPER FASTENER SLIDERS

Filed Jan. 17, 1963

Fig. 1

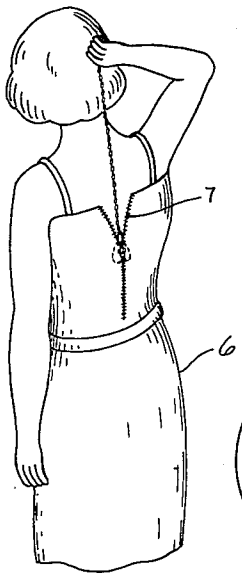


Fig. 2

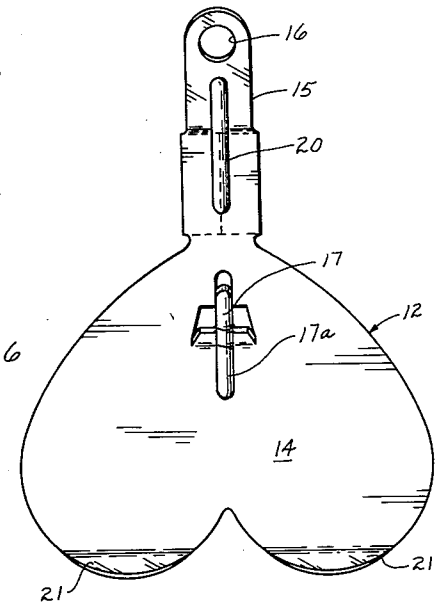


Fig. 3

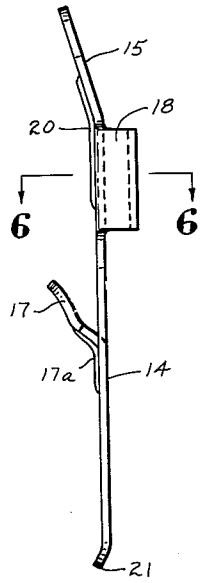


Fig. 6

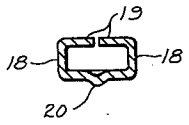


Fig. 5

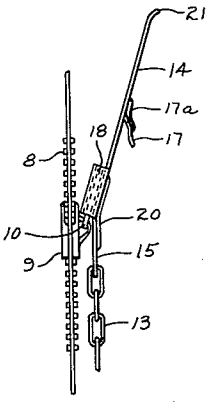
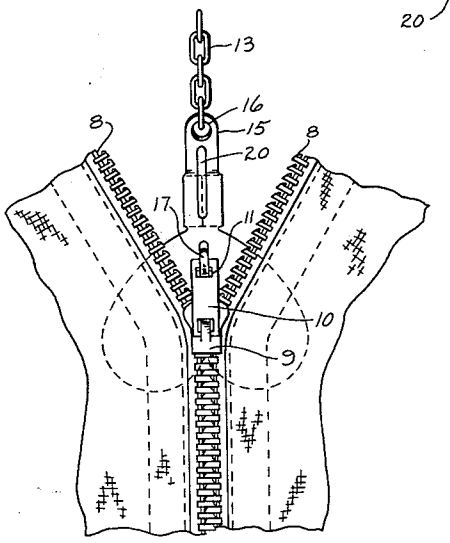


Fig. 4



United States Patent Office 3,122,809 Patented Mar. 3, 1964

3,122,809

ACTUATOR FOR ZIPPER FASTENER SLIDERS

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3 Claims. (Cl. 24—205.15)

This invention is an improved actuator for zipper fastener sliders of the type having a rigid pull tab which is usually of metal, hinged to the slider.

A common type of pull tab used for zippers applied to clothing is a rectangular metal tab with a hole at one end. In most instances, such a pull tab is sufficient for actuating the slider, but in certain instances, notably on the back opening of ladies' dresses, such a pull tab is difficult to reach.

Many proposals have been made for detachably connecting an elongated pull, such as a cord, strap or chain, to the pull tab so that it can be manipulated at a distance away from the slider. None of these devices have been, however, fully satisfactory. Some work fairly well in closing a zipper, but are awkward in opening the zipper.

One of the objects of my invention, therefore, is to provide an improved actuator which is useful both in opening and closing by the use of a single flexible pull, such as a cord, strap or chain.

Another object of the invention is economical manufacture, and to that end, the device consists essentially of an improved one-piece member which is preferably made of sheet metal having a flexible pull attached to one end and capable of the dual use above mentioned.

Another object is to provide a guard on this one-piece member which, during the closing of the zipper, will underlie the slider so as to prevent its snagging on flimsy material beneath the slider.

Another object is to provide an improved actuator of the kind described wherein a one-piece member can be hooked into the opening of the pull tab in closing the zipper, the same member having on its back side a receiver or pocket which can fit over and engage around the pull tab in the inverted position of such member so that a single flexible pull is useful in both directions. At the same time, this improved arrangement has the advantage of holding the pull tab in an extended position during the opening movement so that the slider-locking device is held in the unlocked position.

Other objects and advantages of the invention will hereinafter more fully appear.

In the accompanying drawing, I have shown for purpose of illustration one embodiment which my invention may assume in practice. In the drawing:

FIG. 1 illustrates how my improved slider actuator may be used;

FIG. 2 is a vertical front view of the one-piece pull tab engaging member;

FIG. 3 is a side view of the same member;

FIG. 4 is a front elevation view showing my improved actuator as used in closing a zipper;

FIG. 5 is a side elevation view showing how the same device may be used in opening the zipper; and,

FIG. 6 is a cross-section on line 6—6 of FIG. 3.

FIG. 1 illustrates a dress 6 with a back opening 7, and the zipper has stringers 8 attached to opposite sides of the opening. A slider 9 runs along the stringers 8 to open or close the zipper, and hinged to the slider is a pull tab 10 having a hole 11 near its free end. This is a very common type of pull tab being made of a rectangular piece of metal although, of course, the invention is not limited to any precise shape of the tab.

My improved actuator consists essentially of a one-piece rigid member, generally designated 12, and a flexible elongated pull 13 which may be a cord, chain, strap or the like. The member 12 as shown is made of sheet metal, although it will be apparent that it could be made out of plastic or other rigid materials. It consists generally of a relatively wide, generally flat guard portion 14 which is substantially wider than the slider 9 so that when it is placed underneath the zipper as seen in FIG. 4, it will act as a guard or shield to prevent any material under the zipper from snagging in the slider during closing of the zipper.

Extending from the upper end of the guard portion 14 is a shank 15 having a hole 16 at its upper free end for convenient attachment of the flexible pull 13. A hook 17 is struck out of metal of the guard portion 14 and extends upwardly toward the shank 15. This hook may be reinforced by a rib 17*a* co-extensive therewith and which extends down into the body of the guard portion 14. This is adapted for engaging in the hole 11 of the pull tab 10, as seen in FIG. 4.

On the back side of the shank 15 adjacent the guard portion 14 is a pull-holding device similar to a pocket for fitting over and engaging around the pull tab. This pocket opens upwardly or toward the shank portion so that when the member 12 is inverted, it can be slipped over the pull tab, as seen in FIG. 5. This pocket is preferably formed by side flanges 18 extending rearwardly from the side edges of the shank 15 and having inturned wings 19 to engage over the pull tab.

The upper free end portion of the shank 15 is angled forwardly so that during the closing of the zipper, it will project slightly away from the zipper or the body of the user, and during opening of the zipper, as seen in FIG. 5, it will hold the pull tab in an extended position so that in the case of a locking-type slider, the lock will be disengaged. Preferably, a reinforcing rib 20 extends along the greater part of the length of the shank 15 to provide extra strength. The lower end portions 21 of the guard portion 14 are preferably bent forwardly at an angle to help guide the guard portion into position underneath the zipper.

In use, the hook 17 is fitted into the hole 11 in the pull tab 10 preferably before the garment is put on, so that for closing the zipper, it is only necessary to place the long flexible pull 13 over the shoulder and lift it upwardly as seen in FIG. 1.

When it is desired to open the zipper, the slider will be up near the neck so that the pull tab can easily be grasped by the fingers and the actuator can be slipped over it in inverted position. Then the same flexible pull 13 can be used to pull the slider down to open the zipper.

What I claim is:

1. An actuator for zipper fastener sliders of the type having a rigid pull tab hinged thereto which comprises a one-piece member having

(*a*) a relatively wide guard portion adapted to underlie the slider in closing the zipper;

(*b*) a shank extending from the upper end of said guard portion;

(*c*) a hook projecting from the front face of said guard portion and extending towards said shank; and,

(*d*) means forming a pocket on the back side of said being adapted to be fitted over and engage around receive the pull tab from that direction, said pocket being adapted to be fitted over and engage around the pull tab to hold the same in extended position;

and a flexible pull member attached to the free end of said shank whereby the said pull can be used for closing the zipper when said hook is engaged in the pull tab, or in opening the zipper when said one-piece member is in inverted position with the pull tab engaging in said pocket.

2. An actuator for zipper fastener sliders as defined in claim 1 wherein said one-piece member is formed of sheet metal and said hook is struck out from the guard portion, said hook being centrally aligned with said shank.

3. An actuator for zipper fastener sliders as defined in claim 1 wherein said pocket consists of sidewalls extending rearwardly from the side edges of said shank adjacent said guard portion, at least one of said sidewalls having an inturned rearward flange and wherein the free end of said shank beyond said pocket is angled upwardly and forwardly of the plane of said guard portion.

No references cited.

UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,122,809 March 3, 1964

William S. Shee

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 2, line 63, for "being adapted to be fitted over and engage around" read -- shank, said pocket having its upper end open so as to --.

Signed and sealed this 14th day of July 1964.

(SEAL)

Attest:

ESTON G. JOHNSON
Attesting Officer

EDWARD J. BRENNER
Commissioner of Patents