May 26, 1959 N. MAIO 2,887,752

SLIDE FASTENER ATTACHMENT

Filed Feb. 25, 1957

FIG. 1

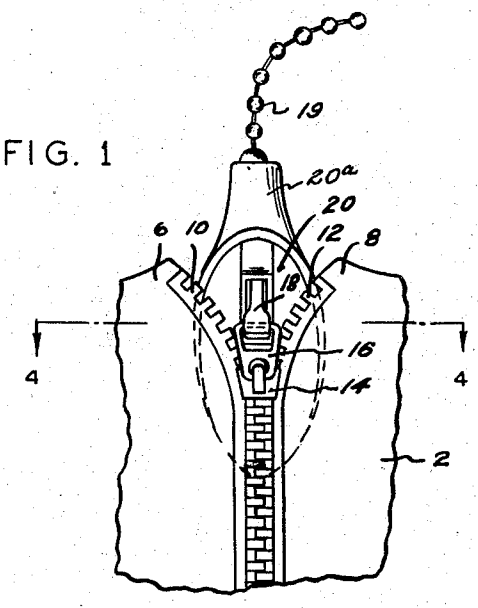


FIG. 2

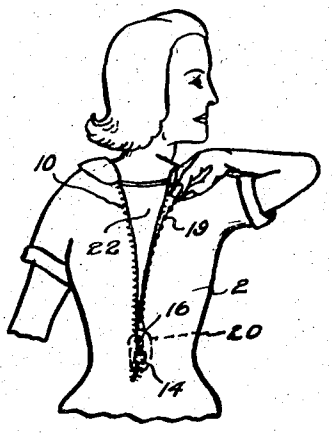


FIG. 3

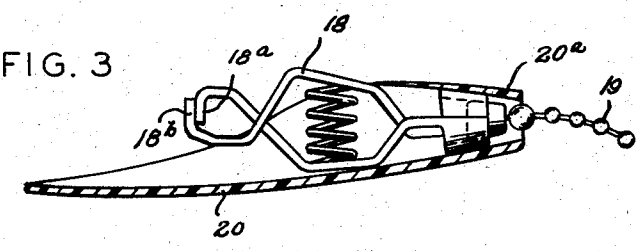


FIG. 4

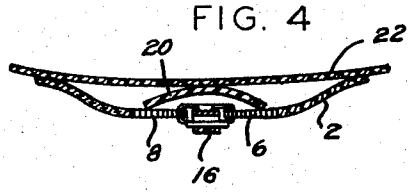


FIG. 5

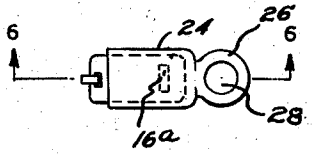
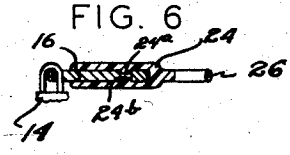


FIG. 6



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SLIDE FASTENER ATTACHMENT

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1 Claim. (Cl. 24—205.15)

This invention relates to an attachment for slide fastener devices of the class which includes a pair of stringer tape elements which are moved into and out of interlocking relationship by means of a metal slider having a tongue or pull element pivotally secured at the upper side thereof. The attachment of the invention is designed to be temporarily engaged with the slide tongue when the stringer tape elements are in a fully opened position. The attachment remains attached while the slide is operated to close the stringer tape edges and thereafter is disengaged and removed.

In the application of slide fasteners to closure openings of the type commonly employed at the back of a ladies' dress, for example, it frequently is the case that the slide fastener tongue becomes positioned in a highly inaccessible location at the lower back portion of the dress so that the person wearing the dress finds it difficult to close the slide. In order for the wearer to operate the slide fastener and move it from such an open position into a raised fully closed position, the wearer must reach around to the back of the dress into a somewhat awkward position in order to grasp the slide fastener tongue. As the slide fastener is pulled upwardly, there is reached a point at which it is difficult for the wear to maintain a hold upon the tongue. In addition, as the wearer pulls the fastening upwardly into a closed position, the slide may, in some instances of use, pass between the dress and an adjacent undergarment with the result that the slide fastener components frequently become jammed or engaged with portions of the undergarment rendering further movement of the slide fastener difficult if not impossible.

Accordingly, it is an object of the invention to deal with this problem and to devise an attachment for use with a slide fastener by means of which the operation of pulling the closure opening of a ladies' dress into a fully closed position may be greatly facilitated and the occurrence of jamming or interference with adjacent garment portions may be avoided.

Another object of the invention is to provide a slide fastener attachment which is quickly and conveniently assembled with a slide fastener and which may, when desired, be readily detached. Still a further object of the invention is to provide a slide fastener tongue enclosure which may be employed as a means of aiding engagement of the attachment therewith and which may be permanently maintained on a slide fastener tongue to provide novel decorative effects.

These and other objects and novel features may be more fully understood and appreciated from the following description of a preferred embodiment of the invention selected for purposes of illustration and shown in the accompanying drawings, in which:

Fig. 1 is a fragmentary elevational view of a ladies' dress with a closure opening formed therein along a back portion of the dress and further illustrating a slide fastener together with the attachment of the invention in one operative position for closing the slide fastener;

Fig. 2 is a diagrammatic view showing the attachment in use;

Fig. 3 is a central cross-sectional view of the attachment;

Fig. 4 is a view in cross-section taken on the line 4—4 of Fig. 1;

Fig. 5 is an elevational view of another slide fastener attachment for use in securing the attachment to the slide fastener; and

Fig. 6 is a cross-section taken on the line 6—6 of Fig. 5.

Referring more in detail to the drawings, attention is directed to Fig. 1 wherein I have shown a conventional slide fastening arranged at the back of a garment such as a ladies' dress shown in an open position. As noted therein, numeral 2 indicates a ladies' dress having an opening at the back thereof which is normally closed by bringing together the two closure sections 6 and 8. As is customary in the use of slide fasteners, a pair of stringer tapes 10 and 12 are sewed or otherwise secured to the respective edges of the dress sections 6 and 8. Arranged to move these tapes into interlocking relationship is a slide 14 of a construction well known in the art and furnished with a pivoted tongue or pull 16.

In accordance with the invention, I provide an attachment consisting of a releasable fastening 18 which is adapted to be releasably engaged on the pull 16, as suggested somewhat diagrammatically in Fig. 1. In one preferred embodiment, the fastening 18 may consist essentially of a pair of spring loaded jaws which are shaped with a pair of narrow tapering teeth 18*a* and 18*b* of a size adapted to pass through an opening in the pull 16 and become interlocked therethrough. It is intended that this fastening 18 may, in the normal use of the device, be attached to the pull 16 before the dress has been put on and with the slide fastening components in a fully opened position. Various other forms of spring loaded jaws, as well as other forms of gripping devices, may also be employed.

Secured to this fastening member 18 in some convenient manner is an elongated pull extension consisting of a pull chain or cord 19 of some suitable material. This elongated pull member is of a length of sufficient magnitude such that it may extend from the slide fastener in a fully opened position at the lower section of the dress 2 upwardly to a point where it may be grasped conveniently by the wearer of the dress by extending one arm up over the shoulder portion of the dress, as suggested diagrammatically in Fig. 2. In this position, the chain or cord may be gripped readily and pulled upwardly drawing the slide fastener into a fully closed position. At this point, the wearer of the dress may reach over the shoulder and compress the spring-held jaws of member 18 to disengage the attachment.

This operation above described may be reversed to open the slide, i.e., the spring jaws are opened and allowed to close into engagement with the slide fastener. Thereafter, the chain or pull cord 19 is allowed to hang downwardly and is grasped from a point at the lower back of the dress and the slide is pulled downwardly to open the dress sections 6 and 8. The slide is then again disengaged.

I have found that, while the above-described operations may be carried out satisfactorily in some instances of use with only a pair of jaws, there may, in other cases, be advantageously employed a special shield element which I have devised to prevent interference between the stringer tapes and an undergarment occurring immediately below the dress with which the slide member necessarily is in contact as it passes along an upward path to effect a closure.

This shield element is denoted by the numeral **20** and is indicated in Fig. 1, as well as being shown more in detail in Fig. 3. Essentially, the shield element **20** consists of a relatively thin, flat body portion which may be made of plastic material or some other suitable material. At one end, the flat body portion is formed with a very short tubular section **20***a*. As the body portion extends away from this tubular section **20***a*, it increases in width to a magnitude such that it exceeds the combined widths of the stringer tapes **10** and **12** in a closed position of these members, as is clearly shown in Fig. 1. This shield element may be conveniently attached to the spring-loaded jaws **18** in any convenient manner such as, for example, by means of a screw fastening which passes through the flat body portion and then is engaged in one end of the spring-loaded jaws. A more convenient method of attachment consists in threading the pull chain **19** through the tubular section **20***a*. In such case, the tubular section **20***a* is formed of a size such that the member **18** will be snugly held therein and yet may be removed when so desired. Various other ways of attaching the shield to the fastening **18** may be resorted to, as indicated below.

In accordance with the invention, the shield **20** is preferably arranged on the fastening **18** at the lower side thereof and in such a manner that portions of the shield may extend along and overlap the undersurfaces of the stringer tapes **10** and **12**, as suggested in Fig. 1. In such a position, the shield will also project downwardly well beyond the bottom of the slide **14**. By means of this arrangement, it will be observed that the shield **20**, on being attached to the slide fastener pull **16**, will, when the dress is put on, tend to lie between the dress **2** and an undergarment **22** (Fig. 2) in such a position that the shield may constantly slide between the dress **2** and the undergarment **22** as the fastener is being closed. Thus, there is no opportunity for the stringer tape and slide fastener components to contact the undergarment and cause jamming as the slide fastener is closed. This arrangement of parts may be more clearly seen from an inspection of Fig. 4 in which the shield **20** is shown in sliding engagement with an undergarment **22** while closing the sections **8** and **6** of the dress **2** by means of slide fastener **16**.

In attaching the device of the invention either with or without the shield **20** to the slide fastener **14**, I may also desire to provide a special enclosure **24** which is formed with an internal slot designed to fit over and tightly engage around the pull **16**, as suggested in Fig. 6. The enclosure body **24** may, for example, consist of a plastic material having a construction substantially as shown in which internal ribbed portions **24***a* and **24***b* resiliently engage through the opening **16***a* of the pull **16**. The

enclosure body **24** may also be formed with an extension or projecting end **26** with which the jaws **18***a* and **18***b* of the member **18** may be engaged. This extension **26** may be formed in various ways. For example, it may be formed with an opening **28** through which the jaws **18***a* and **18***b* are interlocked. Since this opening **28** is appreciably larger than the pull opening **16***a*, it will be appreciated that engagement and disengagement of the jaws may be greatly facilitated thereby. In addition to the opening **28**, the extension **26** may also be formed with a thickened mid-section to comprise a rib or stop for facilitating engagement by various other gripping devices.

It is also intended that the enclosure body **24** may be made up of attractively colored plastics, for example, in colors which match or blend with the color of the dress to which the slide fastener is attached. Therefore, I may desire to use the enclosure body **24** as a simple slide fastener pull accessory which is snapped onto the pull and left there for permanent use, serving as either a decorative member or as a means of covering up an unsightly metal part.

While I have shown preferred embodiments of the various forms of the invention, it should be understood that other structures and arrangements may be utilized within the scope of the appended claims.

Having thus described my invention, what I claim is:

An attachment for a slide fastener of the class which includes a pair of stringer tapes secured to a garment and a slide element for moving the stringer tapes into and out of locking relationship to manipulate a closure in the garment, said attachment comprising a shield member consisting of a relatively thin, flat body portion having integrally formed at one end thereof a tubular extension, a holding device consisting of a pair of resiliently pivoted jaws received on the thin, flat body portion and adapted to be engaged with the slide, the pivoted section of said jaws being protectively contained in the tubular extension, a pull chain device secured to the pivoted jaws and threaded through said tubular extension, said tubular extension cooperating with the holding device when a pull is exerted on the pull chain to locate the thin, flat body portion in a slightly arched position against inner surfaces of adjacent stringer tape sections whereby the stringer tapes are guided into interlocking relationship to one another and, simultaneously, shielded from surfaces underlying the said garment.

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