March 22, 1938. N. L. ETTEN 2,111,924

SLIDE FASTENER ATTACHMENT

Filed Sept. 3, 1935

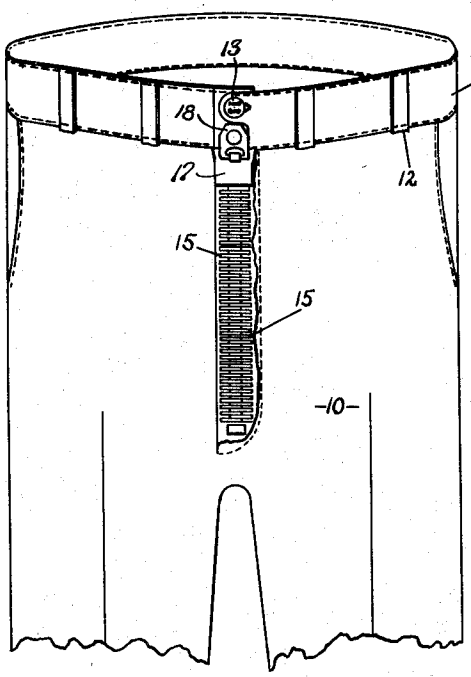


FIG. 1.

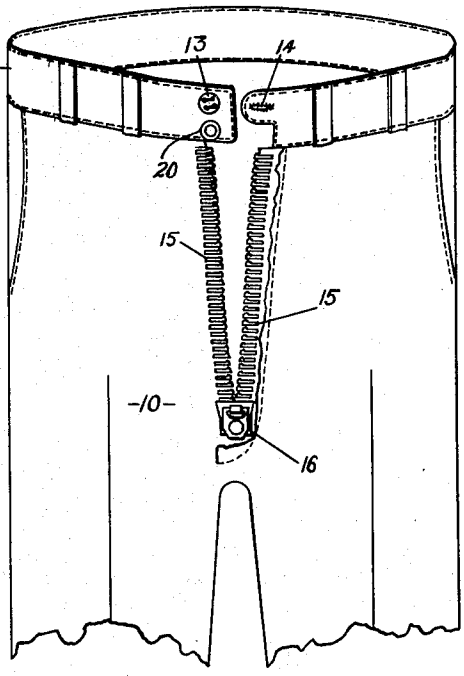


FIG. 2.

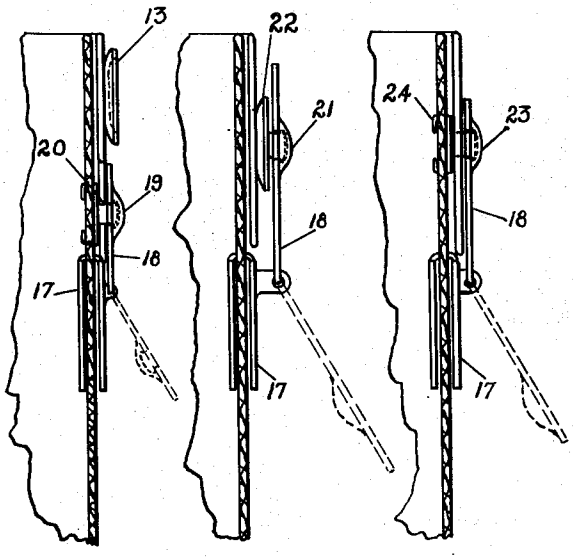


FIG. 3. FIG. 4. FIG. 5.

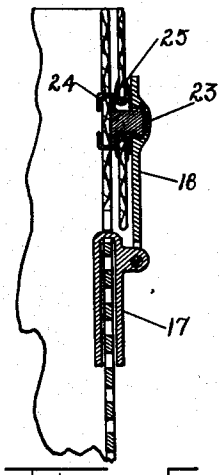


FIG. 6.

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SLIDE FASTENER ATTACHMENT

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Application September 3, 1935, Serial No. 38,931

1 Claim. (Cl. 2—234)

This invention has reference to improvements in slide fastener devices and has for its object to provide, in connection with a conventional slide fastener, a means for locking the slide member thereof in position after the same has been placed to close the fastener, to prevent accidental or undesired movement of the slider member to open the fastener.

Slide fasteners are well known and are used for many purposes where it is desired to accomplish quick and efficient closures on, for example, sweaters, men's trousers, women's clothing and the like.

In applying slide fasteners to various uses it is customary to so arrange them that the sliding member rests at the upper end of the closure when the fastener is in closed condition and in a lowered position when the same is open.

In other words, when it is desired to close the fastener the slider member is slid upwardly and conversely, when it is desired to open the fastener the slider is slid downwardly.

It will be apparent that with the slider in elevated position, it is disposed so as to be acted upon by gravity to tend to slide downwardly to open the closure and this movement is promoted and assisted by flexing, pulling, multitudinous other movements and those of adjacent garments, to which such closure devices are commonly subjected.

Thus the object of my invention is to provide means for preventing unwanted opening movements as above noted.

An embodiment of the invention is disclosed in the following description and accompanying drawing in which:

Figs. 1 and 2 are fractional elevational or perspective views showing a pair of men's trousers with a slide fastener applied for closing the front thereof, with the flap or cover portion broken away to expose the device.

Figs. 3, 4, 5 and 6 are fragmentary sectional side elevational views showing several applications of my locking device which will be referred to in the following description.

Figs. 1 and 2 illustrate the upper portion of a pair of trousers having the conventional body portion **10**, waist band **11** and belt loops **12**.

The waist band may be provided with the conventional button and buttonhole fastening **13** and **14** whereby the ends of the band are fastened.

The front opening of the trousers is provided with conventional slide fastener mechanism consisting of a series of interlocking hooks **15** adapted to be hooked or unhooked by means of operation thereon of a slider member **16**.

Devices of this class and their functioning are thought sufficiently well known to obviate detail description further than to say that with the slider **16** disposed as shown in Fig. 2 the fastener is open, whereas when the slider is slid upwardly to the position shown in Fig. 1 the front opening is automatically closed and the hooks **15** are locked in such a manner as to retain the front opening closed.

It will be apparent that with the slider **16** in the position of Fig. 1 the front opening will remain closed only so long as the slider **16** remains in its upper position. Should the slider, for any reason, move downwardly, the portion of hooks **16** above it would lie unhooked.

Since commercial slide fasteners of the type here considered are quite nicely made, so as to operate smoothly and easily, it is apparent that a slider without the complementary fastener **20**, when placed as in Fig. 1 and the device is subjected to the multitudinous movements common to clothing, is quite likely to move downwardly to permit unlocking of perhaps only a few of the hooks **16**, whereupon the unhooked part spreads open and thereby promotes further movement of the slider, a continuation of which movement eventually permits full opening of the fastener.

In order to prevent such occurrence I provide means shown best in Figs. 3 to 6, wherein the slider is shown in elevated position as it is in Fig. 1.

In commercial slide fasteners the slider mechanism designated **16**, usually consists of a body or sliding portion **17** and a loosely attached handle or tab portion **18**. By means of the latter the portion **17** is manipulated to open and close the device as described.

Fig. 3 illustrates the portion **18** as carrying one element of a snap fastener designated **19**, and a co-operative snap fastener part **20**, suitably attached to the trousers, is disposed to receive and retain the portion **18** in elevated position, as will be apparent.

Fig. 3 illustrates in detail the mechanism shown in Fig. 1.

Fig. 4 shows a modified structure wherein a button is utilized, to be used as and for the purpose of an ordinary button, but which is provided with a snap fastener element to co-operate with the element in portion **18** to hold the latter fixed.

Figs. 5 and 6 show an arrangement wherein the button part is absent. A member **24**, having an

elongated stem is suitably attached to the fabric as shown and the overlying portion of the garment is provided with a simple reinforced hole **25** which is placed over the stem to answer the purpose of a button, and the portion **18** is brought up on the outside to snap the portion **23** over the head of member **24**. With this latter arrangement the snap device **23** has a dual function, first, to hold the portion **18** in position as described and second, to prevent the outer flap of the garment from becoming disengaged from member **24**.

The foregoing has disclosed my invention. Modifications of structure are obviously possible without alteration of principle. I do not wish to be limited in structure or function except within the scope of the appended claim.

What I claim is:

A pair of trousers having a waistband and formed with a fly opening, and said trousers having in combination fastening means for the waistband including a member secured to one end portion thereof and having a stem part provided with a snap fastener element, and the other end portion of the waistband having a hole therein to be engaged by said stem part, slide fastener closure means for the fly opening including two rows of interlocking elements, a slide for actuating said interlocking elements, and a hinged pull on the slide, and a snap fastener element on said pull engageable with the snap fastener element of said stem part when the slide has been moved to effect closure of the fly opening.

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