May 29, 1928. 1,671,539

W. S. McLIMANS

SEPARABLE FASTENER

Filed June 15, 1926

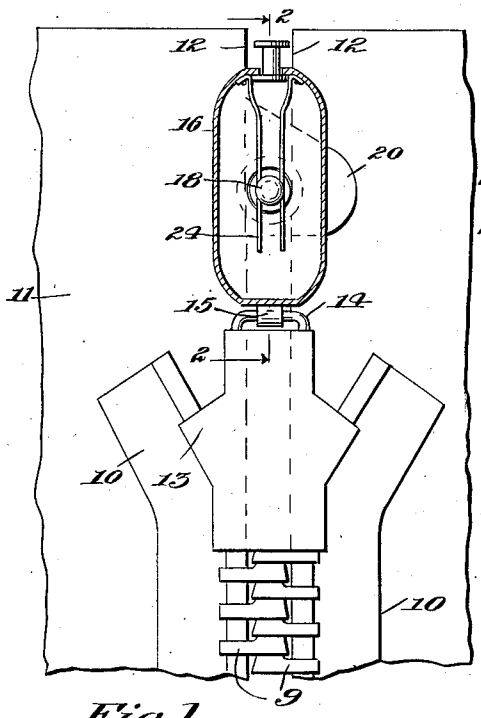


Fig. 1.

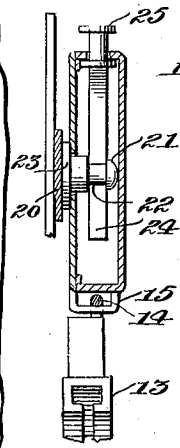


Fig. 2.

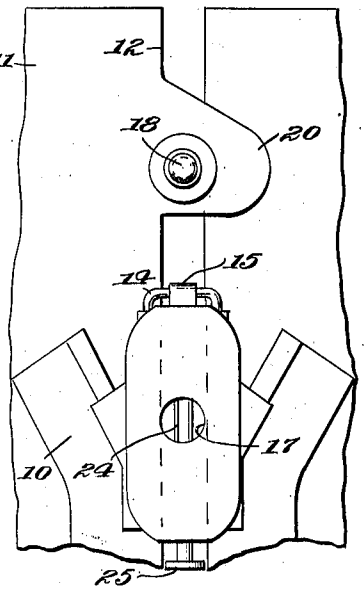


Fig. 3.

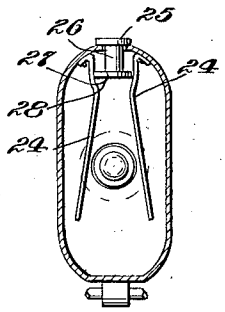


Fig. 4.

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UNITED STATES PATENT OFFICE.

WINFIELD S. McLIMANS, OF BEACH, NORTH DAKOTA.

SEPARABLE FASTENER.

Application filed June 15, 1926. Serial No. 116,142.

This invention relates to fasteners of the type wherein two edges of a fabric or other more or less flexible material are separably fastened together by means of interlocking members which are successively interengaged by means of a sliding device.

The present invention is designed to provide means whereby the sliding device or slide may be secured against movement, thereby locking the fastener in closed position.

A further object is to prevent the pull, by which the slide is actuated, from swinging freely when the fastener is in use.

The invention consists in the novel construction hereinafter described, and illustrated in the accompanying drawings, in which

Fig. 1 is a view, partly in section, of a fastener embodying the invention.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 shows the pull in unlocked position.

Fig. 4 is a sectional view of the pull.

The drawings show the invention applied to a known type of fastener in which the interlocking elements 9 are secured to the stringers 10 of a material 11 having edges 12. A slide 13, of any suitable construction, has a bail 14 to which is secured, by means of loop 15, a pull 16. The pull is in the form of a hollow metallic tab, in one face of which is an aperture 17 adapted to receive a stud 18, secured to a tab 20 on one of edges 12. Stud 18 has a rounded head 21, an annular groove 22, and a base 23 which is secured to the material 11 in any convenient manner.

A pair of flat springs 24 are secured within the pull, as by soldering or riveting, in such relation that they normally assume the position shown in Fig. 3. The width of springs 24 is such that they seat snugly in groove 22 when the pull is in locked position.

A push button 25 has its shank 26 inserted in an aperture in the end of the pull. Within the pull the button has a flange 27 adapted, when the button is pressed in, to exert a wedging action on the bowed portions 28 of the springs 24, which are preferably so shaped as to force the button out to its normal position as soon as the pressure is removed.

The operation of the device will be evident from the foregoing description. The fastener having been closed by drawing the slide to the position shown, the pull is snapped onto the stud, the rounded head 21 forcing springs 24 apart until they seat in groove 22. The slide is thereby locked against movement, while the pull is held in its extended position and secured against swinging.

While I have shown tab 20 positioned at the end of the fastener, it will be apparent that tabs may also be placed at intermediate points, if it is desirable to secure the fastener in a partly opened position.

Having described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a separable fastener having a slide, and a pull for manipulating said slide; a stud secured to the material to be fastened, and a pair of springs on said pull cooperating with said stud to lock the slide against movement.

2. In a separable fastener having a slide, and a pull for manipulating said slide; a fixed stud, and a pair of cooperating resilient members carried by said pull for locking the pull against movement.

3. A separable fastener comprising two rows of interlocking elements, a slide for actuating said interlocking elements, a pull for manipulating said slide, a stud in fixed relation to one of said rows, locking members carried by said pull and adapted to engage said stud, and a reciprocable member carried by said pull and adapted to move said locking members to inoperative position.

4. In combination, a material having adjacent edges, interlocking elements on said edges, a slide for actuating said interlocking elements, a pull for manipulating said slide, a stud secured to said material, and a pair of springs secured to said pull for engaging said stud to hold the pull against movement.

5. In combination, a material having adjacent edges, interlocking elements on said edges, a slide for actuating said interlocking elements, a pull for manipulating said slide, a stud secured to said material, a pair of springs secured to said pull for engaging said stud to hold the pull against movement, and a reciprocating member mounted in said pull and adapted to move said springs to inoperative position.

In testimony whereof, I set my signature.

WINFIELD S. McLIMANS.