Sept. 10, 1940. P. H. BAILEY 2,214,704

SLIDER FOR SLIDE FASTENERS

Filed Dec. 30, 1938

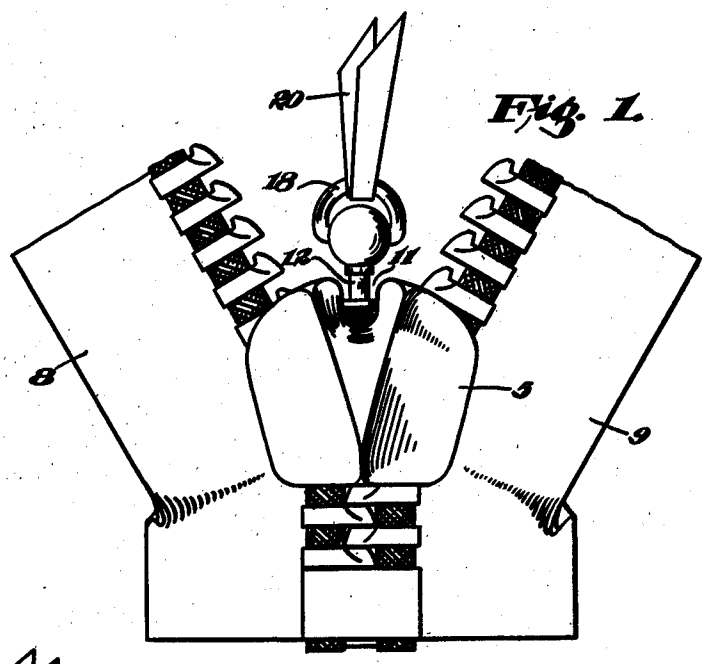
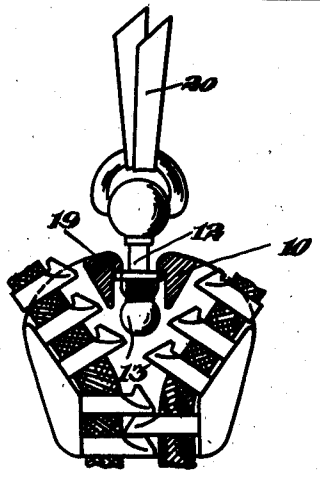



Fig. 1.



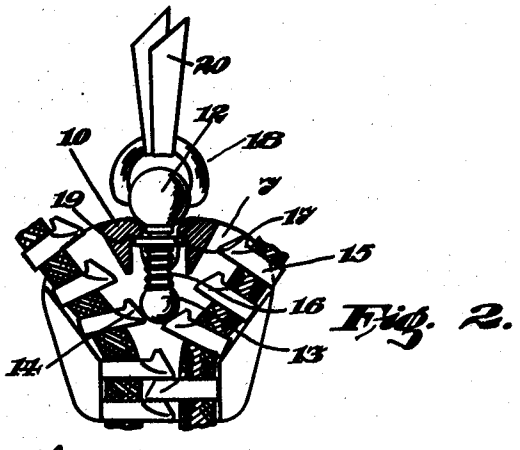




Fig. 2.

Fig. 3.

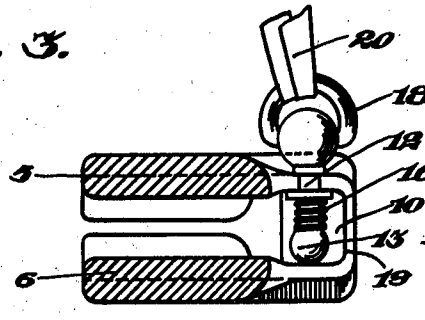



Fig. 4.

INVENTOR.
Perkins H. Bailey
BY Kelley & Chisholm
ATTORNEYS.

Patented Sept. 10, 1940 2,214,704

# UNITED STATES PATENT OFFICE

2,214,704

## SLIDER FOR SLIDE FASTENERS

Perkins H. Bailey, New York, N. Y., assignor to Talon, Inc., a corporation of Pennsylvania

Application December 30, 1938, Serial No. 248,507

5 Claims. (Cl. 24—205.5)

My invention relates to sliders for slide fasteners.

In the conventional construction of sliders for slide fasteners the pull tab for operating the slider is attached to the upper wing of the slider body by means of a lug or track. The upper wing of the slider body is either thickened to receive the pull tab, or the track or lug to which the pull is attached projects upward.

It is therefore an object of my invention to construct an improved locking slider in which the pull tab is not attached to the upper wing of the slider body, but attached through the neck portion joining the wings of the slider body. Accordingly, the over-all thickness of the slider can be reduced to a minimum and be free from any projecting lugs or tracks.

Another object of my invention is to provide an improved locking slider in which the pull is in the form of a plunger operating through a slot in the wedge portion of the slider for engaging the fastener elements and locking the slider.

A further object is to provide an improved slider in which the pull may be moved from one side of the slider to the other at will.

Further objects of my invention will hereinafter more fully appear in the following specification and appended claims.

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

Fig. 1 is a plan view showing a slider fastener equipped with my improved locking slider;

Fig. 2 is a central horizontal section taken through the slider and shows the locking plunger in locked position;

Fig. 3 is a view similar to Fig. 2 and showing the locking plunger in unlocked position;

Fig. 4 is a central longitudinal section through the slider body and shows the locking plunger in unlocked position.

The slider embodying my invention comprises generally upper and lower wings 5 and 6, a Y-shaped channel 7 through which the fastener stringers 8 and 9 pass, and a neck portion 10 joining the wings together. The neck 10 of the slider body has a slot 11 extending through its central portion and in this slot is pivoted a locking plunger 12. The locking plunger can be of any suitable construction, and the one herein disclosed has a locking head 13 which is urged inwardly against the heads 14 of the fastener elements 15 for locking the slider against movement on the fastener stringers. A spring 16 acts between the locking head and a collar 17 on the locking plunger, and urges the locking plunger against the heads of the fastener elements when the pull 18 is released in a horizontal position. Within the slotted portion of the neck 10 of the slider is a track 19 against which the collar 17 bears. This permits the locking plunger to swing in the neck portion of the slider as shown in Fig. 4.

To operate the slider in a closing direction force is exerted on the plunger 12 in a horizontal direction by means of any suitable pull tab such as a strap 20 and the plunger is pulled outwardly from engagement with the fastener elements as in a position as shown in Fig. 3. At any moment when the operator releases the pull tab this spring 16 urges the plunger downward into locked position as heretofore described. When it is desired to open the fastener the force applied to the pull tab causes the locking plunger to swing in the track 19 to a position as illustrated in Fig. 4, and swings the locking head 13 to a position within the neck free from engaging the fastener elements.

Due to the fact that the slot extends vertically entirely through the neck and wings, the plunger and pull may readily be swung in the slot so that the slider can be operated from either side. In this sense the slider is reversible.

While I have shown for the purposes of illustration one embodiment which my invention may assume in practice it will be appreciated that numerous other forms may be constructed within the scope of my invention as set forth in the appended claims.

What I claim as my invention is:

1. A slider for slide fasteners of the class described comprising a slider body for engaging and disengaging the fastener elements, said slider body having upper and lower wings, and a neck joining the wings at one end with a longitudinal slot extending therethrough, an axially reciprocable locking plunger axially bodily movable in said slot, and means normally urging said plunger axially toward locking engagement with the fastener elements.

2. A slider for slide fasteners of the class described comprising a slider body for engaging and disengaging the fastener elements, upper and lower wings and a neck joining the wings at one end, said neck having an aperture extending longitudinally through its center, a locking plunger arranged for reciprocation and bodily movement in said aperture, and yielding

means normally yieldingly urging said plunger axially toward locking engagement with the fastener elements.

3. A slider for slide fasteners of the class described comprising a slider body for engaging and disengaging the fastener elements, said body having upper and lower wings and a neck joining the wings at one end, said neck having therein a slot extending therethrough and into the slider body, a locking plunger arranged in said slot and movable bodily in the slot swingably in a longitudinal plane from one side of the slider body to the other, and yielding means biasing said plunger axially, inwardly of the slider for engaging said plunger with the fastener elements.

4. A slider for slide fasteners of the class described comprising a slider body for engaging and disengaging the fastener elements, said body having upper and lower wings and a neck joining the wings at one end, said neck having therein a slot extending therethrough and into the wings of the slider body with walls having shoulders forming a track, the locking plunger being arranged in said slot and swingable in the slot from one side of the slider body to the other, and a spring urging said plunger toward the fastener elements when the plunger is in a horizontal position.

5. A slider for slide fasteners of the class described comprising a body member having upper and lower wings and a neck joining the wings at one end, the neck having a central slot extending longitudinally of the body member through at least one of the slider wings and also through the back of the neck, a combined locking and pull member mounted in the slot having a pull attaching portion located exteriorly of the slider body and a locking portion located interiorly of the slider body, said locking member being swingable in said slot to a substantial horizontal position where the pull is at the back of the slider, spring means for urging the locking member inwardly of the slider body when in said latter position, the locking member being swingable so that the exterior portion projects at substantially right angles through the open wing of the slider, the locking portion in such position being locked adjacent the neck in position for allowing free movement of the fastener elements through the slider.

PERKINS H. BAILEY.