Nov. 7, 1939. J. BROZEK 2,178,948

SLIDER FOR SEPARABLE FASTENERS

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Fig. 7.

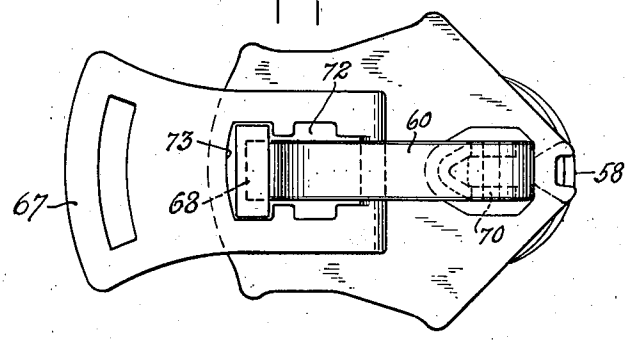



Fig. 8.

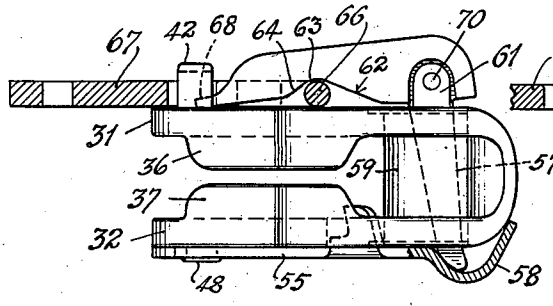



Fig. 9.

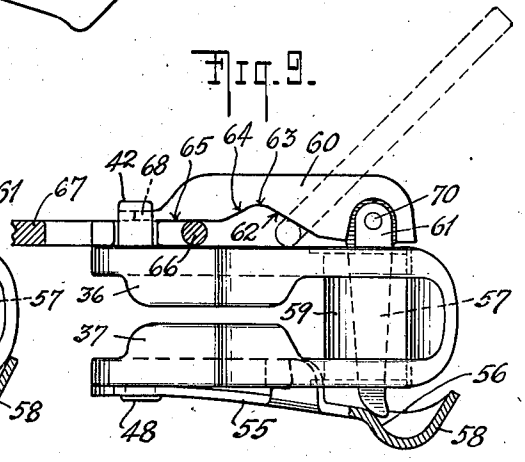



Fig. 10.

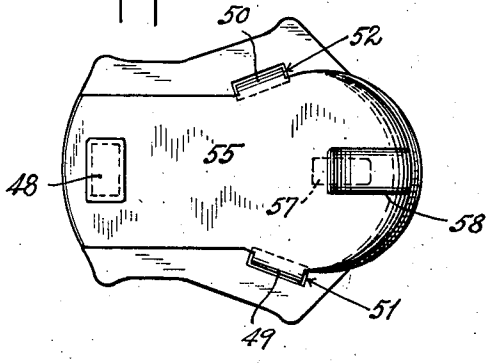
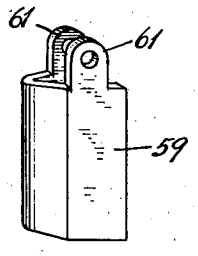



Fig. 11.




WITNESS

G. V. Rasmussen

INVENTOR

JOSEPH BROZEK

BY

Brisen & Schmidt

ATTORNEYS

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SLIDER FOR SEPARABLE FASTENERS

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Fig. 1.

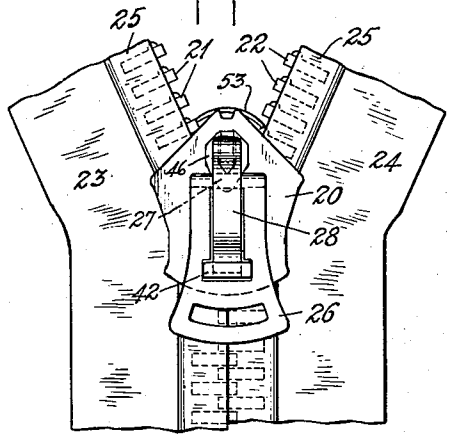



Fig. 2.

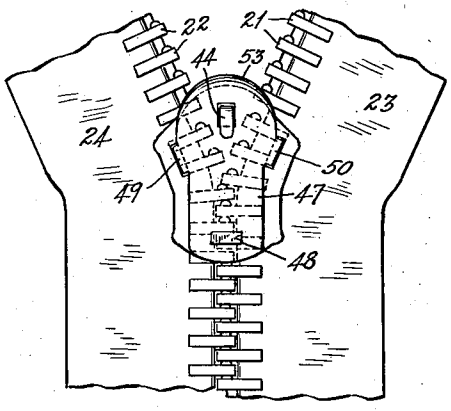



Fig. 3.

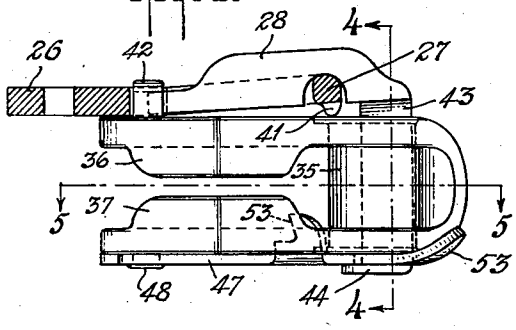



Fig. 4.

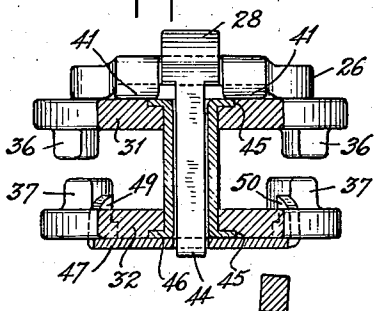



Fig. 5.

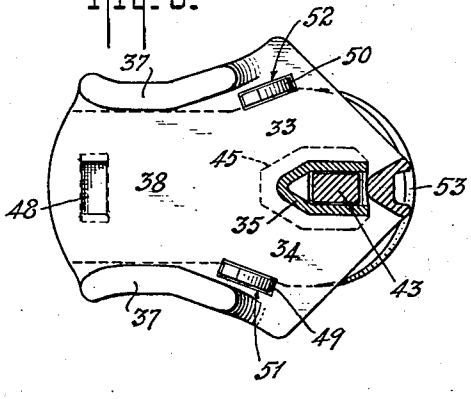
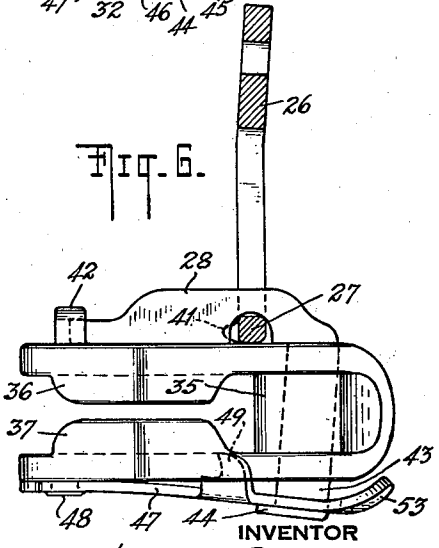



Fig. 6.




WITNESS

G. V. Rasmussen

INVENTOR

JOSEPH BROZEK

BY

Brisen & Schrenk

ATTORNEYS

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SLIDER FOR SEPARABLE FASTENERS

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Fig. 12.

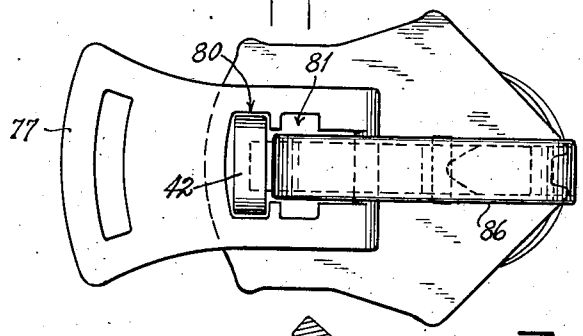



Fig. 13.

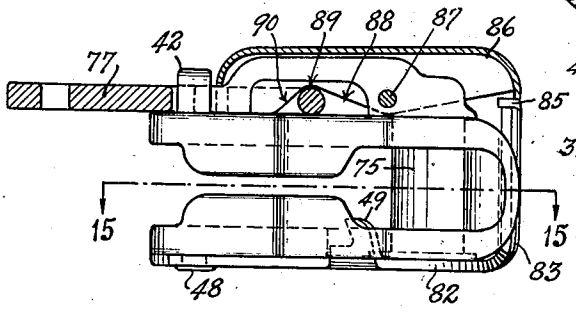



Fig. 14.

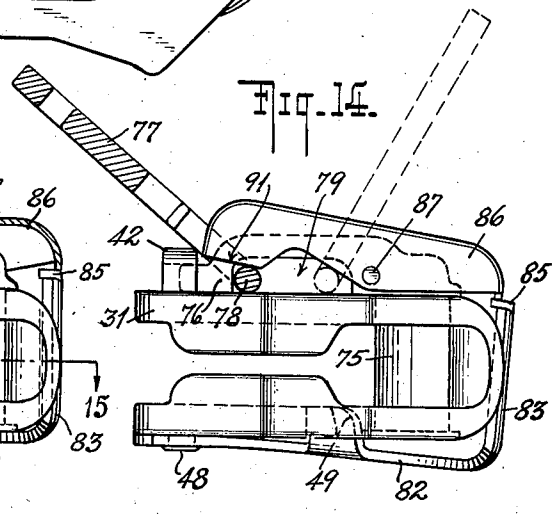



Fig. 15.

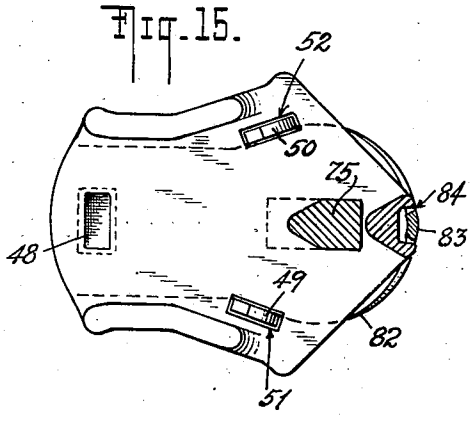
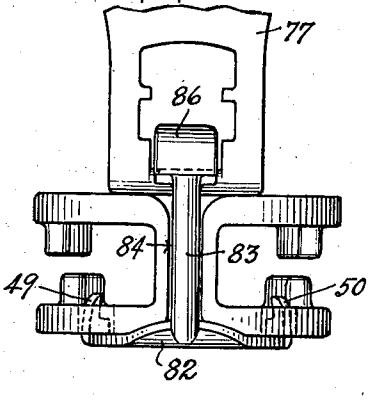



Fig. 16.




WITNESS

G. V. Rasmussen

INVENTOR

JOSEPH BROZEK

BY

Wiesen & Schreck

ATTORNEYS

Patented Nov. 7, 1939 2,178,948

# UNITED STATES PATENT OFFICE

2,178,948

## SLIDER FOR SEPARABLE FASTENERS

Joseph Brozek, Jackson Heights, Long Island, N. Y., assignor to Waldes Koh-I-Noor, Inc., Long Island City, N. Y., a corporation of New York

Application May 19, 1938, Serial No. 208,734

14 Claims. (Cl. 24—205)

This invention relates to sliders for separable fasteners of the slide-operated type and has for its principal object to provide a new and improved means for locking the slider against movement on the fastener in any position of its travel without injury to or excessive wear of the parts of which such slider is constituted.

Separable fasteners of the type above indicated are well known and usually comprise a pair of stringers having rows of interlocking elements attached along the opposed edges thereof and a slider embracing both rows of elements and movable along such rows for interlocking or disengaging the elements. Movement of the slider is usually accomplished by the manual operation of a finger tab which is pivotally attached to a projection or lug provided on the outer or front plate of the slider. Many slide fasteners also include means for covering the interlocking elements, such covering means usually consisting of flexible material, such as rubber or strips of fabric which overlie the elements and extend from the root or attached portions of the elements out to approximately the outer projecting ends of the elements so that when the rows of elements have been interlocked by the slider the outer edges of the covering strips meet and thereby hide the elements from view. In such fastener constructions the plates of the slider are usually spaced to embrace not only the interlocking elements but also the covering strips overlying the same. It is sometimes desirable to provide the slider with locking means operative to maintain the slider in position on the fastener at any point of its range of travel and for this purpose various constructions have been proposed among which is the idea of providing locking pins or fingers in such association with the front plate of the slider that they are insertable through openings in such plate and into the paths of the elements disposed within the slider, the most successful construction being that in which the locking pins are provided on the pull tab of the slider. While this type of locking means is satisfactory for those separable fasteners in which the elements are not concealed by covering material, it has not been at all satisfactory for separable fasteners in which the elements underlie a covering fabric because the locking pins must necessarily penetrate the covering material and extend into the spaces between adjacent interlocking elements in order to function properly so that after a while such covering fabric becomes frayed and broken, thereby giving the fastener an unsightly appearance. Another disadvantage of this type of locking means is that when the user wants to disengage the fastener elements by grasping the stringer edges and pulling them apart, instead of operating the slider itself, as is quite often the case in connection with women's corsets and trousers, there is the danger that the pull tab will pivot so that the locking pins will be caught in the covering fabric rushing through the slider and tear the same.

According to this invention, an improved form of lock slider is provided in which the locking lugs are positioned on a spring member mounted on the back of the slider and arranged to enter through openings provided in the back plate of the slider under the control of a member actuated by the pull tab so that such locking lugs are insertable into locking engagement with the fastener elements without penetration of the covering fabric which may overlie such elements.

Another feature of the invention is that the locking lugs which are mounted on a resilient base are so formed that they offer no bar to the manual movement of the slider in one direction even though they may be disposed in locking position in the spaces between the plates of the slider and yet will effectively function to stop movement of the slider in the opposite direction.

A still further feature of the invention is that means are provided to hold the locking members in withdrawn or unlocked position so that movement of the slider with respect to the rows of elements may be obtained by separating the stringers without any detrimental effects on the parts comprising the slide fastener.

Other features and advantages of this invention as well as the novel details of construction thereof will become more apparent after a perusal of the following description taken in connection with accompanying drawings in which Fig. 1 is a front plan view of a portion of a covered fastener structure provided with a slider made in accordance with this invention, the pull tab of the slider being shown in the position it will have when the slider is locked in position on the fastener; Fig. 2 is a rear plan view of the construction shown in Fig. 1; Fig. 3 is a side view of the slider shown in Figs. 1 and 2, the pull tab thereof being shown in section for the purposes of clearness; Figs. 4 and 5 are sectional views taken along the lines 4—4 and 5—5, respectively, of Fig. 3; Fig. 6 is a view similar to Fig. 3 except that the pull tab is shown in the position it is usually placed by the operator for moving the slider along the fastener; Fig. 7 is a top plan view of a modified form of the invention; Figs. 8 and

9 are side elevations, partly in section, of the slider shown in Fig. 7, Fig. 8 illustrating the position of the parts when the locking lug is in position for locking the slider on the fastener and Fig. 9 illustrating the condition of the parts when the slider is being moved on the fastener or prevented from locking the slider on the fastener; Fig. 10 is a rear plan view of the slider shown in Figs. 7 to 9; Fig. 11 is a perspective view of a detail of such slider; Fig. 12 is a plan view of another modification; Figs. 13 and 14 are side views, partly in section, illustrating the condition of the parts when the slider shown in Fig. 12 is locked in position on the fastener and moved with respect thereto; Fig. 15 is a section taken along the line 15—15 of Fig. 13; and Fig. 16 is a front elevation of the slider shown in Fig. 12.

Referring more particularly to Figures 1 to 6 of the drawings, the numeral 20 designates generally the slider for controlling the locking and interlocking of the rows of elements 21 and 22, the individual elements of which are attached in staggered relation to the stringers 23 and 24 respectively. The elements are covered by fabric covering strips 25 which preferably form part of the material of which the stringers 23 and 24 are constituted and preferably are secured to the outer surfaces of the fastener elements by stitches or other fastening means. Actuation of the slider is accomplished by manual operation of the pull tab 26 which has its lower end pivoted at 27 to a movable lug 28. In Figure 3 of the drawings, the pull tab is shown in the position it will be when the slider is locked in position on the slide fastener, while Figure 6 illustrates the approximate position of the pull tab when the slider is being manually moved with respect to the rows of elements of the fastener. During the sliding movement of the slider, the rows of elements 21 and 22 and the covering strips 25 which overlie the upper surfaces of such elements, enter into the channels formed between the front plate 31 and the back plate 32 of the slider. The channels between the plates 31 and 32 are substantially Y-shaped, the forward or converging channels which are indicated generally by the numerals 33 and 34, (see Fig. 5), being defined by the wedge-shaped section 35 disposed centrally in the forward portion of the slider and the front portions of the flanges 36 and 37 which extend inwardly from the front and back plates 31 and 32. The centrally disposed passageway 38 into which the passageways 33 and 34 converge is defined by the rear portions of the flanges 36 and 37. The passageways 33 and 34 bring the rows of elements into proper relation to be interlocked when they reach the channel 38, as the slider is moved upwardly on the slide fastener as viewed in Fig. 1 and the wedge-shaped section 35 forces the interlocked elements apart into uninterlocked condition when the slider is moved in the opposite direction.

The pull tab 26 is provided at its lower or pivoted end with a pair of spaced locking cams 41 disposed on either side of the movable lug 28. The lugs 41 project outwardly from the pivotal axis of the pull tab at substantially right angles to the latter and are adapted when the pull tab is moved from its raised position, as shown in Fig. 6, to a substantially horizontal position, as shown in Fig. 2, to bear against the top plate of the slider and lift the movable lug 28 by a levering action upwardly into the position illustrated in Fig. 3. As is shown in Figs. 3 and 6, the lug 28 is fastened at one end to the front plate 31 of the slider by a strap 42 which has been stamped out of the material of which the top plate is constituted. The other end of the lug 28 has attached thereto a stem 43 which is disposed at an acute angle with respect to the body of the lug 28 and extends downwardly through the wedge-shaped section 35 and terminates in the flattened end portion 44. The stem 43 has a cross sectional-area less than that of the space within the wedge-shaped section 35 so that such stem may move freely through the latter when the pull tab 26 is raised or lowered. As is shown more clearly in Figs. 4 and 5, the wedge-shaped section 35 comprises a substantially V-shaped member which extends through similarly shaped openings in the top and bottom plates 31 and 32, and is fixedly secured to such plates by stamping the ends thereof into recesses formed as indicated by the dotted line designated 45 in Fig. 5 of the drawings to form the outwardly projecting end shoulders 46 illustrated in Fig. 4 of the drawings.

The flattened end 44 of the slider stem 43 engages the rear side of a spring member 47, through one end of which extends the stem 43, and functions as a stop to limit the outward movement of the spring 47. Spring 47 is attached at its opposite end to the back plate 32 of the slider by means of a projection 48 which has been stamped out of the material of which the back plate is constituted and then after the spring plate has been positioned thereon, flattened out as illustrated in Figs. 2 and 6. The spring 47 is normally tensioned rearwardly so that it functions to hold the movable lug 28 in position against the front plate of the slider when the camming projections 41 are rendered ineffective by the lifting of the pull tab as is clearly shown in Fig. 6. Provided on the spring 47, are a pair of locking lugs 49 and 50 which are arranged thereon so that they extend into the recess openings 51 and 52, respectively, provided in the back plate of the slider within the confines of the converging passageways 33 and 34 and adjacent the front ends of the flanges 37 of such back plate.

As can be readily seen in Figs. 3, 4 and 6, the locking lugs 49 and 50, are formed by turning up at right angles to the spring 47 two outwardly extending portions of such spring. The outer ends of the locking lugs 49 and 50 are adapted to engage between the interlocking elements on each stringer and are formed so that they positively prevent movement of the slider in the direction for unlocking the fastener elements until removed from the path of movement of such elements, but present no obstruction to movement of the slider in the opposite direction, being preferably shaped to enable the fastener elements to cam them out of the path of movement thereof as the slider is moved in the opposite or locking direction. The locking lug 49 and the opening 51 are staggered with relation to the lug 50 and opening 52 so that such locking lugs may both engage between the staggered elements of the separated rows at the same time when the slider is locked in position in the fastener structure.

It will be seen from the foregoing, that when the slider is in unlocked condition ready for movement along the fastener structure the finger tab is raised sufficiently to render the camming lugs 41 ineffective, thereby enabling the spring plate 47 through its connection with the flattened end 44 of the stem 43 to maintain the lug 28 in position against the stop plate 31 of the slider, as is shown in Fig. 6. In this position of the spring plate 47, the engaging heads of the locking lugs

49 and 50 are withdrawn sufficiently into the space defined by the openings 51 and 52 so that they offer no obstruction to the movement of the fastener elements through the slider. When, however, the pull tab 26 is swung to the horizontal position illustrated in Fig. 3 of the drawings, the camming lugs 41 will operate to lift the pivoted end 27 of such pull tab away from the top plate 31, thereby lifting the lug 28 from the outer surface of the top plate 31 about its fixed end 42, and through the stem 43 and the flattened portion 44 of the latter, drawing the spring 47 toward the back plate 32 of the slider. Movement of spring 47 towards the back plate 32 causes the locking lugs 49 and 50 to be moved through the openings 51 and 52, respectively, and projected into the path of movement of the rows of interlocking elements disposed in the converging channels 33 and 34. In this condition of the parts, the locking lugs 49 and 50 will extend into the spaces between adjacent interlocking elements of the fastener and bar further movement of such fasteners through the slider. As the effective plate engaging portion of the camming lugs 41 is outside of the line of pivotal movement of the pull tab 26, such lugs will function to maintain the pull tab 26 in horizontal position until manually removed therefrom by the operator. The free or upper end 53 of the spring 47 is curved up and rounded so that it will not be caught in material underlying the fastener elements as the slider is moved upwardly or in the locking direction.

In the construction illustrated in Figs. 1 to 6 the spring member 47 upon which the locking lugs 49 and 50 are provided, is tensioned so as to be normally spaced outwardly from the rear plate of the slider, but it will be apparent that such spring may be tensioned so as to be normally engaged with the outer surface of the back plate of the slider. A slider provided with a spring of this latter type is illustrated in Figs. 7 to 11 of the drawings, in which similar reference characters designate similar parts throughout the several views.

In this embodiment of the invention, the spring 55 which is attached at one end to the back plate 32 of the slider by the projection 48 thereof in the same manner as the above described spring 47, is provided adjacent to its other end with a cam surface 56 arranged to be engaged by the pivotally supported stem or actuating member 57 and at the extremity of such end with a cupped guard 58 for enclosing the lower end of the member 57 and to prevent catching of such end of the spring 55 in material underlying the fastener elements as the slider is moved towards the right, as viewed in Figs. 8 and 9, or in the locking direction. The lower end of the actuating member engaging with the cam surface 56 of the spring, is also cam-shaped so that when it is moved clockwise from the position shown in Fig. 8 to the position shown in Fig. 9, it will move the adjacent end of the spring 55 away from the back plate 32 thereby withdrawing the locking lugs 49 and 50 from the path of movement of the interlocking elements through the slider and so that it may be readily returned to the position shown in Fig. 8 when released under the tension of spring 55.

The actuating member 57 extends up through the wedge-shaped section 59 and is integrally formed at its upper end with the movable lug 60 which is pivotally supported just above its point of attachment with the member 57 on a pair of upstanding ears 61 provided on the outer end of the wedge-shaped section 59. Except for the ears 61, the section 59 is similar in construction to the wedge-shaped section 35 illustrated in Figs. 1 to 6 and is attached to the slider in the same manner as the latter. The movable lug 60 is formed on its under surface to provide an inclined cam surface 62, an intermediate concave surface 63, and a cam surface 64 which connects with a relatively straight surface 65. Disposed between such surfaces and the front surface of the front plate 31 is the portion 66 of the pull tab 67 about which the pull tab pivots and which is preferably circular in cross-section, as is illustrated in Figs. 8 and 9. When the portion 66 of the pull tab is disposed in the region of the concave surface 63, as is illustrated in Fig. 8, and no upward force is being exerted upon such tab, the tension of the spring 55 on the actuating member 57 maintains the free end 68 of the lug against the front surface of the plate 31, as is shown in Fig. 8. The end 68 of the lug which is disposed within the opening formed by the strap 42, has a cross-sectional area which bears such relation to the area of the opening formed by strap 42, that sufficient movement of the lug 60 about its pivotal axis 70 is permitted to enable the actuating member to move the spring 55 away from plate 32 to the extent that the locking lugs 49 and 50 are withdrawn through the openings 51 and 52 in the back plate 32 out of the path of the interlocking elements. Movement of the lug 60 is attained either by pulling the pull tab 67 towards the pivotal axis 70 of the lug, whereby the portion 66 of the pull tab engaged with the inclined surface 62 to force the lug in a clockwise direction about its pivotal axis 70 or by pulling the tab 67 in the opposite direction against the cam surface 64 to produce the same result. By bringing the portion 66 of the pull tab into engagement between the straight surface 65 and the front surface of the plate 31, the lug 60, actuating member 57 and spring 55 will be locked in the position shown in Fig. 9, thereby enabling the fastener structure to be opened by gripping each stringer and forcing them apart. The pull tab 67 is provided with an opening 72 adapted to receive the strap 42 and thereby lock the tab against movement out of engagement with the straight surface 65. A second recess 73 is provided in the pull tab for receiving the strap 42 when the portion 66 thereof is in the region of the concave surface 63 or in the operative condition of the locking lugs 49 and 50.

Instead of having the spring actuating member integral with the pull tab lug, as is the case in the above-described constructions, such member may be separate therefrom and in Figs. 12 to 16 there is shown a slider construction illustrating this form of the invention. In this modification of the invention, the wedge-shaped member 75 is solid and cooperates with the strap 42 on the front plate 31 to hold the pull tab lug 76 fixedly on the outer surface of the plate 31. The pull tab 77 is pivotally connected to the lug 76 by the portion 78 thereof which extends through an elongated opening 79 formed by the lug 76 and the top surface of the plate 31. The pull tab 77 like the pull tab 67 in the construction illustrated in Fig. 7, is provided with two connected openings 80 and 81 adapted to receive the strap 42 in two positions of the pull tab. The spring 82 like the previously described spring 55 is normally tensioned toward the back plate 32 of the slider

so that the locking lugs 49 and 50 normally extend into the path of the interlocking elements contained in the slider as is shown in Fig. 13. Spring 82 differs from spring 55 in that it has integrally formed therewith an outwardly extending portion 83 which extends outwardly from the back plate 32 in the transverse slot 84 formed in the front end of the slider, beyond the outer surface of the front plate 31 and terminates in a broadened head portion 85 having a relatively flat outer surface.

The head portion 85 is engaged by one end of a housing member 86 fitted over the pull tab lug 76 and pivotally connected to the latter at 87. The lower edges of the housing member 86 are formed to provide an inclined edge portion 88, an intermediate concave portion 89 which connects with an inclined camming edge portion 90, the latter of which is connected in turn with a relatively horizontal straight portion 91. In the normal condition of the parts, the portion 78 of the pull tab is positioned in the slot 79 so that it is between the camming edges 88 and 90 and in the region of the concave portion 89, thereby enabling the spring 82 through its extension 83 and head 85 to maintain the straight edge portions 91 of the housing member 86 against the outer surface of the plate 31 and to position its locking lugs 49 and 50 into the path of the interlocking elements in the slider. This normal condition of the parts is illustrated in Figs. 12 and 13, which also show the pull tab lying upon the outer surface of the plate 31 with the opening 80 thereof engaged with the strap 42 on the plate 31. The housing member 86 may be rotated in a clockwise direction about its pivot 87 to depress the extension 83 of the spring and thereby force the spring 82 away from the back plate 32 and the locking lugs 49 and 50 out of the path of the interlocking elements in the slider, either by moving the portion 89 of the pull tab into engagement with the camming edge portions 88 of the housing member 86 to move the slider forwardly in the interlocking direction or to the right, as viewed in Fig. 14, or by pulling the pull tab to the left, as viewed in such figure, thereby moving the portion 89 of the pull tab into engagement with the camming edge portions 90 of the housing member and moving the slider rearwardly or in the unlocking direction. When the portion 78 of the pull tab has been moved to the extent that it is positioned between the edge portions 91 of the housing member and the outer surface of the front plate 31, the spring 82 will be locked in its inoperative position (see Fig. 14) thereby enabling the used to unlock the fastener structure by pulling the stringers thereof apart instead of operating the slider itself. The portion 78 of the pull tab may be locked in this position by moving the pull tab to horizontal position so that the strap 42 on the front plate 31 is engaged in the recess 81 of the pull tab.

It will be apparent from the foregoing, that other changes and modifications in the configuration and combination of the several parts may be made without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, front and back plates spaced to receive the interlocking elements of the slider, a locking device mounted on said back plate and adapted to engage with the interlocking elements between such plates, a member mounted on said front plate for movement relative thereto, a pull tab pivotally connected to said movable member and adapted to actuate the same and means connecting said movable member to said locking device and arranged to operate the latter when said member is actuated by said pull tab.

2. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, front and back plates spaced to receive the interlocking elements of the slider, a spring member mounted on said back plate, a locking lug mounted on said spring member and arranged to extend through an opening in said back plate into the path of the interlocking elements contained in said slider, a member mounted on said front plate for movement relative thereto, a pull tab connected to said movable member and adapted to actuate the same and means connecting said movable member to said spring member and adapted to operate the latter upon operation of said movable member by said pull tab to bring the locking lug into operative engagement with the interlocking elements in said slider and to render said locking lugs inoperative.

3. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of plates spaced to receive the interlocking elements of the slider, resilient means mounted on one of said plates and having a locking lug adapted to extend through an aperture provided in said plate to engage with the interlocking elements contained in said slider, a pull tab, a lug pivotally mounted on the other of said plates, a rigid transverse member connecting said lug with said resilient means, said pull tab being pivotally connected to said lug, and means on said pull tab adapted to coact with a surface portion of said other plate during movement of said pull tab relative to said slider to actuate said pivoted lug and thereby to cause said rigid transverse member to actuate said resilient means.

4. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of front and back plates spaced to receive the interlocking elements of the slider, a spring carried by said back plate and having a locking detent adapted to extend through an aperture in said back plate and into engagement with interlocking elements carried in said slider, a member extending transversely of said slider and connected to said spring, a lug connected at one end to said transverse member and pivotally connected at its other end to the front plate of said slider, a pull tab pivotally connected to said lug and camming means on said pull tab for controlling the pivotal movement of said lug.

5. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of front and back plates spaced to receive the interlocking elements of the slider, a spring carried by said back plate and having a locking detent adapted to extend through an aperture in said back plate and into engagement with interlocking elements carried in said slider, a member extending transversely of said slider and con-

nected to said spring, a lug connected at one end to said transverse member and pivotally connected at its other end to the front plate of said slider, a pull tab pivotally connected to said lug and camming means on said pull tab for controlling the pivotal movement of said lug, said camming means comprising a member projecting outwardly from said pull tab adjacent to its pivotal axis and adapted to engage with the upper surface of said front plate to rotate said lug in one direction as the pull tab is rotated in the other direction, the effective engaging portion of said projection being disposed with relation to said pull tab that it functions to lock said pull tab at the end of its range of movement in said opposite direction.

6. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, front and back plates spaced to receive the interlocking elements of the slider, a spring carried on said back plate and having a locking detent adapted to enter through an aperture in said back plate into engagement with interlocking elements contained in said slider, a rigid member pivoted on said front plate, a rigid transverse member connected to said pivoted member and adapted to engage with said spring and control the movement thereof, a pull tab connected to said pivoted member and camming means associated with said pull tab and pivotal member and operable when said pull tab is actuated, to cause actuation of said pivotal member and said transverse member and thereby cause said latter member to actuate said spring and locking detent.

7. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of plates spaced to receive the interlocking elements of the slider, a spring carried by one of said plates and having a locking detent adapted to enter an aperture in said plate to engage with interlocking elements disposed within said slider, a pair of ears extending outwardly from the other plate of said slider, a member pivotally supported on said ears and extending transversely of the slider into engagement with said spring, a lug member pivotally supported on said ears for movement relative to said other plate and connected to said pivotal member and a pull tab for causing pivotal movement of said lug member and said pivotal member to actuate said spring.

8. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of plates spaced to receive the interlocking elements of the slider, a spring carried by one of said plates and having a locking detent adapted to enter an aperture in said plate to engage with interlocking elements disposed within said slider, a pair of ears extending outwardly from the other plate of said slider, a member pivotally supported on said ears and extending transversely of the slider into engagement with said spring, a lug member connected to said pivotal member and being pivotally supported on said ears for movement relative to said other plate, a pull tab for causing pivotal movement of said transverse member and said lug member to actuate said spring, and means engageable by said pull tab and coacting with said lug member for locking said pivotal member in at least one position of its movement.

9. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of front and back plates spaced to receive the interlocking elements of the slider, a spring carried by said back plate and having a locking detent adapted to extend through an aperture in said back plate into engagement with interlocking elements carried in said slot, a member extending transversely of the slider and connected to said spring, a lug positioned on the front plate of said slider, a pull tab pivotally connected to said lug and pivotal means connected to said lug and controlled by said pull tab for controlling the movement of said transverse member and spring.

10. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of plates spaced to receive the interlocking elements of the slider, a spring carried by one of said plates and having a locking detent adapted to extend through an aperture in said plate into engagement with interlocking elements carried in said slider, a hollow member extending through both of said plates and fixedly attached thereto, a transverse member extending through said hollow member and movable with relation thereto, said transverse member being connected to said spring, a lug positioned on said other plate and connected to said transverse member for moving the same, means pivotally supporting said lug and a pull tab connected to said lug and adapted to actuate the same to cause movement of said transverse member and thereby actuate said spring to project said locking detent into the path of the interlocking elements and to withdraw it from such path.

11. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of front and back plates spaced to receive the interlocking elements of the slider, a spring carried by said back plate and having a locking detent adapted to extend through an aperture in said back plate into engagement with interlocking elements carried in said slot, a member extending transversely of the slider and connected to said spring, a lug positioned on the front plate of said slider, a pull tab pivotally connected to said lug, a housing member enclosing said lug and pivotally connected thereto, said housing member being connected to said transverse member for controlling the movement thereof, and camming means intermediate said pull tab and said housing member and operable upon movement of the former to actuate the latter to control said spring.

12. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of plates spaced to receive the interlocking elements of the slider, a spring carried by one of said plates and having a locking detent adapted to extend through an aperture in said plate into engagement with interlocking elements carried in said slider, a movable member extending transversely of the slider and connected to said spring, a horizontally disposed member on the other plate of the slider connected to said transverse member, cam surfaces provided on said horizontal member and a pull tab operatively connected to said horizontal member and coacting

with said cam surfaces to cause movement of said horizontal member and said transverse member and thereby to control the movement of said spring.

13. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, a pair of plates spaced to receive the interlocking elements of the slider, a locking device mounted on one of the said plates and adapted to engage with the interlocking elements between such plates, a pull tab pivotally mounted on one of said plates, means operable by said pull tab for controlling the locking and unlocking of said locking device and means engageable by said pull tab and coacting with said operable means to lock said locking device in unlocked position, whereby the interlocking elements of the slide fastener can be unlocked by forcing the stringers apart to cause unlocking movement of the slider without directly actuating the latter.

14. A slider for a slide fastener of the type which includes a pair of stringers having rows of spaced interlocking elements along their longitudinal edges, comprising in combination, front and back plates spaced to receive the interlocking elements of the slider and connected together at the upper portion of the slider, a flat spring member mounted on said back plate, said flat spring being fixedly connected at one end to the lower end portion of said back plate and being provided at its other end with an offset shield portion which extends forwardly at the upper portion of said slider, a locking lug mounted on said spring member and arranged to extend through an opening in said back plate into the path of the interlocking elements contained in said slider when said spring member lies flat against the outer surfaces of said back plate, a member mounted on said front plate for movement relative thereto, a pull tab connected to said movable member and operable to actuate the same, and rigid means connecting said spring member with said movable member and enabling the latter to control the position of said spring member relative to said back plate to bring the locking lug into operative engagement with the interlocking elements in said slider and to render said locking lug inoperative.

JOSEPH BROZEK.