Nov. 7, 1939. J. BROZEK 2,178,949

SEPARABLE FASTENER SLIDER

Filed May 19, 1938

Fig. 1.

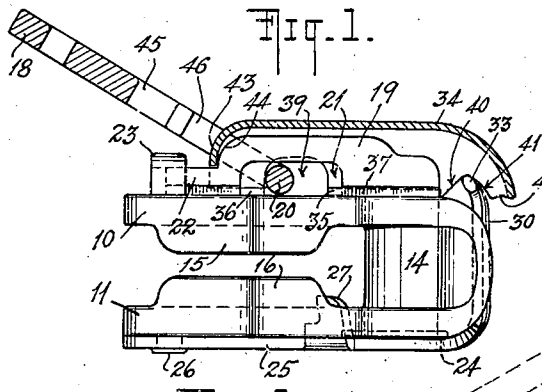


Fig. 2.

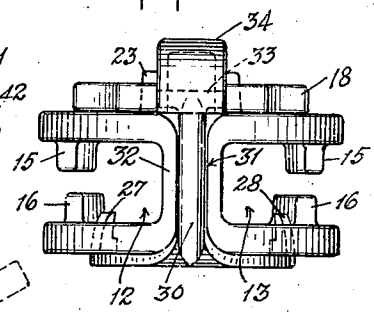


Fig. 3.

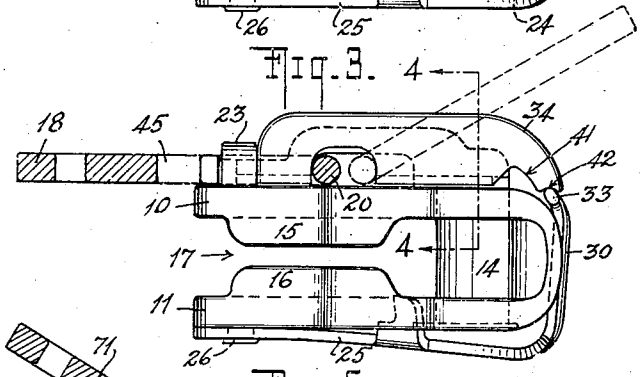


Fig. 4.

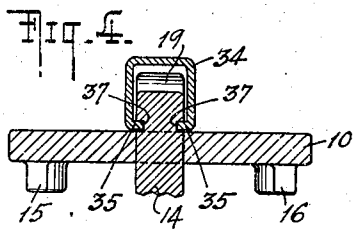


Fig. 5.

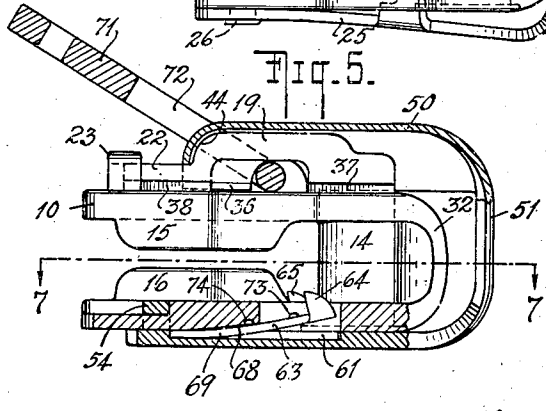


Fig. 6.

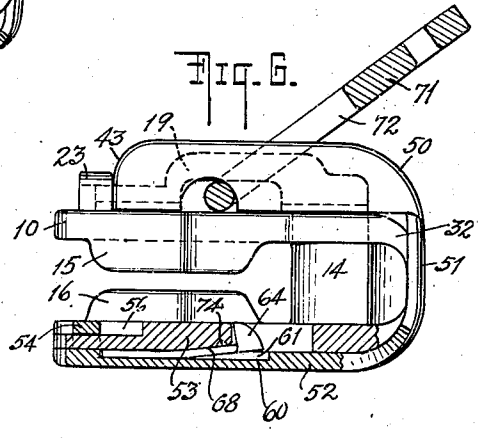
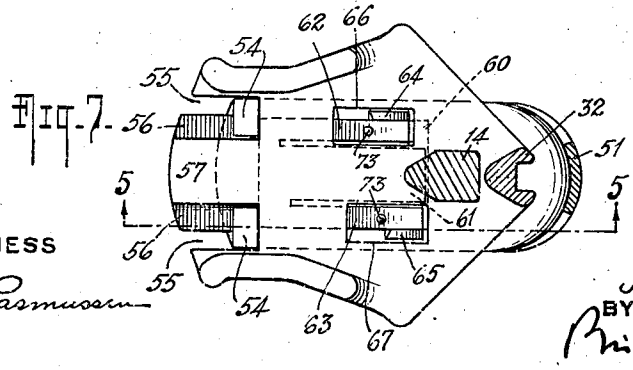


Fig. 7.



WITNESS

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SEPARABLE FASTENER SLIDER

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13 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 comprising flexible material, such as rubber or strips of fabric, having portions 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 men's 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 through 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 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.

A still further feature of the invention is that the operation of the locking members on the resilient means is controlled by a slidable member mounted on the front plate of the slider and such slidable member is in turn controlled by the movement of the pull tab.

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 the accompanying drawing, in which Fig. 1 is a side view of a slider made in accordance with the invention, several of the parts thereof being shown in section for the purpose of clearness; Fig. 2 is an upper end view of the slider shown in Fig. 1 with the pull tab shown disposed against the outer surface of the front plate thereof; Fig. 3 is a view similar to Fig. 1 showing the condition of the parts when the locking detents are withdrawn to inoperative position, the pull tab being shown in position to lock such detents against movement back into the slider; Fig. 4 is a section taken

along the line 4—4 of Fig. 3; Fig. 5 is a side view, partly in section along the line 5—5 of Fig. 7, of a modified form of the invention; Fig. 6 is a view similar to Fig. 5, illustrating the position of the parts when the locking lugs have been withdrawn from the path of the interlocking elements in the slider, and Fig. 7 is a section taken along the line 7—7 of Fig. 5.

Referring more particularly to Figs. 1–4 of the drawing, the numerals 10 and 11 designate the front and back plates, respectively, of the slider between which are formed the passages through which pass the rows of interlocking elements attached in staggered relation along the opposed edges of the stringers of the fastener structure and the covering strips which overlie such fastener elements and which preferably form part of the material of which the strips are constituted and which are preferably secured to the outer surfaces of the fastener elements by some means such as stitches. For convenience, I will refer to that end of the slider which is foremost when the slider is moved in the locking direction to interlock the fastener elements, as the upper end of the slider, while the opposite end of the slider which extends in the direction of the interlocked elements will be referred to as the lower end of the slider. The passages or channels between the plates 10 and 11 are substantially Y-shaped, the upper or converging channels which are indicated generally by the numerals 12 and 13 (see Fig. 2) being defined by the wedge-shaped section 14 disposed centrally in the upper portion of the slider and the upper portions of the flanges 15 and 16 which are disposed to the right, as viewed in Figs. 1 and 3, and which extend inwardly from the front and back plates 10 and 11, respectively (see Fig. 2). The centrally disposed passageway or channel 17 into which the passageways 12 and 13 converge is defined by the lower portions of the flanges 15 and 16 or the left hand portions of such flanges, as is viewed in Figs. 1 and 3. The passageways 12 and 13 bring the rows of elements into proper relation to be interlocked when they reach the channel 17 as the slider is moved upwardly on the fastener structure or in the locking direction and the wedge-shaped section 14 forces the interlocked elements apart into uninterlocked relation when the slider is moved in the opposite or unlocking direction, as is well known in the art.

Actuation of the slider along the rows of interlocking elements on the stringers is accomplished usually by manual operation of a pull tab 18 which is pivotally connected at its lower end to a lug 19 by means of the transverse portion 20 thereof which extends through an aperture 21 provided in the lug 19, as is shown more clearly in Figs. 1 and 3. The lug 19 is provided at its lower or left end, as viewed in such figures, with a reduced portion 22 which rests on the outer surface of the front plate 10 and extends into the opening formed by a strap 23 which has been stamped out of the material of which the top plate is constituted and which fastens such end of the lug 19 to the front plate 10. The other end of the lug 19 is formed integral with the wedge-shaped member 14 which extends through an opening provided in the front and back plates 10 and 11 and is upset at its back end to provide a head 24 which fills the space in a recess formed on the outer surface of the back plate 11 and which cooperates with the strap 23 to securely fasten the wedge-shaped member 14 and the lug 19 in position on the slider.

Provided on the outer surface of the back plate 11 of the slider, is a flat spring 25 which is attached to said back plate by means of a projection 26 which has been stamped out of the material of which the back plate is constituted and then after the spring 25, which is provided with an aperture to receive such projection, has been positioned thereon, flattened out, as illustrated in Figs. 1 and 3, to securely fasten such spring to the back plate. Provided on the spring 25 are a pair of locking lugs or detents 27 and 28 which are arranged thereon so that they extend into openings provided in the back plate 11 of the slider within the confines of the converging passages 12 and 13 and adjacent the upper ends of the flanges 16 of such back plate. The locking lugs 27 and 28 are formed by turning up at right angles to the spring 25 two outwardly extending portions provided on the side edges of such spring. The spring 25 is tensioned so as to normally engage with the outer surface of the back plate 11 of the slider and to project the locking lugs 27 and 28 into the path of the interlocking elements contained in the passageways of the slider, as is shown in Figs. 1 and 2. The outer ends of the locking lugs 27 and 28 are adapted to engage between the interlocking elements of 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 27 as well as the recess through which it extends, are staggered with relation to the locking lug 28 and its opening, (see Fig. 2), 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 on the fastener structure. Integrally formed with the free or upper end of the spring 25 is an outwardly extending portion 30 which is disposed in a recess 31 formed in the neck 32 connecting the front plate 10 and back plate 11 of the slider and which extends at right angles to plane of the spring 25 outwardly beyond the outer surface of the front plate 10 and terminates in an offset V-shaped head 33 adapted to engage with the upper end of a housing member 34.

The housing member 34 is fitted over the pull tab lug 19 and is connected in sliding engagement with respect thereto by two spaced sets of inturned edges 35 and 36 which engage with two sets of longitudinally extending recesses or guideways 37 and 38, respectively, provided on said lug adjacent to the outer surface of the front plate 10 as shown in Figs. 1 and 4. The upper set of inwardly turned guide edges 35 of the housing member 34 are separated from the lower set of guide edges 36 by apertures 39 which are in alignment with the aperture 21 of the lug 19 and are appreciably shorter in length than the latter so that it is necessary to slidably move the housing member 34 from a position where one end of all the apertures are in alignment, to a position where the opposite ends of such apertures are in alignment. Extending through the apertures 39 of the housing member 34 as well as the aperture 21 of the lug 19, is the transverse portion 20

of the pull tab 18. The inner edge of the upper or right hand end portion of the housing member 34, as viewed in Figs. 1 and 3, beyond the inturned edges 35, is formed to provide an inclined surface 40 whose upper end is connected with an inclined camming surface 41 and a locking notch 42 associated with the lower end of the camming surface 41.

It will be evident from Fig. 1 of the drawing and from the foregoing description that when the offset head 33 of the spring portion 30 is disposed between the inclined edge surfaces 40 and 41 of the housing member 34, the spring 25 will be enabled to insert the locking lugs 27 and 28 into the path of movement of the interlocking elements contained in the slider. In this condition of the parts, the back-turned lower end 43 of the housing 34 will engage with the lower shoulder 44 of the lug 19 and the pull tab 18 may be lowered to horizontal position by engaging the recess 45 thereof with the strap 23 provided on the front plate 10 of the slider. To withdraw the locking lugs 27 and 28 from between the interlocking elements of the fastener structure and thereby enable the slider to be moved in the unlocking direction or to the left, as viewed in Fig. 1, the pull tab 18 is disengaged from the strap 23 and pulled in such direction so that the transverse portion 20 of such pull tab will engage with the lower edges of the apertures 39 and slidably move the housing member 34 downwardly or to the left, as viewed in Figs. 1 and 3, until the lower edges of such apertures are in alignment with the lower edge of the aperture 21, as is shown in Fig. 3. The length of the reduced portion 22 of the lug 19 is such that in this position of the housing member 34 the down-turned portion 43 thereof engages with the strap member 23 which functions as a stop to prevent further movement of the housing member 34. During the movement of the housing member 34 in this direction, the camming edge 41 on the upper end of the housing member 34 functions to depress the portion 30 of the spring 25 thereby moving the free end of the spring away from the outer surface of the back plate 11 and withdrawing the locking lugs 27 and 28 out of the path of movement of the interlocking elements and into their associated recesses. The parts may be locked in this position by engaging the recess 46 provided on the pull tab 18 of the slider with the strap member 23 thereby enabling the user to unlock the fastener structure by grasping the upper ends of the stringers and forcing them apart without any danger of the locking lugs moving into the path of the interlocking elements rushing through the slider. When the slider is moved in the opposite or locking direction, due to the shape of the locking lugs 27 and 28, the interlocking elements passing through the slider will cam such locking lugs out of position thereby permitting movement of the slider in such direction. While in the construction illustrated, the locking lugs are positively removed from the path of the interlocking elements in the slider for only one direction of movement of the latter, it will be understood that the locking lugs 27 and 28 may be positively moved from the path of movement of the interlocking elements for movement of the slider in the locking direction of the slider by associating with the lower end of the inclined surface 40 a locking notch similar to the locking notch 42 so that as the housing member is forced to the right, as viewed in Fig. 1, the inclined surface 40 will depress the portion 30 of the spring 25 to remove the locking lugs 27 and 28 from the path of movement of the interlocking elements and such lugs will be maintained in such position when the offset head 33 of the spring portion 30 is engaged with said second locking notch. In this form of the invention slight modifications in the dimensions of the housing member 34 and the reduced portion 22 of the lug 19 will be necessary as will be readily evident to those skilled in the art.

In the embodiment shown in Figs. 5, 6 and 7, in which similar reference characters designate similar parts throughout the three views, the slidable housing 50 has integrally formed at its upper end a transverse portion 51 which corresponds to the spring portion 30 illustrated in Figs. 1 to 3 and which spans the neck 32 of the slider. The transverse portion 51 is connected at its back end with a plate 52 which is in flat engagement with the outer surface of the back plate of the slider 53. The plate 52 is provided at its lower or left end, as viewed in Figs. 5 and 6, with a pair of back-turned guide lugs 54 which extend through longitudinally extending slots 55 provided in the lower end of the back plate 53 and engage in guide grooves 56 formed along each side of the portion 57 of the back plate disposed between the slots 55. Thus as the housing member 50 is moved longitudinally with respect to the outer surface of the front plate 10, the plate portion 52 thereof will be moved therewith, the guide lugs 54 extending through the slots 55 slidably moving in the guide grooves 56. The depth of the guide groooves 56 and the thickness of the portions of the guide lugs 54 disposed in such grooves are preferably such that the interior surfaces of such portions of the lugs 54 are flush with the interior surface of the back plate 53, as is clearly shown in Figs. 5 and 6. The plate portion 52 is provided with a longitudinally extending, rectangularly-shaped recess 60 in that surface which is adjacent to the outer surface of the back plate 53 and disposed in such recess 60 is a spring member 61. The length of the spring member 61 is approximately the same as that of the recess 60 so that it is carried with the latter during the slidable movement of the plate 52 and the thickness of such spring member is approximately the same as the depth of the recess 60 so that its outer surface is flush with the interior surface of the plate 52. The spring member 61 is slotted lengthwise to provide two spring tongues 62 and 63 along the outer edges of said spring member 61, as is shown more clearly in Fig. 7. The tongues 62 and 63 are provided at their outer or free ends with locking lugs 64 and 65, respectively, formed by bending upwardly at right angles to the body of such tongues outwardly extending projections integral with the material of such tongues and having a shape that they form a positive bar against movement of the interlocking elements in one direction while they do not inhibit movement of the interlocking elements in the opposite direction. The locking lugs 64 and 65 and the free end portions of the tongues 62 and 63 normally extend through a pair of apertures 66 and 67 so that the locking lugs will be disposed in the path of movement of the interlocking elements disposed within the slider. The spring tongues 62 and 63 are bent outwardly from the body of the spring member 61 at approximately the point 69 (see Fig. 5) to insure their extending up through the apertures 66 and 67 when the backwardly extending portion 43 of the covering element 50

is in engagement with the shoulder 44 of the pull tab lock and cause them to bear against the exterior surface of the back plate 53 of the slider. Withdrawal of the locking lugs 64 and 65 from the path of the interlocking elements in the slider is attained by the camming surface 68 formed in the outer surface of the back plate 53 so that when the housing element 50 and the plate 52 are moved in the unlocking direction of the slider or to the left, (compare Figs. 5 and 6), the camming surface 68 of the back plate will depress the spring tongues 62 and 63 thereby causing the withdrawal of the locking lugs 64 and 65 into the apertures 66 and 67 and out of the path of the interlocking elements in the slider. A small tit 73 may be provided on each of the tongues 62 and 63 for engagement with similarly shaped locking recesses 74 provided in the camming surface 68 so that when the locking lugs are withdrawn from the path of the interlocking elements in the slider, they will be positively held in such inoperative position until removed therefrom by the actuation of the housing member 50. Movement of the housing member 50 is attained by operating the pull tab 71 in the same manner described with respect to the pull tab 18, illustrated in Figs. 1 to 3. The pull tab 71 like the pull tab 18 may be also provided with an aperture 72 adapted to receive the strap 23 on the front plate 10 of the slider, as an additional means for maintaining the locking lugs in inoperative position.

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, a pair of plates spaced to receive the interlocking elements of the slider, a spring on one plate having a locking detent adapted to enter through an aperture in said plate into engagement with interlocking elements carried in said slider, a lug carried on the other of said plates, a pull tab pivotally connected to said lug, a member slidably connected to said lug and controlled by said pull tab, said slidable member being operatively connected to said spring and controlling movement thereof.

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, a pair of plates spaced to receive the interlocking elements of the slider, a spring on one plate having a locking detent arranged to enter a recess provided in said plate and engage interlocking elements disposed within said slider, a lug mounted on the other plate of said slider, a housing enclosing said lug and connected for slidable movement longitudinally thereof, said housing being operatively connected to said spring and adapted to control the movement thereof, and a pull tab connected to said lug and adapted to control the slidable movement of said housing.

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, a spring on one plate having a locking detent adapted to enter through an aperture in said plate into engagement with interlocking elements carried in said slider, a lug carried on the other of said plates, a pull tab pivotally connected to said lug, a member slidably connected to said lug and controlled by said pull tab, a transverse member connecting said slidable member with said spring and camming means operable upon movement of said sliding member to control said spring and locking detent.

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 plates spaced to receive the interlocking elements of the slider, a spring on one plate having a locking detent adapted to enter through an aperture in said plate into engagement with interlocking elements carried in said slider, a lug carried on the other of said plates, a pull tab pivotally connected to said lug, a member slidably connected to said lug and controlled by said pull tab, camming means provided on said slidable member and a transverse member connected to said spring and engaging said camming means whereby upon sliding movement of said slidable member said transverse member is cammed to operate said spring.

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 on said back plate having a locking detent adapted to enter through an aperture in said back plate into engagement with interlocking elements carried in said slider, a lug carried on said front plate, a pull tab pivotally connected to said lug, a member slidably connected to said lug and controlled by said pull tab, and a slidable plate disposed against the outer surface of said back plate and connected to said slidable member, said spring being mounted on said slidable plate intermediate the same and said back plate.

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, a pair of front and back plates spaced to receive the interlocking elements of the slider, a spring on said back plate having a locking detent adapted to enter through an aperture in said back plate into engagement with interlocking elements carried in said slider, a lug carried on said front plate, a pull tab pivotally connected to said lug, a member slidably connected to said lug and controlled by said pull tab, a plate disposed against the outer surface of said back plate and connected to said slidable member, guide means connecting said slidable plate to said back plate and said spring being mounted on said slidable plate intermediate the same and said back plate.

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 front and back plates spaced to receive the interlocking elements of the slider, a spring on said back plate having a locking detent adapted to enter through an aperture in said back plate into engagement with interlocking elements carried in said slider, a lug carried on said front plate, a pull tab connected to said lug, a pair of longitudinally extending slots on said back plate, a

plate slidably engaging said back plate and having a pair of guide members extending through said slots and engaging the interior surfaces of said back plate, said spring being disposed in a recess provided on said slidable plate intermediate the same and said back plate, a member slidably connected to said lug and controlled by said pull tab and means connecting said slidable plate with said slidable member.

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 front and back plates spaced to receive the interlocking elements of the slider, a spring on said back plate having a locking detent adapted to enter through an aperture in said back plate into engagement with interlocking elements carried in said slider, a lug carried on said front plate, a pull tab connected to said lug, a slidable member on said front plate and controlled by said pull tab, a plate slidably mounted on said back plate for supporting said spring, a transverse member connecting said slidable plate with said slidable member and a cam surface on said back plate to control said spring as it is moved by said slidable plate.

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 on said back plate having a locking detent adapted to enter through an aperture in said back plate into engagement with interlocking elements carried in said slider, a lug carried on said front plate, a pull tab connected to said lug, a slidable member on said front plate and controlled by said pull tab, supporting means for said spring slidably connected to said back plate, a transverse member connecting said supporting means to said slidable member, camming means on said back plate to actuate said spring upon slidable movement of said supporting means and means for locking said spring and locking detent at one end of the range of movement of said supporting means.

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 on one plate having a locking detent adapted to enter through an aperture in said plate into engagement with interlocking elements disposed within said slider, camming means controlling the operation of said spring and detent, a member mounted for sliding movement on the other of said plates and operatively associated with said camming means, a pull tab connected to said slidable member and operable to shift the latter on said other plate to operate said camming means, and means to limit the sliding movements of said slidable member relative to said other plate.

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 plates spaced to receive the interlocking elements of the slider, a spring connected to one of said plates and having a locking detent adapted to enter through an aperture in such plate into engagement with interlocking elements disposed within said slider, a lug fixedly mounted on the other of said plates, a pull tab pivotally connected to said lug, a member slidably mounted on said lug and connected to said pull tab so that it may be slidably actuated by the latter, a transverse member attached to the free end of said spring and extending into engagement with said slidable member, said engaged portion of said slidable member being formed to provide a camming surface adapted upon movement of said slidable member in one direction to cause said transverse member to move said spring and locking detent relative to its associated slider plate and a locking notch adjacent to said camming surface and adapted to receive the cam engaging end of said transverse member and to maintain the same and said spring and detent in operated position.

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 on one plate having a locking detent adapted to enter through an aperture in said plate into engagement with interlocking elements disposed within said slider, a lug fixedly secured to the other of said plates, a member slidably mounted on said lug and operatively connected to said spring to control movement thereof relative to its associated plate, a pull tab pivotally connected to said lug and arranged to control the sliding movements of said slidable member, and means on said pull tab adapted to engage and interlock with a member provided on said other plate to lock said sliding member against sliding movement on said lug and to lock said spring member in position where the locking detent is withdrawn from engagement with the interlocking elements positioned within the slider.

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 and connected together at one end, a spring plate fixedly secured at one end to the free end of one of said slider plates and provided with a locking detent adapted to enter through an aperture in such slider plate into engagement with interlocking elements in said slider, a transverse member connected at one end to the free end of said spring plate and extending toward the other plate of the slider, an elongated lug fixedly secured to the other plate of the slider and extending longitudinally thereof, a housing enclosing said lug and connected thereto for slidable movement longitudinally thereof, said housing being provided on its under side with a cam surface which engages with the other end of said transverse member and being formed so that on movement of said slidable housing relative to the lug, said transverse member is cammed downwardly to space the spring plate from its associated plate and to withdraw said locking detent from engagement with the interlocking elements in the slider and a pull tab pivotally connected to said lug and adapted to engage with said slidable housing to actuate the same when the slider is drawn from a locked position to open the fastener structure.

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