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2,398,947	4/1946	Marinsky.....	24/205.11 X
3,292,224	12/1966	Silberman	24/205.14 A
3,319,743	5/1967	Pelavin.....	190/41 Z
3,477,553	11/1969	Kish	190/41 Z

FOREIGN PATENTS

894,402	4/1962	Great Britain.....	24/205.11
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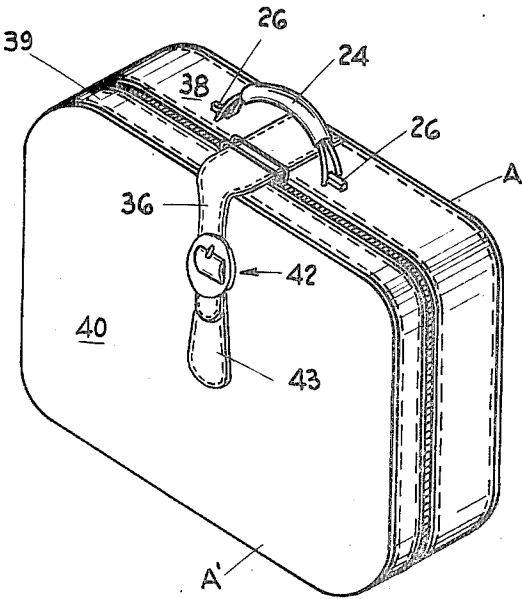
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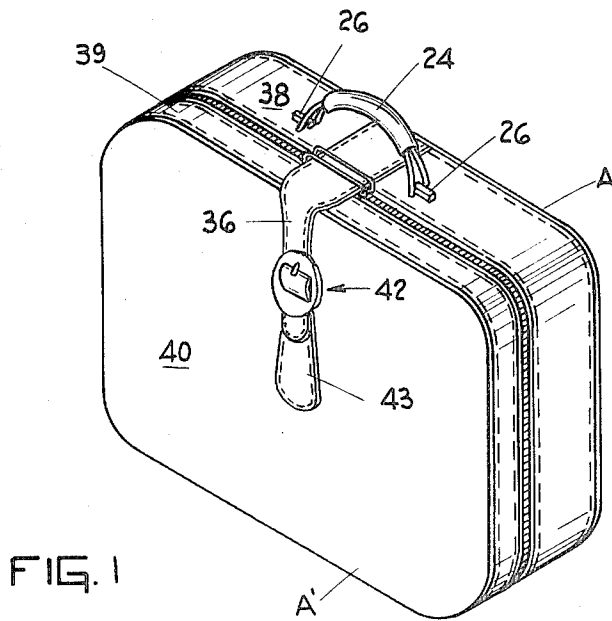
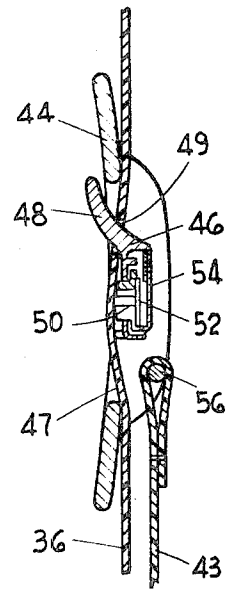
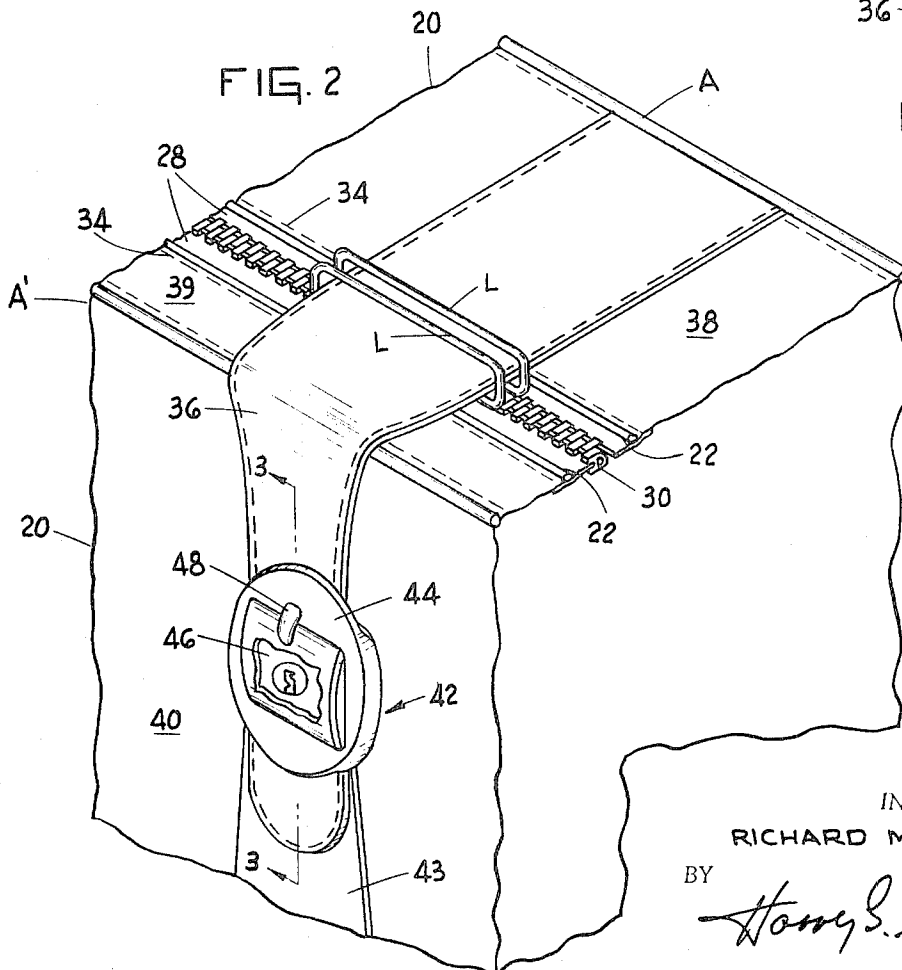
[54] LUGGAGE WITH SLIDE FASTENER CLOSURE
AND SLIDER THEREFOR
10 Claims, 10 Drawing Figs.

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24/205.11 L
[51] Int. Cl..... A45c 13/00
[50] Field of Search..... 190/41 Z,
59; 24/205, 205.11, 205.15 H

[56] References Cited
UNITED STATES PATENTS
367,237 7/1887 Reinisch..... 190/59
1,705,149 3/1929 Brady..... 190/41 Z UX

ABSTRACT: A luggage case comprising opposed case sections of a sewable material employs a slide fastener for opening and closing the case. A strap is connected to one case section and means connected to the opposite case section is provided for releasably locking the strap. The strap overlies a slider or sliders in the closed condition of the slide fastener. The slider, or where a pair of sliders are used to open and close the fastener, are each provided with an elongated loop member through which the strap is extended to prevent the slide fastener from being opened, unless the strap is disconnected from the means for locking the strap to the case.





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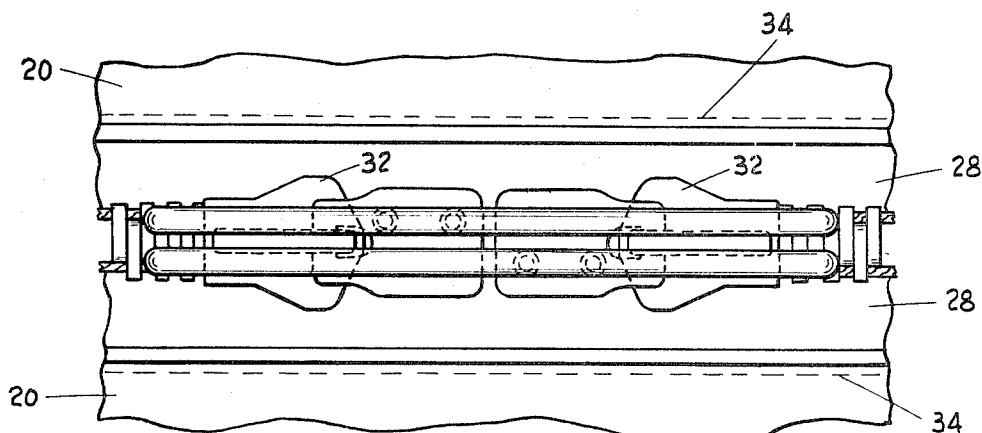


FIG. 4

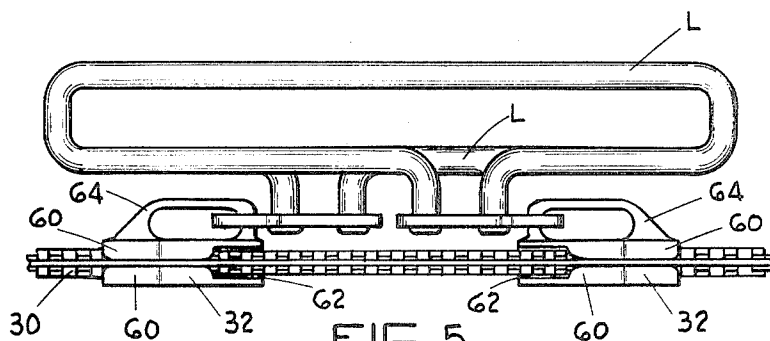


FIG. 5

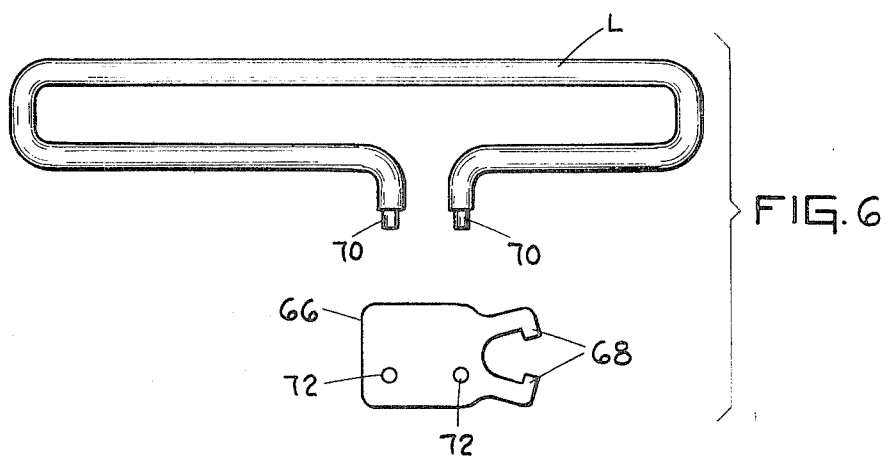


FIG. 6

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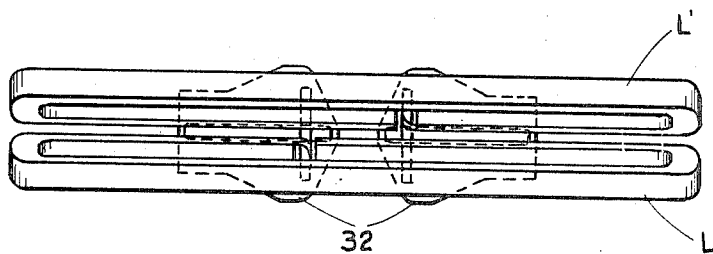


FIG. 7

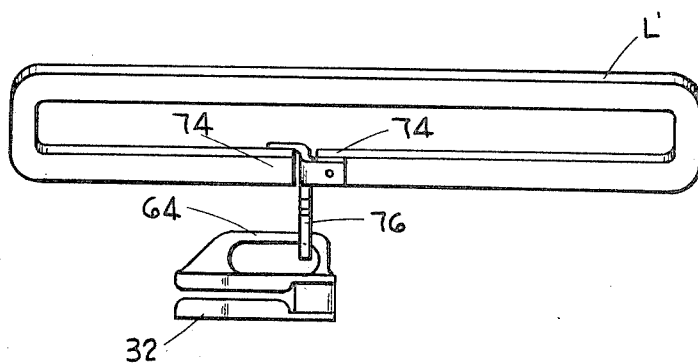


FIG. 8

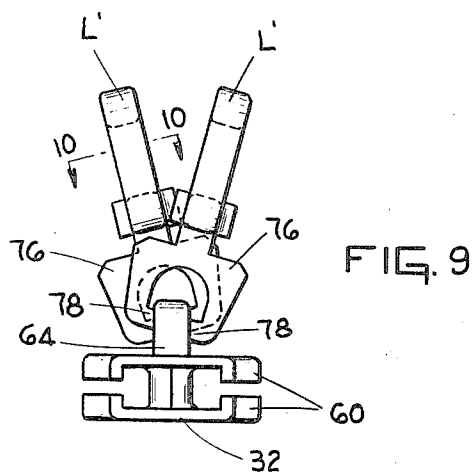


FIG. 9

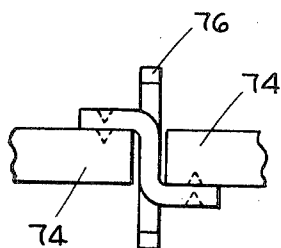


FIG. 10

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LUGGAGE WITH SLIDE FASTENER CLOSURE AND SLIDER THEREFOR

The invention relates to improvements in luggage having a slide fastener closure; also improvements in sliders for slide fasteners.

BACKGROUND OF THE INVENTION

There is presently on the market a luggage case of the type having a slide fastener closure where in the closed condition of the case, or with the slide fastener closed, a pair of sliders are located adjacent one another midway of the length of the top side of the case. A strap connected to one of the case sections overlies the adjacent sliders, and has its end releasably connected to a buckle lock mounted on the side of the opposite case section.

Although the sliders are concealed beneath the strap in the closed and locked condition of the case, the flexible character of the material constituting the case sections, or a small amount of looseness of the locked strap, permits one to obtain access to the sliders beneath the strap to move them in fastener-opening direction. As a result, unauthorized access to the contents to the case is possible.

The primary object of the invention is to prevent the unauthorized opening of the slide fastener of a luggage case of the type as above described.

Another object of the invention is to provide a slider of a novel construction.

SUMMARY OF THE INVENTION

In accordance with the invention, a slider is provided with an elongated loop member connected to a wing of the slider body. The loop member extends substantially parallel to the length of the slider, and is adapted to closely confine a strap extended therethrough. A slide fastener having a slider provided with the loop member incorporated in a luggage case prevents the slider or sliders so made, from being manipulated to open the case when the strap is extended through the loop member or members and locked to the luggage case.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a luggage case made in accordance with the invention, the case being shown with the slide fastener in its closed condition;

FIG. 2 is a partial, perspective view, on an enlarged scale, showing the relationship of a slide fastener, a strap overlying the slider bodies of the fastener, and the connection of the end of the strap to a buckle lock, this view showing the strap partially broken away to expose the key barrel of the buckle lock;

FIG. 3 is a vertical cross-sectional view taken in approximately the plane of line 3—3 of FIG. 2;

FIG. 4 is a partial top plan view on an enlarged scale, showing the relationship of sliders made in accordance with the invention in the closed condition of the case;

FIG. 5 is a front elevational view of the elements shown in FIG. 4, this view omitting the showing of the associated case sections for purpose of clarity in illustration;

FIG. 6 shows a loop member and a slider pull preliminary to their connection to one another;

FIGS. 7—10 illustrate another embodiment of a slider made in accordance with the invention, FIG. 7 being a top plan view and showing the relationship of a pair of the sliders when the slide fastener is closed;

FIG. 8 is a front elevational view of the slider;

FIG. 9 is an end view of the elements shown in FIG. 7; and

FIG. 10 is a cross section taken approximately in the plane of the line 10—10 of FIG. 9.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, a luggage case made in accordance with the invention comprises a pair of case sections A, A' which are hinged to one another on the underside of the case by a pair of longitudinally spaced hinges (not shown), as

is common in the art. The case sections are made of a sewable material 20, for example, leather, plastic sheet material such as vinyl resin sheeting, or a coated fabric such as canvas coated with a suitable waterproofing composition. Various waterproofing compositions may be used, for example, polyvinyl chloride, copolymers of vinyl chloride and vinyl acetate, copolymers and terpolymers of styrene, etc. The case sections A, A' each have a peripheral edge 22 along their respective open sides (FIG. 2). Each peripheral edge is defined longitudinally by the top, bottom and end sides of the case section. The edges may be reinforced by welting. As shown in FIG. 1, a handle 24 is connected to one case section by longitudinally spaced connecting studs 26.

A slide fastener or a pair of slide fasteners are used to open and close the luggage case. The slide fastener comprises a pair of stringers, that is, a pair of tapes 28 having interlockable fastener elements 30 secured in offset relationship to the respective edges of the tapes for engagement and disengagement of the fastener elements by a slider or sliders 32. The respective tapes 28 are in overlapping relationship with the case section material 20 at the peripheral edges of the case sections and sewn thereto by the lines of stitching 34.

Where, as illustrated, a slide fastener or slide fasteners are used in a manner where the case is closed with a pair of the sliders 32 located adjacent one another midway of the length of the top side of the case, either a single slide fastener or a pair of slide fasteners may be used. With fastener elements of the so-called double-acting type, a single slide fastener with a pair of opposed sliders may be used and is preferred. Where the fastener elements are of the single-acting type, a pair of slide fasteners are used, the top or top stop ends of which are located midway of the top of the case. In any event, whether a single double-acting slide fastener or two slide fasteners of the one-way acting type are used, an overall length of slide fasteners is selected so that the ends of the fastener or fasteners terminate on the underside of the case near the juncture of the underside with the sidewalls of the case.

In the illustrated form of the invention, a strap 36 has one end thereof sewn to either the top side 38 of one case section or such case section's sidewall. The strap is of a length to extend across the parting line of the case, across the top side 39 of the opposing case section and down the sidewall 40 of the opposed case section. A buckle lock 42 is mounted on the sidewall 40 by the connection thereof to a mounting strip 43 sewn to the sidewall. The buckle lock is of a known construction, which is commercially available.

As shown in FIGS. 2 and 3, the buckle lock comprises an apertured plate 44 to which a member 46 is pivotally connected. The member 46 is positioned for rotation within the aperture 47 of the plate 44. The member 46 is provided with a hook 48 adapted to be extended through an eyelet 49 in the strap 36. The pivoted member 46 carries a key barrel 50 and a locking bolt 52 which are supported by a bottom frame 54. Cooperable means are provided by the plate 44 and the locking bolt so that sliding movement of the locking bolt by a key (not shown) inserted through the key barrel will prevent rotation of the hook-providing member 46 in the locked condition of the device. As shown in FIG. 3, the plate 44 is provided with a crosspin 56 for the connection of the device to the mounting strip 43 as by sewing or rivets extended through the folded over end portion of the mounting strip 43.

As shown in FIGS. 4 and 5, the bodies of the sliders 32 are of the usual construction in that they each comprise a pair of spaced, flanged wings 60 joined at one end by a neck 62 to provide an internal substantially U-shaped channel for the engagement and disengagement of the fastener elements 30 when the slider is moved in fastener-opening or fastener-closing direction. The top wing of the slider is provided with the usual longitudinally extending lug 64 to which a pull 66 is pivotally connected by trunnions 68.

In accordance with the invention, an elongated loop member L is connected to the slider body or the top wing of the slider body. In the embodiment of the invention illustrated

in FIGS. 4, 5 and 6, the elongated loop member L, which is formed or made of a bent wire is connected to the pull 66 by providing the adjacent outwardly bent ends of the wire with respective connecting stud portions 70 which are extended through a pair of longitudinally spaced apertures 72 in the pull 66. The ends of the studs are then headed over to secure the parts to one another. The lengthwise dimension of the loop member extends substantially parallel to the length of the slider body. The pull serves as the means for connecting the loop member to the slider body. In use, the loop member is grasped for moving the slider in fastener-opening and fastener-closing directions.

In the embodiment of the slider illustrated in FIGS. 7—10, the intermediate pull 66 is eliminated. The elongated loop member, designated L', has its adjoining ends 74 connected by a connecting member 76, the member also being formed to provide trunnions 78 for direct connection to the lug 64. The connecting member 76 has a portion which is generally Z-shaped. As shown in FIG. 10, the offset parallel portions are secured to the ends 74 of the loop member, as by spot welding. An integral, downwardly extending portion is formed to provide the trunnions 78 which are clinched under the lug 64 on the slider body to form the connection.

The advantage of the construction shown in FIGS. 7—10 is that the side-by-side relationship desired for the loop members of a pair of sliders is obtained without resort to "rights" and "lefts" as needed in connection with the embodiment of FIGS. 4—6. In this later embodiment the apertures 72 in the pull 66 must be located near one edge of a pull for one slider and near the opposite edge of the pull for the second slider. In the embodiment of the invention shown in FIGS. 7—10 there is enough play between the member 76 and the lug 64 to allow exactly the same construction for each of the sliders.

The elongated loop members L or L' preferably are made of wire stock which, when bent to the illustrated configuration, possesses substantial rigidity. Wire stock having a diameter of approximately one-eighth inch is preferred. The wire may have a square cross section with a radius at the corners so that there will be no sharp edge presented to the hand when grasping the loop member. The loop member provides an elongated opening to closely confine the strap which is to be extended therethrough. The strap should be of a width to cover or conceal the slider bodies in the closed condition of the case. An example of suitable dimensions for the opening through the loop member is a length of approximately 3.0 inches and a height of approximately one-quarter inch. The lengthwise dimension of the elongated loop member is substantially greater than the length of the slider body to which it is connected. The lengthwise dimension of the loop member extends substantially parallel to the length of the slider body.

The case is locked in the following manner. The loop members L, or L', are grasped to bring the sliders adjacent one another on the top of the case with the loop members in aligned and side-by-side relationship, as shown in FIGS. 1, 2, 4, 5, 7 and 9. The end of the strap 36 is extended through the adjacent loop members and is threaded through the plate member 44 of the buckle lock. The hook 48 is extended through the eyelet 49 in the strap, and the locking bolt 52 is shifted by a key to lock the case before tucking the end of the strap under and out from beneath the lower end of the plate member 44. If one could get under the strap, the sliders can not be moved in fastener-opening direction. The loop members through which the strap is extended prevents any movement from being imparted to the sliders, unless the strap is unlocked from the buckle lock and the strap is retracted from within the loop members.

The term "slide fastener" as used in the claims is intended to refer to either a single slide fastener having double-acting slide fastener or scoops or a pair of slide fasteners of the single-acting type.

Although a luggage case as illustrated, wherein the buckle lock and the cooperable strap are located centrally of the case is preferred, the strap and associated buckle lock may be

located on an end wall near its juncture with the bottom side of the case, at which area the slide fastener is in closed condition. Such modification permits the use of a single slider including the described associated elongated loop member cooperable with the strap.

It is believed that the advantages and improved results afforded by the illustrated and described slider and luggage construction including a slide fastener having such slider will be apparent from the foregoing detailed description of a preferred embodiment of the invention.

I claim:

1. A slider for slide fasteners comprising a pair of spaced flanged wings joined by a neck to provide a slider body, and an elongated loop member connected to a wing, said loop member being elongated in the direction of the length of the slider body and having a lengthwise dimension substantially greater than the length of the slider body, the elongated loop member being adapted to closely confine a strap extendible through the loop member in a direction transverse to the length of the slider body.

2. A slider according to claim 1, including a lug on one of the wings and a pull connected to the lug, the loop member being formed of a bent wire having the ends thereof secured to the pull.

3. A slider according to claim 1, including a lug on one of the wings, and a connecting member secured to the loop member and connected to the lug.

4. A slider according to claim 3, wherein the loop member is formed of bent wire having its ends adjacent each other substantially midway of the length of the loop member, the connecting member comprising a substantially Z-shaped portion welded to said ends and a projecting portion formed to provide a pair of trunnions extended beneath the lug.

5. In a luggage case comprising a pair of opposed case sections, a slide fastener including a pair of tapes having interlockable elements secured to their respective edges and a slider body for opening and closing the slide fastener, the tapes being secured to the case sections along their peripheral edges, a strap connected to one case section, and means connected to the opposite case section for releasably locking the strap, the strap overlying the slider body in the closed condition of the slide fastener, the improvement comprising an elongated loop member connected to the slider body, the strap being extendible through the loop member.

6. In a luggage case comprising a pair of opposed case sections, a slide fastener including a pair of tapes having interlockable elements secured to their respective edges and a pair of slider bodies for opening and closing the slide fastener, the tapes being secured to the case sections along their peripheral edges, the slider bodies being adjacent to one another in the closed condition of the slide fastener, a strap connected to one case section, and means connected to the opposite case section for releasably locking the strap, the strap overlying the slider bodies in the closed condition of the slide fastener, the improvement comprising an elongated loop member connected to each slider body, said loop members being in aligned, side-by-side relationship in the closed condition of the slide fastener to permit the strap to be extended through the loop members.

7. In a luggage case according to claim 6, wherein each elongated loop member has a lengthwise dimension substantially greater than the length of the slider body and is connected thereto to extend substantially parallel to the length of the slider body.

8. In a luggage case according to claim 6, wherein each slider body is provided with a lug, and a pull is connected to the lug, the loop member being formed of a bent wire having the ends thereof secured to the pull.

9. In a luggage case according to claim 6, wherein each slider body is provided with a lug, and a connecting member is secured to the loop member and connected to the lug.

10. In a luggage case according to claim 9, wherein the loop member is formed of bent wire having its ends adjacent

each other substantially midway of the length of the loop member, the connecting member comprising a substantially Z-shaped portion welded to said ends and a projecting portion formed to provide a pair of trunnions extended beneath the lug.

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