United States Patent [19]

Slan

[11] **3,741,355**

[45] **June 26, 1973**

[54] **SOFT SIDED LUGGAGE CASE**

[75] Inventor: **Jack Slan,** Toronto, Ontario, Canada

[73] Assignee: **Dominion Luggage Co. Limited,** Toronto, Ontario, Canada

[22] Filed: **June 29, 1970**

[21] Appl. No.: **50,839**

[52] **U.S. Cl.** **190/49,** 190/51, 190/53

[51] **Int. Cl.** **A45c 3/00,** A45c 13/00

[58] **Field of Search** 190/49, 50, 54, 51, 190/53, 41

[56] **References Cited**

UNITED STATES PATENTS

3,128,856	4/1964	Axtell	190/49
2,848,079	8/1958	Brodie	190/54
2,746,581	5/1956	Ritter, Jr.	190/54
2,889,020	6/1959	Kotkins	190/54
2,269,574	1/1942	Benenfeld	190/54
3,335,827	8/1967	Hofferbert	190/53
3,286,800	11/1966	Slan	190/49

FOREIGN PATENTS OR APPLICATIONS

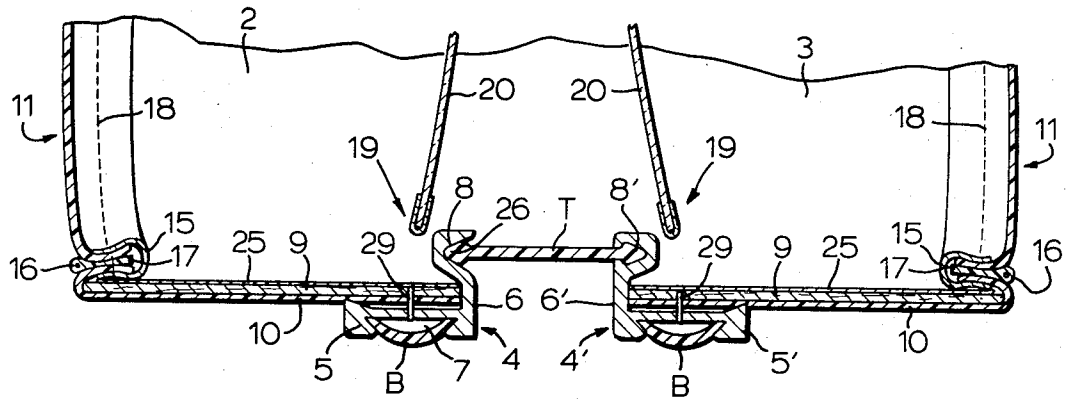
663,916	5/1965	Belgium	190/41 R
152,472	2/1938	Austria	190/51

Primary Examiner—George E. Lowrance
Assistant Examiner—Stephen Marcus
Attorney—Douglas S. Johnson

[57] **ABSTRACT**

A soft sided center opening luggage case comprising two hinged sections and having a strong, rigid central frame structure running around the case, resilient frame structures anchored from the central frame structure and extending laterally outwardly as resilient cantilevers, and a soft or flexible material closing the side of the case and supported from the free edges of the resilient cantilevers. The inside face of each section of the case is also closed by a releasable partition so that the case provides two sections which can be packed independently and each of which has in effect an expandable packing capacity.

2 Claims, 5 Drawing Figures



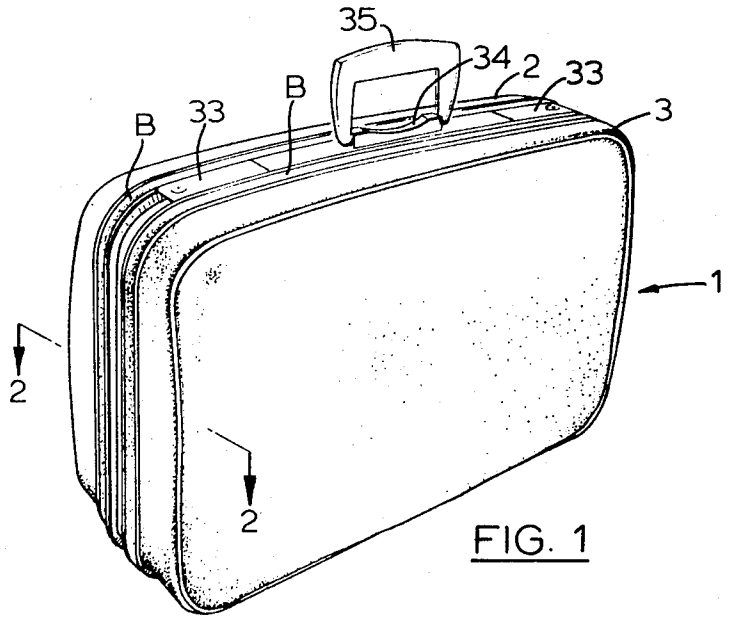


FIG. 1

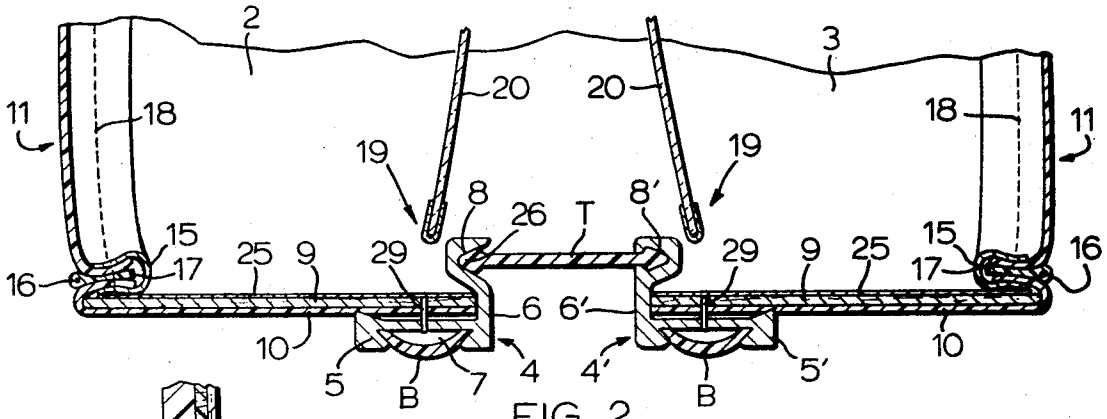


FIG. 2

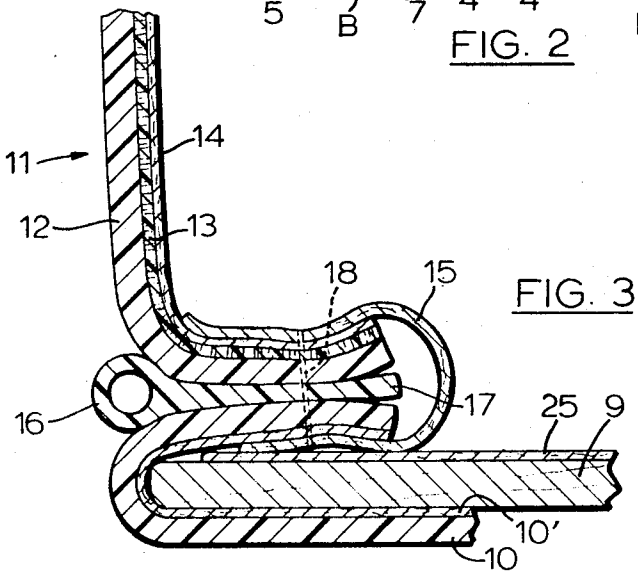


FIG. 3

INVENTOR.
JACK SLAN

BY Douglas S. Johnson

Attorney

FIG. 4

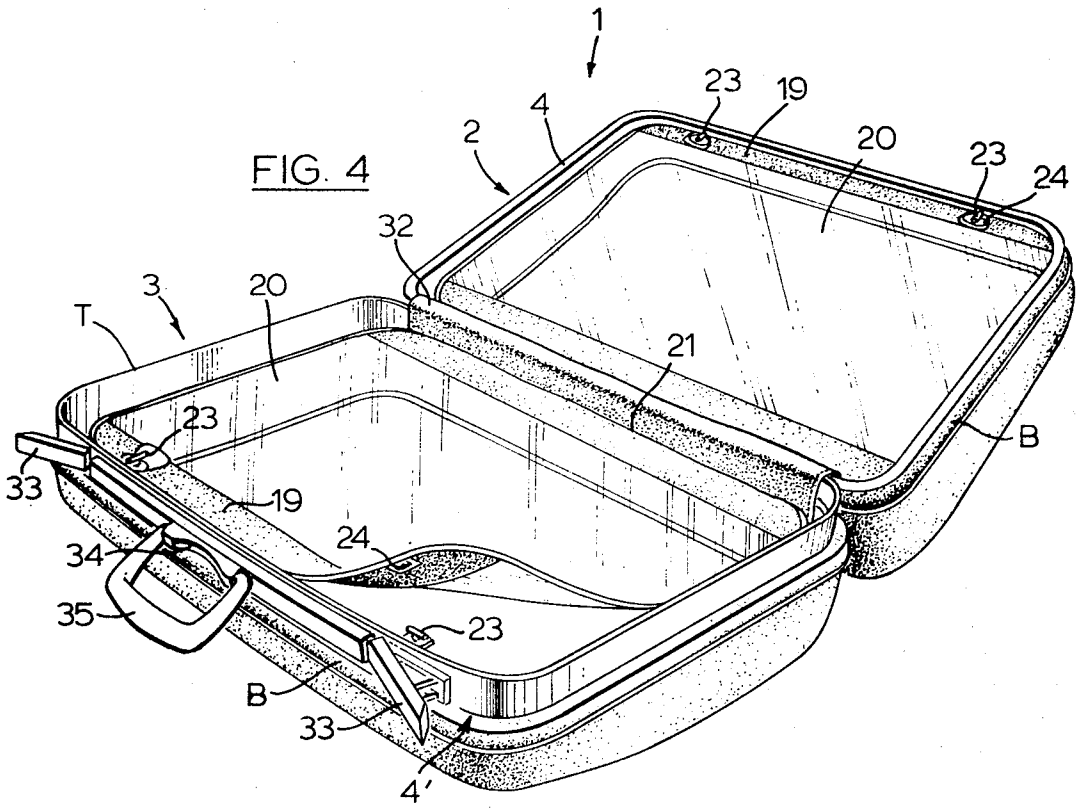
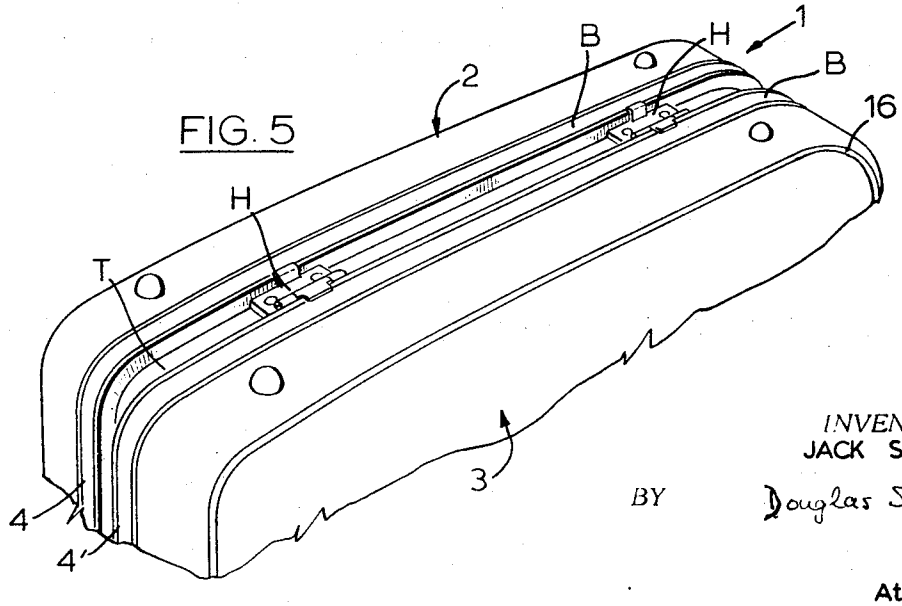


FIG. 5



INVENTOR.
JACK SLAN

BY Douglas S. Johnson

Attorney

SOFT SIDED LUGGAGE CASE

This invention relates to a soft sided luggage case and more particularly to a soft sided luggage case which opens at the center.

BACKGROUND OF THE INVENTION

In general there are two types of commonly used luggage cases, those formed of moulded shells which fit together, present hard or rigid sides, and open at the center, and those formed with a closed central frame, have soft or flexible sides, and open at one side. The moulded luggage cases afford good protection to the contents and have particular appeal from an appearance standpoint, always retaining their precise configuration but at the same time the amount of clothing or other articles which can be packed is strictly limited by that same precise configuration. Moreover, the sides and corners of the case are subject to damage under impact because of their rigidity. While the soft sided luggage case is provided with flexible side walls which can be distorted or bulged to accept or conform to the contents to be packed and therefor provide a greater packing capacity, they normally have to be packed from one side and present a single compartment into which all clothing and other articles have to be packed making it difficult to retain the clothing in a fresh and properly folded state. Moreover, unless the soft sided case is packed to full or bulging capacity the contents will shift and drop to the bottom and become disarranged when carrying. Further, the broad central flat frame structure extending between the soft sides inherently has limited resistance to inward collapse under sharp impact so that this factor, combined with the flexibility of the soft sides, presents limited protection against breakage of the contents or in fact, destruction of the case itself.

BRIEF DESCRIPTION OF THE INVENTION

It is the object of the present invention to provide a luggage case which affords the advantages of both the hard sided and the soft sided luggage pieces while eliminating the present inherent disadvantages of both.

More particularly, according to the invention there is provided a soft sided two section center opening luggage case that has an extremely strong central structure running around the case to provide the rigidity required to prevent edgewise collapse, has a resilient structure extending laterally outwardly from the rigid center to absorb and cushion corner and edge impact and has the soft sides supported from the resilient structure whereby the case will accept a substantially greater amount of clothing and other articles than present hard sided cases of equivalent size, can be packed and unpacked with a great deal more facility than present soft sided cases and will withstand more abuse while protecting the contents than either the present hard or soft sided cases.

Further according to the invention the case comprises in effect two soft sided "bottomless" case components or sections each with an expansible packing capacity whereby one section only can be packed sufficiently with clothing which it is desired to maintain properly folded and fresh (the amount being variable over a wide range because of the expansible feature), and same will be firmly held from disarrangement even when the full capacity of the entire case is not required.

DESCRIPTION OF THE DRAWINGS

These and other features of the invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings in which

FIG. 1 is a perspective view of a luggage case embodying the invention,

FIG. 2 is an enlarged broken away cross sectional view taken on the line 2 — 2 of FIG. 1,

FIG. 3 is a fragmented further enlarged cross sectional view showing the details of the connection of the soft side to the resilient frame,

FIG. 4 is a perspective view of the case of FIG. 1 in the open position,

FIG. 5 is a broken away perspective view of the bottom of the case.

DETAILED DESCRIPTION OF THE INVENTION

With reference to FIGS. 1, 4 and 5, the luggage case according to the invention and generally designated at 1 comprises two sections, 2 and 3, hinged together by suitable hinges H, FIG. 5, to swing between the open position shown in FIG. 4 to the closed position shown in FIG. 1.

The two sections 2 and 3 are of similar construction with the exception that the inner edge frames are of slightly different form, one carrying and the other adapted to receive a case closing tongue T as hereinafter described.

Referring to FIG. 2, Section 2 comprises an inner edge right angled frame 4 which extends peripherally around the section, the frame having an outer leg 5 and an inturned leg 6. The outer leg 5 is provided with an outwardly facing undercut groove 7 in which is anchored a bumper B which preferably comprises an outwardly bowed strip of relatively stiff material such as polyvinylchloride which is relatively hard at normal ambient 9 temperatures but will provide a measure of resiliencey on impact as more particularly described in my co-pending application Ser. No. 15,804. The inturned leg 6 is provided with a groove 8 facing towards the opposite section 3 to receive and seat the tongue member T carried by the opposite section 3 as hereinafter more fully described.

The angle frame 4 may be formed of a metal or other rigid material and may, for example, be formed of an extruded aluminum strip or a hard moulded or extruded plastic. Connected within the angle of the rigid angle frame 4 by suitable stitching or stapling 29 is a resilient frame member 9, preferably formed of a strip of plywood extending peripherally around the section, the width of the strip being controlled to provide the desired shape or outline of the case in that it tapers inwardly or narrows slightly towards the upper case edge. The exterior of the frame 9 is covered with a suitable covering 10 which may, for example, be a fabric, a plastic or a combination of both. Conveniently, a vinyl such as an expanded or foamed vinyl may be employed with or without a backing 10'.

The covered resilient but structurally strong frame member 9 is thus anchored and protected at its inner edge beneath the rigid angle frame 4 and extends outwardly as a cantilever for a maximum width of substantially less than half the width of the case.

The side 11 of the case section 2 is formed or closed by a "soft" material which again may be a fabric, a

plastic or a combination of both. A highly suitable material comprises an expanded vinyl as illustrated in FIG. 3, having an outer layer 12 which may be printed or embossed, or both, a foamed vinyl core 13 and a vinyl coated jersey, cotton or drill backing 14.

The siding 11 is connected to the frame 9 through the frame covering 10 by having the edges of the materials 10 and 11 turned inwardly to be received in a flexible channel 15, located interiorly of the section.

Preferably a bumper bead 16 having an inwardly extending leg 17 is inserted between the inturned ends of the siding 11 and the covering 10 and the entire assembly is connected together via the channel 15 by stitching or other suitable means indicated at 18.

The soft siding 11 such as described is flexible and has a limited ability to stretch and recover, governed in part by the selection of the backing. It will therefore be understood that the siding 11 can conform to articles packed within the section and can be bulged outwardly with a limited stretch from which the material will recover when the articles are removed. This ability to bulge is enhanced by the inherent resiliency of the frame 9 from the outer free edge of which the siding is supported.

The inner face of the section 2 is adapted to be closed by a resilient flexible partition 19 of a suitable plastic or fabric, and preferably having a transparent window portion 20, secured at one edge 21 by stitching or other suitable means (shown in FIG. 4 in respect of the corresponding partition of Section 3) adjacent the hinged inner edge of the section 2. The opposite edge of the partition 19 is removably fastened adjacent to the opposite side of the inner edge portion of the section by means of rotatable elongated buttons 23 which are adapted to project through elongated slots 24 in the partition and rotated to locking position.

The inside face of the resilient frame member 9 is preferably covered with a suitable plastic or fabric 25 which hides the stitching, stapling or other fastening means 29 which secures the frame 9 to the angle frame 4, from the inside of the case while the bumper B prevents such fastening means from being exposed at the exterior of the case.

Section 3 of the case is, as mentioned, constructed in the same manner as section 2 except that the angle frame 4 ' is slightly different from the angle frame 4. More particularly, angle frame 4' has an outer leg 5' corresponding to the leg 5 and an inturned leg 6' provided with a groove 8' in which is locked or crimped the tongue T. The tongue at its free edge is formed with an enlarged bead 26 which is adapted to seat in the groove 8 of the frame 4 when the sections 2 and 3 are closed. In other respects section 3 is identical in construction to section 2 and like parts have been given like numerals.

The provision of the angle frames 4 and 4' provides when the case is closed a central rigid structure running around the periphery of the case to provide the resistance to inward collapse corresponding to a hard side or moulded case. The tough but resilient plywood strip frames 9 anchored and protected along one edge within the angles of the angle frames 4 and 4' and each of a width substantially but less than half the width of the case affords a tough resiliency to the case edges, particularly at the corners which will enable the case to absorb and withstand impact without cracking, splitting or denting.

Further, the rigid angle frames 4 and 4' which protect and anchor the inner edges of the frame strips 9 are themselves protected against marking, scratching or denting by the resilient bumpers B. In turn, the exposed resilient cantilever portions or outer edges of the frame strips 9 are protected both inside and outside by the use of the bumper bead 16, the inturned covering 10 and siding 11, and the anchoring or fastening channel 15. In use, each section may be packed between the two flexible walls constituted by the outer siding 11 and the partition 19. Because these members exhibit apparel some measure of stretch and can conform or bulge to accommodate the shape of the articles or clothing being packed, each section can accept a substantially greater volume of apparel and other articles than would be the case in a hard or rigid sided luggage case of the same dimensions. Thus, each section 2 and 3 provides an expandable packing capacity or forms, in effect, a "Bottomless" section of a "Bottomless" case.

When the quantity of clothing or other articles to be carried is less than that required to fill each section firmly, one section can be packed firmly with those pieces of clothing which it is desired to prevent from shifting so that they can be kept fresh and neatly packed and folded during normal handling of the bag. Other items such as shoes, jewellry cases, shaving kit, etc. can be packed in the other section where, if shifting occurs, no damage will be done.

In use, the luggage case according to the invention exhibits all the benefits of existing hard and soft sided cases without the detriments presently attached thereto. For example, the yieldable sides of the case and the measure of resiliency provided by the frames 9 outwardly of the central rigid structure of the angle frames 4 and 4' enables the case to absorb and cushion impacts as it is discharged from a conveying ramp such as used in airports, without cracking or splitting of the corners, edges or sides of the case. At the same time, the bumpered rigid center section precludes inward collapse from any edgewise blow or impact and the limited width of the anchored resilient frame strips 9 essentially preclude their being subjected to breakage forces while absorbing impacts. Moreover, the case is extremely easy to pack by virtue of its center opening and its provision of two separate sections to protect the case and contents, each having expansible capacity as previously described.

The case additionally provides a very attractive appearance in which all of the stitching, stapling or other fastening means connecting the component parts are hidden from view and the shape of the case can readily be controlled or altered as desired by simply changing the width of a portion or portions of the strip frames 9.

As will be appreciated, the interior of the case can be finished as desired. For example, a covering material 32 may be applied over the edges of the case at the hinge side as illustrated in FIG. 4 and attached by the stitching 21 fixing the one edge of the partitons 19. Also pockets, hanger arrangements and other conventional attachments may be provided as desired.

The case is also provided with the usual provisions for locking and carrying, having suitable locks indicated at 33, handle mount 34 and handle 35.

While the preferred form of the invention has been shown and described, it will be understood that variations in details may be made by those skilled in the art

without departing from the spirit of the invention or scope of the appended claims.

I claim:

1. A center opening luggage case comprising two opposing hinged sections each of said sections comprising a rigid peripheral frame portion extending around its inner edge, a resilient peripheral frame portion connected to and extending laterally outward from said rigid peripheral frame portion, and a flexible siding closing the outer side of said resilient peripheral frame, said flexible siding comprising an expanded vinyl, said resilient peripheral frame strip having its outer surface covered with a material drawn over the outer edge thereof, and having an inturned edge and said expanded vinyl siding having an inturned edge adjacent the aforesaid inturned edge, a flexible outwardly facing channel receiving said inturned edges, and means fixing said inturned edges in said channel.

2. A luggage case as claimed in claim 1 in which a bumper member is provided having a leg portion secured between said inturned edges of said siding and said cover material and a bead portion projecting outwardly and exposed beyond said siding and covering material at the junction thereof.

* * * * *