Sept. 24, 1963 S. KOFFLER 3,104,740

CAR CASE

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FIG. 1

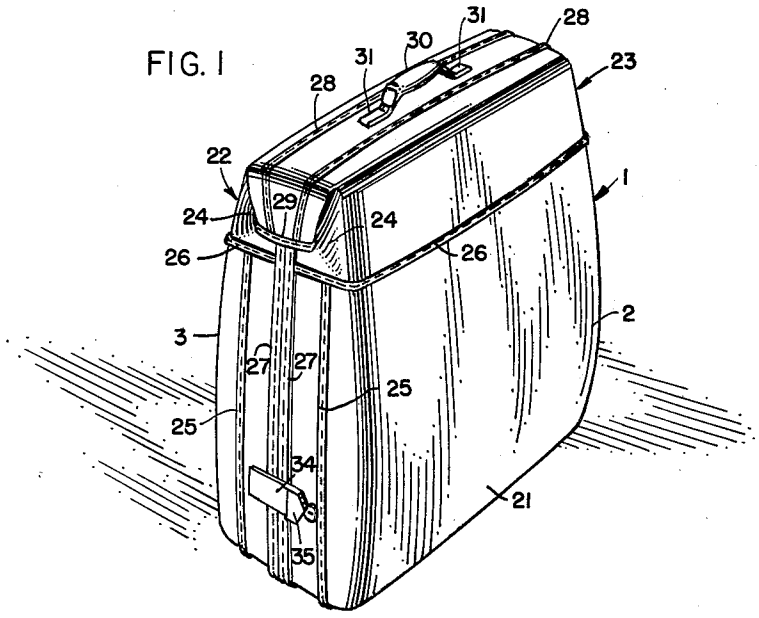
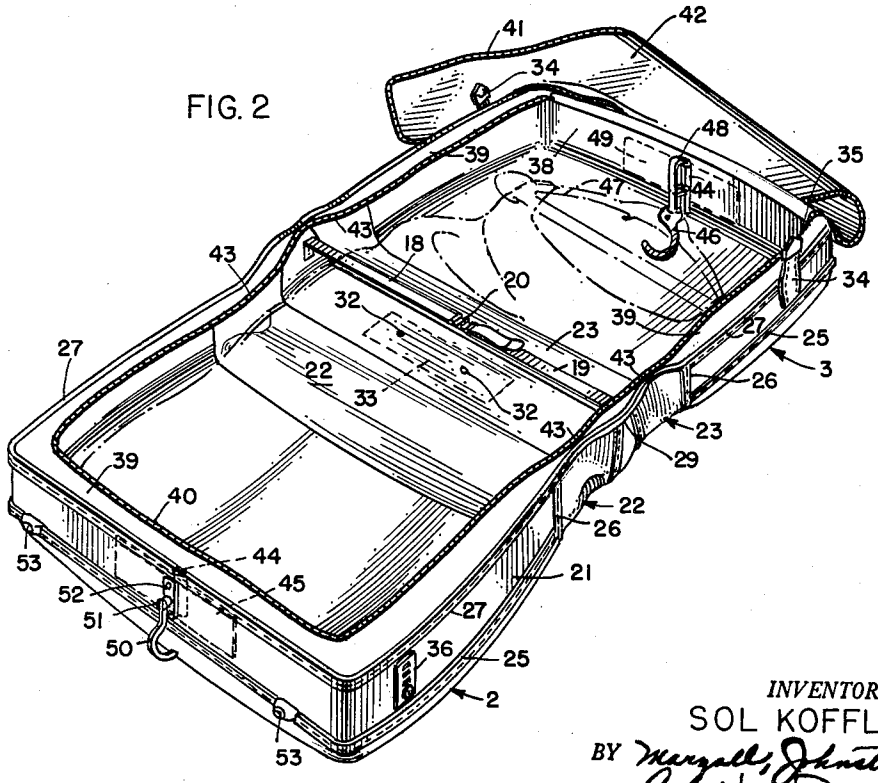


FIG. 2



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FIG. 3

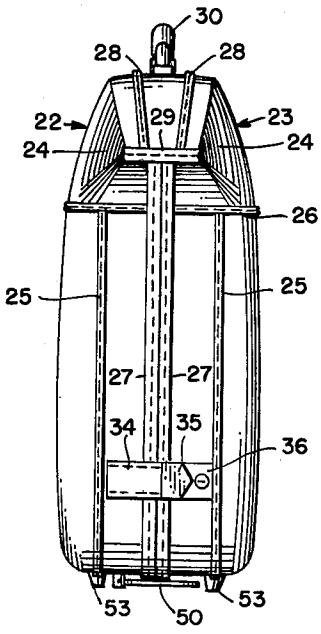


FIG. 4

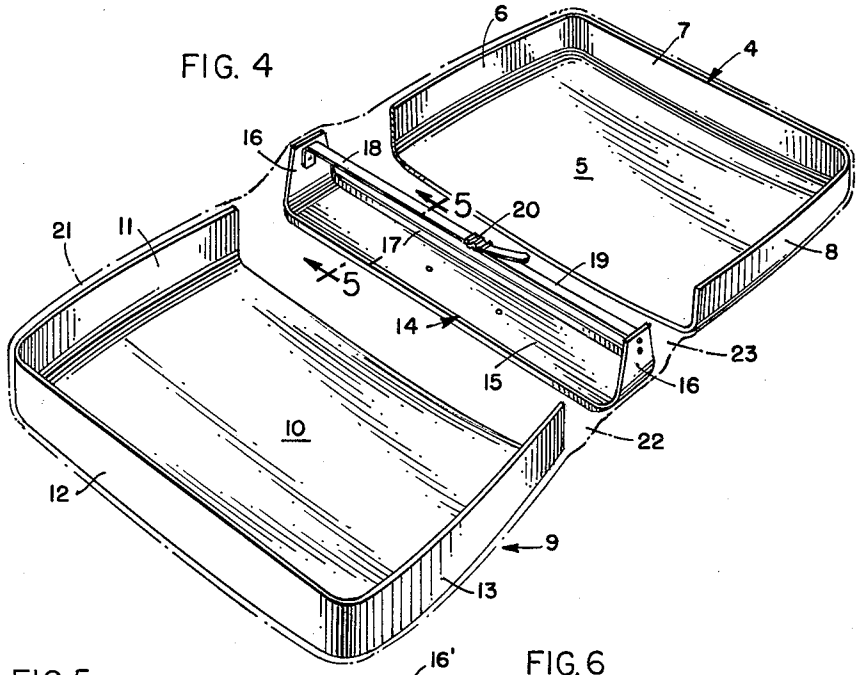


FIG. 5

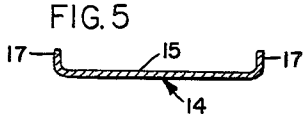
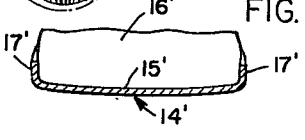


FIG. 6



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United States Patent Office 3,104,740 Patented Sept. 24, 1963

3,104,740

CAR CASE

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Filed Sept. 15, 1960, Ser. No. 56,312
2 Claims. (Cl. 190—43)

This invention, in general, relates to luggage. More particularly, the invention relates to luggage of the type in which articles of clothing and the like may be supported on hangers in the luggage.

The present invention relates to luggage commonly called car cases. The conventional car cases are made of a heavy fabric which opens into two undivided sections when the luggage lies flat. Suits, dresses and the like are laid in the luggage, usually on hangers attached at one end of the luggage to a member on the inner wall of the luggage. When the luggage is closed, the articles of clothing fold at the middle part of the luggage. The primary value of this type of luggage is the minimizing of wrinkling of the articles of clothing carried.

I have observed that luggage of the type described is relatively unattractive in appearance in comparison with other types of luggage, especially after the luggage has been used a number of times. Because the usual car cases have essentially flexible walls with little internal support in the luggage, the luggage begins to become misshapen after a short period of use. Furthermore, the usual car cases are not very servicable when travelling by public conveyances because they are stacked with other pieces of luggage in the baggage compartment of the public conveyance wherein the luggage and the clothing therein can be crushed by the weight of the other luggage stacked thereon.

It is an object of this invention to provide improvements in luggage of the previously described car case type.

Another object of the invention is to provide stronger articles of luggage of the car case type than heretofore known.

Still another object of the invention is to provide luggage of two opposed undivided segments with a flexible connection therebetween whereby the segments can be opened and closed.

Briefly, the luggage of the instant invention comprises a pair of matching shells. Each shell has an open end, and the two open ends are connected by a flexible segment which allows the luggage to be opened in a fully flat position without division between the two shells and to be closed with the shells forming a hollow compartment for holding articles of clothing. Each shell is rigid and has a side wall, a bottom wall and two end walls. The shells are interconnected by a flexible material. The middle of the flexible material preferably is rigidified by a supporting member to which the handle of the luggage is attached. An embodiment of the invention is illustrated in the drawing wherein:

FIG. 1 is a perspective view of a piece of luggage made in accordance with the invention in which the piece of luggage is shown in the closed state;

FIG. 2 is a perspective view of the piece of luggage of FIG. 1 in the flat, open position;

FIG. 3 is an end elevation of the piece of luggage of FIG. 1;

FIG. 4 is a perspective view similar to FIG. 1, illustrating the three rigid pieces in the article of luggage and their relative positions in the luggage;

FIG. 5 is a cross-sectional view taken on section 5—5 of FIG. 4; and

FIG. 6 is a cross-sectional view similar to FIG. 5 in a modified form of the invention.

The luggage piece 1 is made of two opposing hollow

compartments 2, 3 which form a hollow container for holding articles of clothing when the luggage piece is closed as shown in FIG. 1 and which form an undivided compartment for receiving articles of clothing when the luggage is laid open as shown in FIG. 2.

In order to make this type of luggage rigid and resistant to crushing under weight loads, the major part of each compartment 2, 3 contains rigidifying shells 4 and 9, respectively. Shell 4 has a side wall 5, a bottom wall 7 and two end walls 6 and 8. The shell 9 is identical to the shell 4 and has the side wall 10, a bottom wall 12 and two ends walls 11 and 13. The shells are positioned in the luggage piece with their open ends opposing each other when the luggage piece is laid open as shown in FIG. 4. When the luggage piece is closed, the end walls 6 and 8 are aligned with ends walls 11 and 13, respectively. The bottom walls 7 and 12 become the bottom side of the luggage. The walls 5 and 10 constitute the side walls of the luggage, and the end wall pairs 6 and 11 and 8 and 13 become a part of the end walls of the luggage.

The luggage piece 1 contains one additional rigid part in the luggage framework. This part is the frame member 14 composed of a wall 15 having integral end walls 16 spaced apart a distance substantially co-extensive with the width of shells 4 and 9. The wall 15 may be without side walls as shown in FIG. 2, or its rigidity may be augmented by small, integrally-formed side walls 17. The wall 14 may be substantially flat as viewed in cross-section and shown in FIG. 5, or it may have a slightly arcuate configuration in cross-section as shown in FIG. 6, where the numeral 14′ designates the modified form of the frame member corresponding to frame member 14. The frame member 14′ is made up of a wall 15′, a pair of end walls 16′ and a pair of short rigidifying walls 17′. The remaining aspects of the frame member 14′ are identical with the frame member shown in FIG. 4.

The frame member 14 is positioned in the luggage piece 1 midway between the shells 4 and 9 when the luggage piece is laid open as shown in FIG. 4. When the luggage piece is closed, the wall 15 becomes the rigid framework for the top of the luggage piece 1. The end walls 16 depend downwardly and serve as small, rigidifying sections at the top of the end walls of the luggage piece 1. The frame member 14 has a pair of straps 18 and 19 mounted on the respective end walls 16. The straps 18 and 19 are connected or disconnected as desired by the buckle 20. The connected straps 18 and 19 act in nature of a supporting rod for articles of clothing draped thereover when the luggage piece is closed and standing upright.

The shells 4 and 9 and frame member 14 are made of any suitable material which is substantially rigid and resistant to substantial bending. It is preferably a lightweight material. Examples of materials from which the shells 4 and 9 and frame member 14 can be made are lightweight metals, molded plastics, and molded fiber products such as molded Fiberglas. The shells and frame member are designed so that they can be cast, molded or stamped as unitary pieces.

The finished luggage piece preferably is covered entirely with a relatively heavy, wear-resistant fabric or plastic sheeting 21. Examples of said fabrics or plastic sheeting include canvas duck, heavy woven nylon fabric or other heavy synthetic polymer woven fabric, or relatively heavy plastic sheeting, such as various types of vinyl sheeting and the like which are sufficiently plastic that they can be bent a large number of times without breaking. The covering 21 is shown in FIG. 4 by the broken line outline.

In forming the luggage piece, the covering 21 is glued,

cemented, or otherwise secured to the outer surface of the shells 4 and 9 and tightly stretched thereover. It is similarly cemented, glued or otherwise adhered to the outer surface of the frame member 14. These three pieces of the luggage framework make up the major portion of the wall area of the luggage piece 1, the remaining area being bendable segments 22 and 23, which are unrigidified pieces of the covering 21. The covering 21 preferably is made of a sufficiently heavy, and self-supporting material so that the segments 22 and 23 do not collapse when the luggage is standing in the upright position.

When the luggage is closed, the lower edges of the walls 16 are in proximity to and aligned with the upper edges of the walls 6, 8, 11 and 13 of shells 5 and 10. Excessive loads on the top of the luggage cause said edges to come into contact and thereby prevent excessive crushage of the flexible top part of the luggage piece.

By constructing the luggage in the manner outlined, the luggage piece 1 has a finished appearance and is much more attractive than the usual, presently known car cases. The luggage piece protects the articles of clothing contained therein against crushing when loads are placed on the luggage piece. The attractive appearance of the luggage is further enhanced by the fact that the bendable segments 22 and 23 need have only one fold 24 in the covering at each corner.

The appearance of the luggage can be further improved by stitching beads 25 to the end walls and bottom wall of the luggage piece and similarly stitching a circumferential, horizontal bead 26 around the side walls and end walls. The edges of the two compartments of the luggage piece have ribbing 27 by which the flange 39 is stitched on the luggage piece. The segment 29 of ribbing 27 becomes folded when the luggage piece is closed (see FIG. 1). Decorative beading 28 may be applied along the top and a part of the ends of the luggage piece 1.

A handle 30 is mounted on the top wall of the luggage piece in handle brackets 31. The handle brackets 31 are rigidly secured to the frame member 14 by means of rivets 32 extending through the frame member and riveted upon a reinforcing plate 33 on the underside of the frame member 14.

The luggage piece 1 is locked in the closed position by a pair of locks, each composed of a strap 34 having a latching part 35 and a catch 36 having one or more catch openings. The strap 34 is attached to the compartment 3 and the catch 36 is mounted on the end wall of the compartment 2. The locking components are of the usual conventional construction and are not illustrated in detail. There is provided around the inner periphery of the compartments 2 and 3 at the edges thereof, excepting wall 38, flange 39 of relatively rigid material. Flange 39 has a zipper track 40 along its free edge, which zipper track meshes with zipper track 41 extending along the three sides of a fabric covering 42, which encloses the articles of clothing in the compartments 2, 3 after they have been packed in the luggage piece 1. The fourth side of the cover 42 is attached to the inner wall 38 of the compartment 3 and corresponds in size to the opening between the edges of the flange 39. The flange 39 is bendable at segments 43 so that it does not interfere with the closing of the luggage.

Compartments 2 and 3 each have a hanger support 44 mounted on the wall segments making up the bottom wall of the luggage piece 1. The hanger supports 44 are attached to mounting plates 45 and 49, respectively, which, in turn, are secured to the walls of the luggage compartments 2 and 3, respectively. Hanger supports 44 are adapted to receive and hold a removable, interfitting supporting bar 48, on which the latching parts of pivotable hooks 46 of hangers 47 are hung. The hanger supports 44 and supporting bars 48 are described in greater detail in my pending application Serial No. 44,127, filed July 20, 1960. Any of the conventional hanger supports presently known for the articles of luggage may be used instead of the illustrated mechanism.

The articles of clothing are packed in the luggage piece by placing them on the hangers 47 and attaching the hangers on one or both of the supporting bars 48. The supporting bars are interfitted and locked in the hanger supports 44 as described in said copending application. The straps 18 and 19 are buckled together over the articles of clothing, and the cover 42 is zipped. The luggage is then closed and locked. In the upright position the buckled straps 18 and 19 act as a support for the clothing folded thereover with the luggage in the upright position. On the outside of the bottom wall of compartment 2 and opposite the hanger support 44 there is provided a hook 50 mounted by hinge 51 on hook mounting bracket 52, which is, in turn, secured to the mounting plate 45. The hinge 51 permits the hook 50 to be laid flat with relation to the bottom wall of the compartment 2 as shown in FIG. 2, or to be pivoted to a position substantially perpendicular to said wall. This hook on the outside wall of the luggage allows the open luggage piece to be hung. When the hangers containing the articles of clothing are all mounted on hanger support 44, the opened luggage piece 1 doubles as a storage bag. The compartments 2 and 3 each have mounted over the beading 25 of the bottom side of the luggage a pair of luggage feet or cleats 53 upon which the luggage is supported when in the upright position.

The foregoing description of one embodiment of my invention constitutes but one of the many possible variations for putting to practice the generic concepts disclosed in this description and claimed in the appended claims. My invention is not limited in its generic aspect solely to the embodiment described and illustrated. By way of example of some variations, a serviceable luggage piece can be constructed without covering the shells 2 and 3 and/or the frame member 14 with fabric or plastic sheeting. Instead, foldable, relatively rigid fabric may be used in a luggage piece only in the segments corresponding to segments 22 and 23 of the previously described drawing with the fabric pieces attached at or adjacent to the edges of the shells 4 and 9 and the frame member 14. Alternatively, the fabric may be attached at the edges of the shells 4 and 9 in the form of a unitary piece to which is adhered, cemented or otherwise secured, a frame member 14 in the manner previously described. The decorative beading shown in the illustrated embodiment may be placed at other positions on the luggage or may be omitted entirely. Other decorative or aesthetic features of the illustrated embodiment may be modified or omitted without departing from the spirit and scope of the invention. The straps 18 and 19 may be replaced by a rod or bar hinged at one side of the luggage, and the hook for hanging up the luggage, which hook is located on the bottom wall of the luggage, may be omitted or changed in structural design.

Thus, in essence, the herein described invention provides a luggage piece which is composed primarily of a frame-work of substantially rigid framing members interconnected by relatively stiff, but foldable fabric or sheeting segments. This combination of interconnected, substantially rigid framing members provides luggage pieces which provide all of the utilitarian functions of previously known car cases, while substantially enhancing the appearance of the luggage pieces in comparison with the previously known car cases, and at the same time giving much improved protection to the clothing contained in the luggage pieces against crushing of the clothing contained therein when weight is placed upon the luggage pieces. Still further, the luggage features constructed in accordance with the invention retain their new or original appearance much longer than the known car cases under conditions of similar handling and storage, particularly in the handling and storage of baggage during transit on public and freight conveyances.

The invention is hereby claimed as follows:

1. A luggage piece comprising a pair of substantially rigid and substantially identical shells,

each shell being a unitary body with a generally rectangular side wall, a bottom wall, two end walls on opposite sides of said side wall, with three edges of said side wall being joined to said bottom wall and said end walls, said bottom and end walls being at substantially right angles to said side wall,

the fourth side of each shell opposite said bottom wall being open,

the shells, when said luggage piece is closed, having the edges of their respective two side walls and said bottom walls in opposing, juxtapositioned relationship and forming an enclosure with one open end,

a substantially rigid frame member comprising a first wall extending across said open end of said juxtapositioned shells and end walls extending at substantially right angles to said first wall from the ends of said first wall toward said end walls of said shells,

said frame member being spaced from said shells,

said end walls of said frame member having a length from said first wall to the outer edges thereof substantially equal to the width of said end walls of said shells,

a sheet of flexible material extending over said frame member, said sheet being adhered to said first wall and said end walls of said frame member,

said sheet being further adhered to said side walls and said end walls of each of said shells, said sheet extending between said side walls of said shell and said first wall of said frame member as well as between said end walls of said shells and said end walls of said frame member,

said shells, said frame member and said sheet of flexible material forming a generally rectangular, five-sided enclosure when said luggage piece is lying open with said side walls of said shells lying on a flat surface,

the portions of said sheet of flexible material extending between said end walls of said shells and said end walls of said frame member forming, four, inward folds, one of each of said folds being located immediately beside one of the four side edges of said end walls of said frame member, when said shells are brought into said opposing, juxtapositioned relationship,

the portions of said sheet of flexible material extending across the spaces between shells and said frame member forming flexible hinges whereby said shells can be pivoted relative to said frame member,

and a carrying handle attached to said frame member.

2. A luggage piece comprising a pair of substantially rigid and substantially identical shells.

each shell being a unitary body with a generally rectangular side wall, a bottom wall, two end walls on opposite sides of said side wall, with three edges of said side wall being joined to said bottom wall and said end walls, said bottom and end walls being at substantially right angles to said side wall,

the fourth side of each shell opposite said bottom wall being open,

the shells, when said luggage piece is closed, having the edges of their respective two side walls and said bottom walls in opposing, juxtapositioned relationship and forming an enclosure with one open end,

a substantially rigid frame member comprising a first wall extending across said open end of said juxtapositioned shells and end walls extending at substantially right angles to said first wall from the ends toward said end walls of said shells,

said frame member being spaced from said shells,

said end walls of said frame member having a length from said first wall to the outer edges thereof substantially equal to the width of said end walls of said shells,

a sheet of flexible material extending over said frame member, said sheet being adhered to said first wall and said end walls of said frame member,

said sheet being further adhered to said side walls and said end walls of each of said shells, said sheet extending between said side walls of said shell and said first wall of said frame member as well as between said end walls of said shells and said end walls of said frame member,

said shells, said frame member and said sheet of flexible material forming a generally rectangular, five-sided enclosure when said luggage piece is lying open with said side walls of said shells lying on a flat surface,

the portions of said sheet of flexible material extending between said end walls of said shells and said end walls of said frame member forming four, inward folds, one of each of said folds being located immediately beside one of the four side edges of said end walls of said frame member, when said shells are brought into said opposing, juxtapositioned relationship,

the portions of said sheet of flexible material extending across the spaces between shells and said frame member forming flexible hinges whereby said shells can be pivoted relative to said frame member,

a hook pivotally mounted on the bottom wall of one of said shells, said hook being pivotable from a position substantially parallel with said bottom wall to a position substantially at right angles thereto, whereby said hook can be used to hang up said luggage piece in the open position,

and a carrying handle attached to said frame member.

References Cited in the file of this patent

UNITED STATES PATENTS

2,774,450	Smallberg	Dec. 18, 1956
2,839,167	Smith	June 17, 1957
2,849,093	Chesnut	Aug. 26, 1958
2,887,196	Davis	May 19, 1959
3,035,673	Schenkler	May 22, 1962