

April 9, 1963

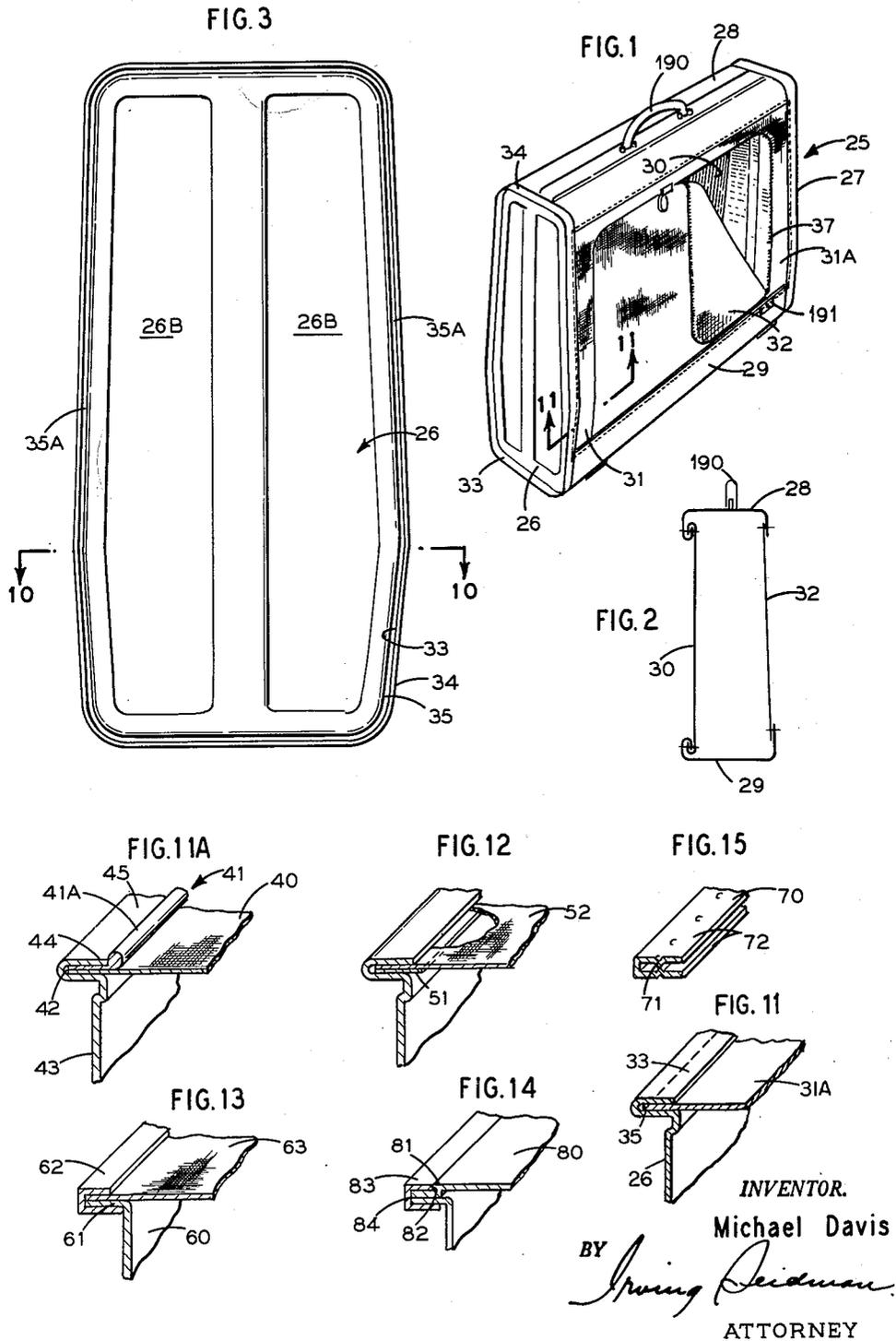
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SOFT SIDED LUGGAGE CONSTRUCTION

Filed March 26, 1962

2 Sheets-Sheet 1



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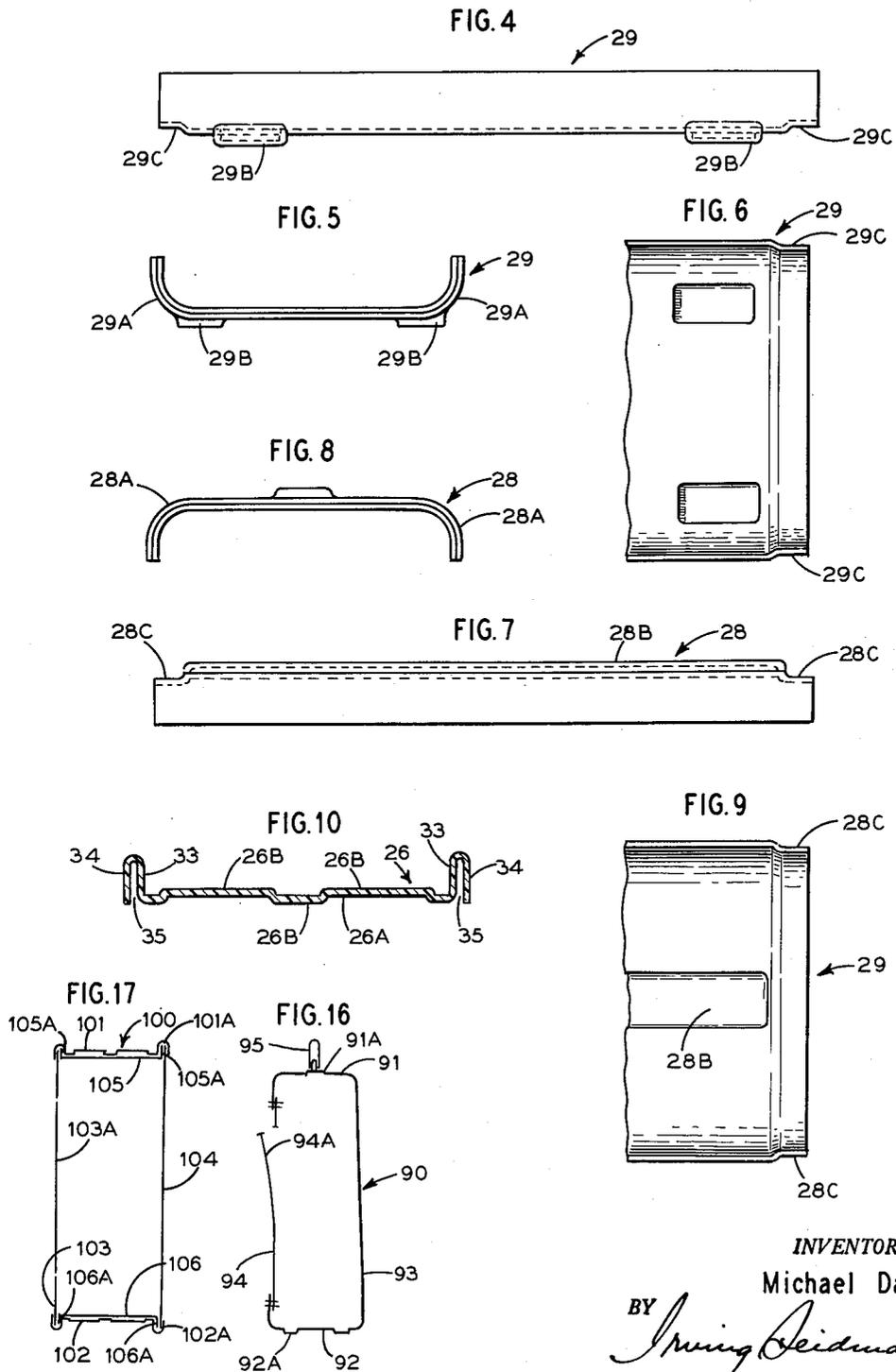
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**SOFT SIDED LUGGAGE CONSTRUCTION**

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Filed Mar. 26, 1962, Ser. No. 182,221

4 Claims. (Cl. 190—41)

This invention relates in general to the luggage art, and more specifically to an improved construction for a lightweight, rugged and relatively inexpensive luggage.

An object of this invention is to provide an improved luggage that is relatively simple in construction and one which is formed of a relatively few number of component arts.

Another object of this invention is to provide a novel luggage formed of component parts which can be readily fabricated and assembled with a minimum of ease.

Still another object is to provide a luggage construction that is sturdy and resistant to impact, wear and abrasion incident to normal handling

A further object is to provide an improved luggage construction that is neat and pleasing in appearance.

A further object of this invention is to provide a luggage formed of prefabricated molded parts that can be readily fitted together and the component parts readily secured together by either gluing, heat sealing, sewing, riveting or clamping.

The above objects and other features and advantages of this invention are attained by a luggage construction which comprises a minimum of component parts which can be readily fitted and secured together. Essentially, in one form of the invention the luggage construction includes a pair of end panels with a top and bottom panel fitted to the end panels to define therewith an open sided luggage construction. Preferably the ends, top and bottom panels are formed as molded plastic components, and the open sides of the luggage frame are closed by a suitable panel member. In another form of the invention, the top, bottom and one interconnecting side panel are integrally formed as a single molded piece which is fitted between the end walls. In either form, one of the side panels is preferably formed of a soft, flexible material, e.g. a fabric, which has formed therein a flap by which access may be had to the luggage. A zipper-type fastener or the like may be provided to secure the marginal portions of the flap to the adjacent portions of the soft panel to secure the flap in closed position.

A feature resides in the provision that the luggage constructed in accordance with this invention is relatively very inexpensive to construct, and further the respective components may be secured in a variety of different manners.

Other features and advantages will become readily apparent when considered in view of the drawings and specification in which:

FIG. 1 is a perspective view of the luggage of this invention;

FIG. 2 is a diagrammatic end sectional view of FIG. 1;

FIG. 3 is an inside view of the end panel construction;

FIG. 4 is a detail side view of the bottom panel construction;

FIG. 5 is an end view of the bottom panel of FIG. 4;

FIG. 6 is a fragmentary plan view of the bottom panel;

FIG. 7 is a detail side view of the top panel construction;

FIG. 8 is an end view of top panel of FIG. 7;

FIG. 9 is a partial plan view of the top panel;

FIG. 10 is a sectional view taken along line 10—10 of FIG. 3;

FIG. 11 is a sectional view taken along line 11—11 of FIG. 1;

FIG. 11A is a detail of a slightly modified construction

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taken along line 11—11 of FIG. 1 illustrating the interconnection between the end panel and the soft side panel;

FIG. 12 is a modified construction of the detail of FIG. 11; FIGS. 13 and 14 are other modified detail constructions illustrating other arrangements by which the side panel may be secured to the end panels; FIG. 15 is a detail showing of a binding construction; FIG. 16 illustrates a modified form of the invention; and FIG. 17 illustrates a sectional view of a modified embodiment.

Referring to the drawings, there is shown in FIG. 1 the improved luggage construction 25 of this invention. Essentially, it comprises a pair of similarly constructed end panels 26 and 27 interconnected in spaced relationships by a top panel 28 and a bottom panel 29. In their assembled relationships the end panels 26, 27, top panel 28, and bottom panel 29 define an open sided luggage frame construction. In accordance with this invention, the open sides are closed by a pair of side panels 30 and 31. Preferably at least one of the side panels 31 is formed of a soft material, e.g. a woven fabric 31A or the like, and it has formed therein a flap 32 by which access may be had to the luggage 25.

More specifically, the end panels 26, 27 are each formed as molded plastic components which are substantially rectangular in shape. However, it will be understood that the general configuration of the end panels may vary without affecting the inventive concept. As shown in FIG. 3, the end panels in one form of the invention are formed with a laterally extending flange 33 extending circumferentially about the periphery of the panel. The end of the flange 33 is reversely folded, as viewed in FIG. 3, to define a leg portion 34, spaced from flange 33 to form a circumferentially extending groove 35. If desired, the planar portions 26A of the end panels 26 may be provided with embossed portions 26B to enhance the strength characteristics thereof.

The bottom panel 29 is formed as a molded plastic component that is slightly dish shaped in cross section. Thus, the longitudinal edge portions 29A of the bottom panel 29 define rigid rounded corners for the luggage in the assembled position thereof.

It will be noted that, if desired, short embossments 29B may be integrally molded with the bottom panel 29 to define short leg like structures on which the luggage may be rested. Each end of the bottom panel 29, it will be noted, is slightly offset as indicated at 29C. Thus in the assembled position, the offset portions 29C of the bottom panel 29 are received in the groove 35 formed in the bottom portion of the respective end panels 26, 27. For added strength, the bottom panel, if desired, may be provided with longitudinally extending embossed ribs.

The top panel 28 construction, as seen in FIGS. 7 to 9, is somewhat similar in construction to the bottom panel 29. The top panel 28 is likewise preformed as a molded plastic component and it is likewise formed with rounded corners 28A extending longitudinally thereof. As shown, a central longitudinally extending embossed rib 28B is provided to increase the panel rigidity. The ends of the top panel 28 are also formed with an offset portion 28C at each end and which in the assembled position are receivable in the top portions of the groove 35 in the respective end panels 26, 27.

For securing the top and bottom panels 28, 29 respectively, to the end panels 26, 27, it will be appreciated that this may be done either by gluing, heat sealing, as the components are formed of a thermoplastic material, or by stapling, riveting or clamping.

Closing the open sides of the luggage are a pair of side panels 30 and 31. As shown in FIG. 1, one side panel 30 may be formed of a rigid thermoplastic material of the type from which the side, top and bottom panels are

formed. This side panel 30 in the illustrated embodiment comprises simply a rectangularly shaped panel which has its end portions received in the upright portion 35A of the groove 35 formed in the end panels 26 and 27. The top and bottom marginal edges of the side panel are disposed to underlie the adjacent marginal portions of the respective top and bottom panels, and are secured thereto preferably by a sewn seam. If desired, a binding may be fitted about the ends of the side panels and adjacent edges of the top and bottom panels 28, 29, respectively, to provide for a more finished appearance.

The other side panel 31 in the illustrated embodiment of FIG. 1 is closed by a soft fabric panel which is preferably secured in place by a sewn seam. This panel has formed therein a flap 32 which is cut out of the soft panel 31. Thus the portion of the soft panel 31 from which the flap 32 is cut defines the opening for permitting access to the luggage 25. A zipper type fastener 37 is provided to seal flap 32 over the access opening in the soft panel 31. The soft panel 31 is secured to the edges of the top and bottom panels in a manner similar to that of panel 30.

As shown in FIGS. 11 to 13, various modified means may be employed to secure the side panels 30, 31 in position between the end panels 26, 27.

In the embodiment of FIG. 11, the soft panel 40 is framed on four sides adjacent the marginal edge thereof by a molding strip 41 having a beaded portion 41A co-extensive therewith. As therein shown, the soft panel 40 with moulding strip 41 attached thereto is fitted with the grooves 42 of an end panel 43 so that the end 44 of the outer groove wall 45 abuts against the bead 41A. Thus a finished and more pleasing appearance is afforded thereby. Along the edges of the top and bottom panel, the strip 41 is disposed in underlying relationship therewith so that the longitudinal edge of the respective top and bottom panels engage the bead 41A.

The modification of FIG. 12 is similar except that the moulding 51 comprises simply a flat member minus the bead which is secured to the panel 52. Further, the moulding strip 51 in this form of the invention is positioned on the inside of the panel 52.

FIG. 13 illustrates a further modification of the invention. In this form, the end panel 60 also required modification. As seen, a luggage construction of this form of the invention has an end panel 60 which is provided with a laterally extending flange 61 only. Accordingly, the flange 61 extends around the entire periphery of the end panel 60. The respective top, bottom and side panels are secured thereto by a U-shaped moulding member or binder 62. Thus, as seen in FIG. 13, the side panel 63 overlies the flange 61 of the end panel 60, and the moulding strip 62 is fitted to the overlying portions of the flange 61 and side panel 63. The respective flange portions 61 and panel 63 may then be secured by sewing, riveting, gluing or heat sealing the moulding or binding 62 thereto.

As shown in FIG. 15, the U-shaped moulding 70 may be provided with projections 71 spaced longitudinally therealong. The projections are suitably formed by the application of pressure on a suitable tool, e.g. a star wheel rolling along the moulding so that the flange portions 72 of the member 70 may be positively clamped to a flange and overlying panel portion in an arrangement as disclosed in FIG. 13.

The form of the invention as defined in FIG. 14, is similar to that described with reference to FIG. 13 except that the side panel 80 is provided with an offset portion 81 to define a shoulder 82. Thus, in the assembled position the flange 83 of the moulding 84 lies flush with the surface of the side panel 80.

To complete the construction of the luggage, a suitable handle 190 may be hingedly connected to the top panel 28. Also, to lock the zipper fastener 37 in the

closed position, a suitable lock catch 191 may be secured to the side of the panel 31 adjacent the closed end of the zipper fastener 37.

For the foregoing description, it will be apparent that the luggage 25 described is relatively simple in construction, and comprises essentially of only six major component parts. As shown, the majority of them can be prefabricated as moulded members, and simply secured by tongue and slot type of fastening means, supplemented by gluing, sewing, riveting or clamping. The luggage 25 further is rendered easy to handle, rugged in construction and pleasing in appearance.

FIG. 16 illustrates a modified form of the invention. In this form the end panels of the luggage are similarly formed as described with reference to the showing of FIG. 3. However, the body member 90 of the modified construction is formed as an integral moulded piece which comprises a top portion 91, a bottom portion 92 and an interconnecting side portion 93. As previously described, the top portion 91 may be provided with an embossed rigid 91A for added strength; and the bottom portion 92 formed with embossed leg portions 92A. A soft flexible panel 94 similar to that herein described with reference to FIG. 1 is secured to the marginal portions of the top and bottom portions. This soft panel also is provided with the flap construction 94A and zipper fastener as herein described. A handle means 95 is also provided. In this form it will be noted that the integral body piece 90 is fitted into the circumferential grooves of the side panel, and may be secured thereto in any of the ways hereinbefore described.

FIG. 17 illustrates a further modified form of the invention. In this form, the luggage 100 includes a pair of end panels 101, 102 which are substantially similar to that herein described with reference to FIGS. 1 and 3. The top and bottom panels, not shown in FIG. 17, are the same as top and bottom panels 28, 29 of FIGS. 1, 4 and 7. The side panels 103, 104 are similar to that shown in FIG. 1, panel 103 being formed with the flap 103A. This form of the invention differs from the form of FIG. 1 in that a second end panel 105, 106 is provided at each end. End panels 105, 106 are each provided with lateral flanges 105A and 106A respectively, and they are arranged to abut against the end portions of the side panels 103, 104. In accordance with this form of the invention, the inner end panels 105, 106 are not made as heavy as the outer end panel 101, 102. However, they are made sufficiently rigid so as to function as means to further strengthen the ends of the luggage 100. As shown, the flanges 105A, 106A and the abutting end portions of the side panels 103 and 104 are received in the groove 101A, 102A circumscribing the respective end panels 101, 102. It will be understood that the means for securing outer end panels 101, 102, flanges of the inner panels and the abutting edges of the side panels 103, 104 may be secured in any of the ways herein described with reference to FIG. 1.

It will be understood that auxiliary end panels may be used in a similar manner as in the other forms of the invention disclosed herein.

While the instant invention has been disclosed with reference to several embodiments for practicing the same, it is to be appreciated that the invention is not to be taken as limited to all of the details thereof as modifications and variations thereof may be made without departing from the spirit or scope of the invention.

What I claim is:

1. A luggage construction comprising a pair of substantially rectangularly shaped molded end panels formed of a rigid plastic material, each of said end panels being free of any covering material and having a circumferentially extending marginal groove formed integral therewith, a molded top panel and a molded bottom panel interconnecting said end panels in spaced relationship, said top and bottom panels having an integrally connected

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rounded corner extending longitudinally along each edge thereof, said top and bottom panels having their respective end portions fitted into the groove formed in each of said end panels to define with the rigid end panels a luggage frame having full open sides, a rear panel connected between the end panels and between the top and bottom panels to close one side thereof, and a soft flexible panel closing the other side of said luggage, said soft panel having a flap cut therein to define an access opening to said luggage and means for fastening and unfastening said flap to the soft panel to open and close said access opening, said soft panel includes a rigid moulding circumscribing the marginal edge of said soft panel, said molding having opposed moulding portions whereby said opposed moulding portions are fitted into the upright groove portions formed in said end panels.

2. The invention as defined in claim 1 wherein said moulding includes a bead, and said soft panel and connected moulding being fitted into said groove in said end panels so that the bead lies immediately against said groove.

3. A luggage construction comprising a pair of substantially rectangularly shaped molded end panels formed of a rigid plastic material, each of said end panels having a circumferentially and laterally extending marginal flange formed integral therewith, a rigid molded top self-supporting panel and a rigid molded bottom self-supporting panel interconnected between said end panels, said top and bottom panels having an integrally connected rounded corner extending longitudinally along each edge thereof, said top and bottom panels having their respective end portions overlying the flanges formed on each of said end panels, a side panel disposed between the end panels and between the top and bottom panels to close one side thereof, said side panel having its peripheral marginal portions overlying the flanges of the end panels and the adjacent longitudinal edges of said top and bottom panels, a soft side panel closing the other side of said luggage, said soft panel having a flap cut therein to define an access opening to said luggage, means for fastening and unfastening said flap to the soft panel to open and close said access opening, said soft panel having its peripheral marginal portion overlying the flanges of said end panels and the adjacent longitudinal edge of said top and bottom panels, and means for securing the ends of said top, bottom and respective side panels to the underlying circumferentially extending flanges of the respective end panels, said last

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mentioned means includes a U-shaped binding, said binding having its opposed leg portions gripping therebetween said flange and overlying top, bottom and side panels, and means for permanently securing said binding to the end panel flanges, said securing means include a plurality of spaced projections for clamping the opposed leg portions of said binding to the side panel flanges and overlying end portions of said top, bottom and side panels.

4. A luggage construction comprising a pair of substantially rectangularly shaped molded end panels formed of a rigid plastic material, each of said end panels being free of any covering material and having a circumferentially extending marginal groove formed integral therewith, a molded top panel and a molded bottom panel interconnecting said end panels in spaced relationship, said top and bottom panels having an integrally connected rounded corner extending longitudinally along each edge thereof, said top and bottom panels having their respective end portions fitted into the groove formed in each of said end panels to define with the rigid end panels a luggage frame having full open sides, a rear panel connected between the end panels and between the top and bottom panels to close one side thereof, and a soft flexible panel closing the other side of said luggage, said soft panel having a flap cut therein to define an access opening to said luggage and means for fastening and unfastening said flap to the soft panel to open and close said access opening, and including a second pair of end panels, said second pair of end panels each having laterally extending flanges disposed in abutting relationship to said side panels, said flanges and abutting side panels being received in the groove formed integral to said first mentioned end panels.

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