United States Patent [19]

Yount

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[45] **June 12, 1973**

[54] **CARRYING CASE WITH REMOVABLE SIDE PANELS**

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[52] **U.S. Cl.** ..... **190/49,** 217/12 A
[51] **Int. Cl.** **A45c 13/00**
[58] **Field of Search** ..... 150/28 A; 190/16, 190/49; 206/16 R, 82; 217/12 R, 12 A, 13, 15

[56] **References Cited**

UNITED STATES PATENTS

3,575,226	4/1971	Chapman	150/28 A
2,950,792	8/1960	Axtell	190/49
2,699,848	1/1955	Kaplan	217/12 R X
1,218,432	3/1917	McElveen	190/16
2,695,210	11/1954	Evans	206/16 R X

FOREIGN PATENTS OR APPLICATIONS

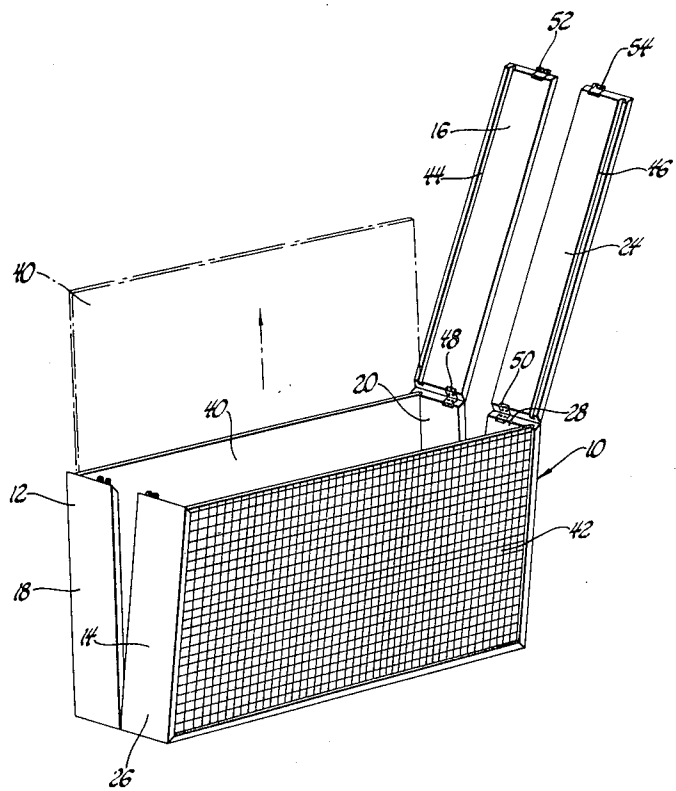
401,388	11/1933	Great Britain	217/12 A
1,108,023	1/1956	France	150/28 A
111,393	7/1964	Czechoslovakia	150/28 A

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[57] **ABSTRACT**

A carrying case comprising two hinged shell portions each comprising a perimeter frame and a structural side panel carried within a slot extending around the inside surface of the frame. Each frame is segmented such that the side panels may be removed from the frames and replaced or reversed to change appearance.

5 Claims, 6 Drawing Figures



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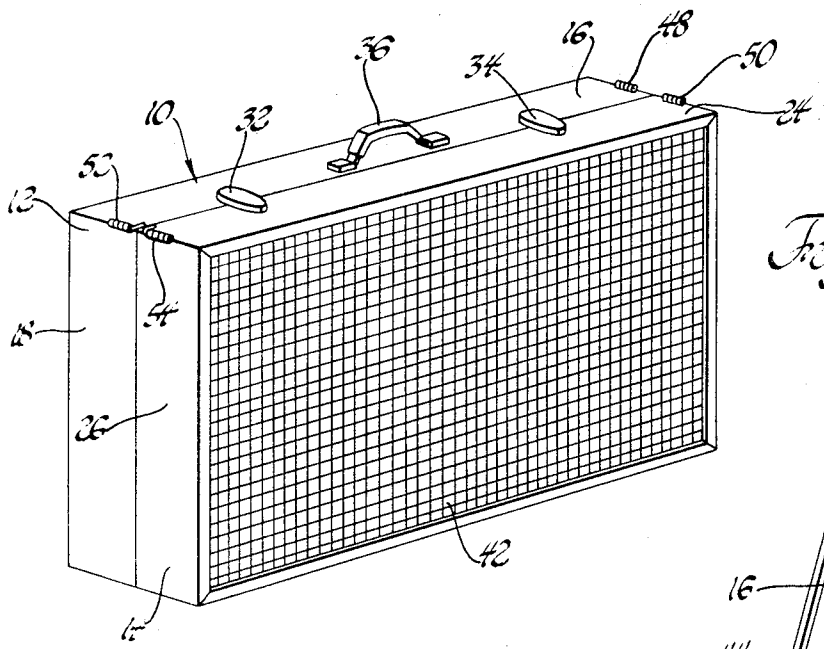


Fig. 1

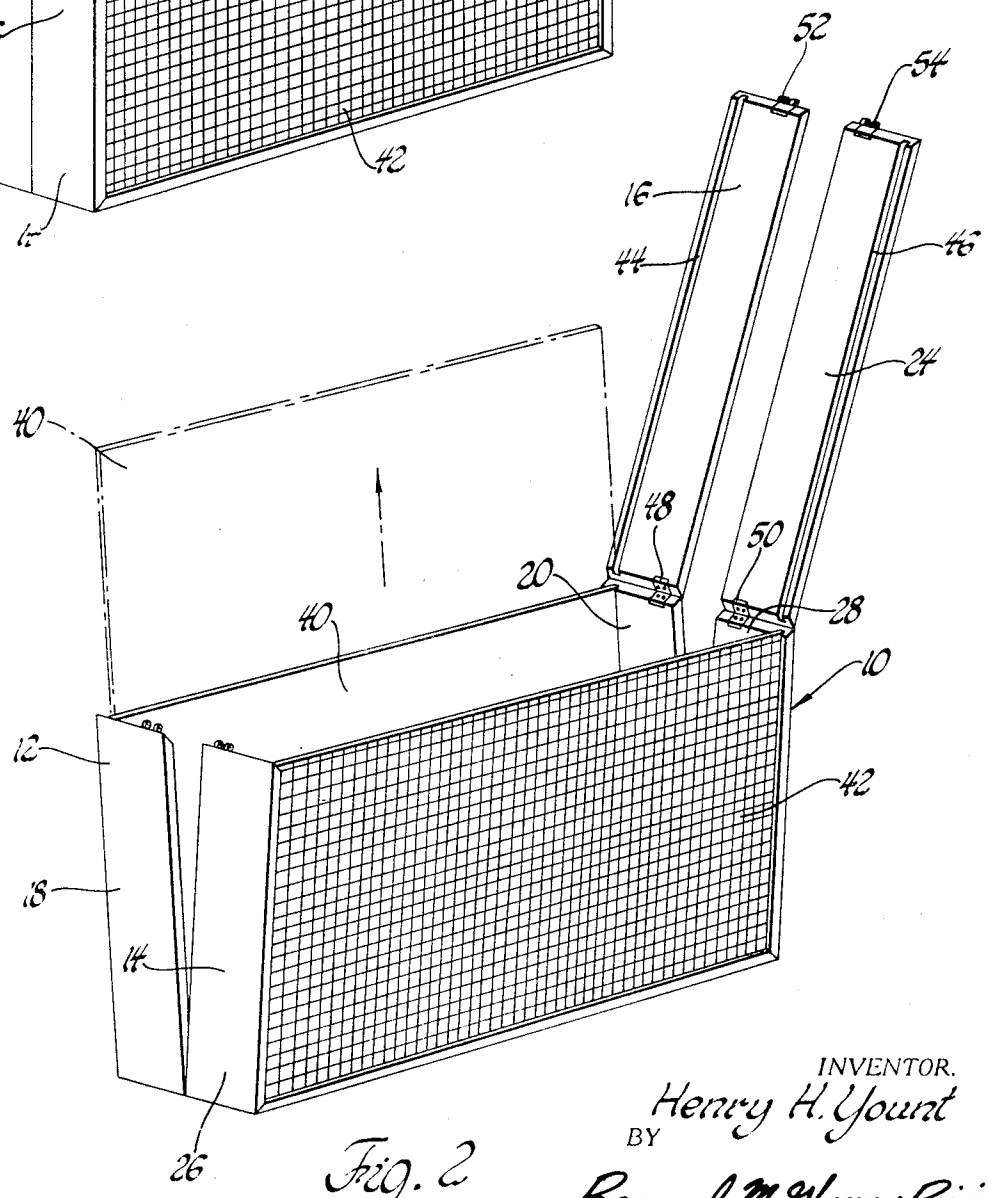


Fig. 2

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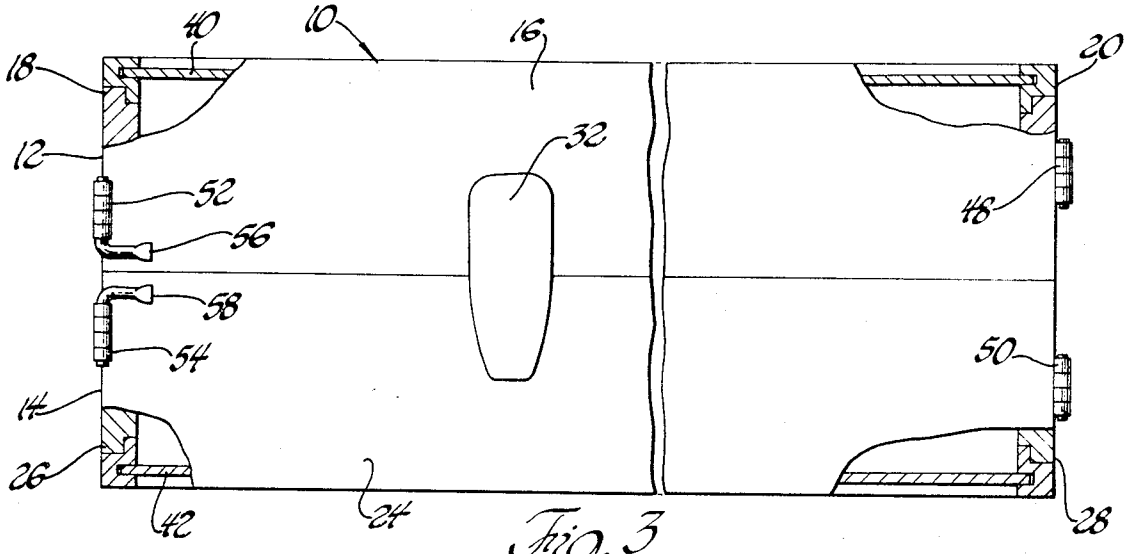


Fig. 3

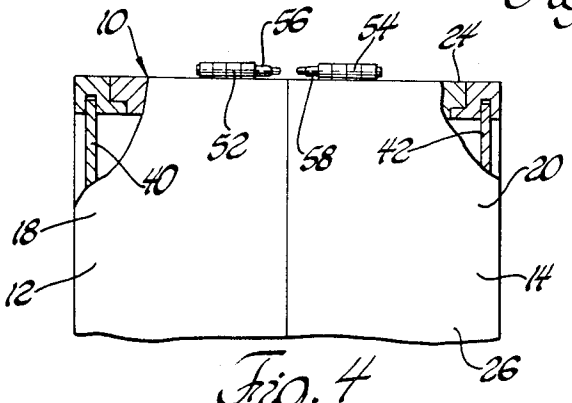


Fig. 4

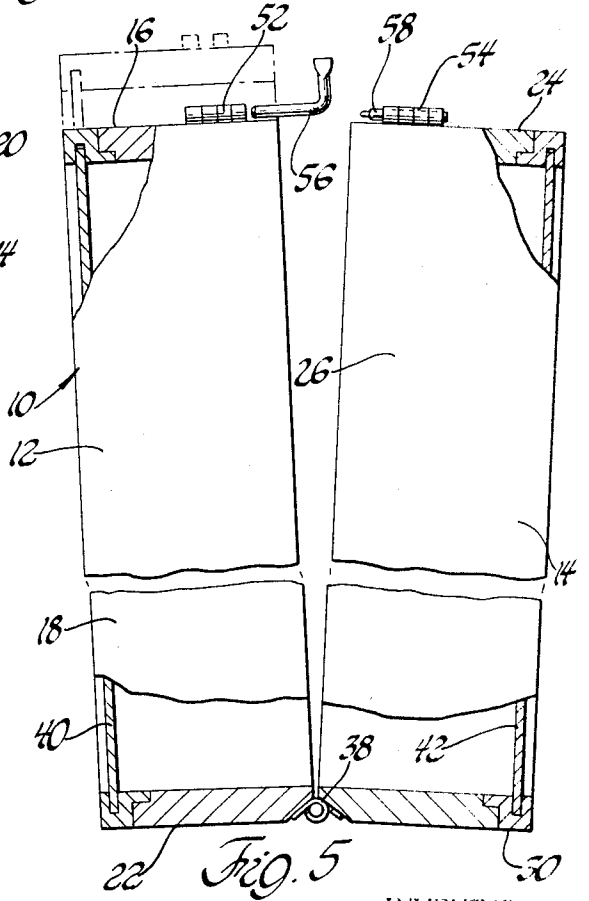


Fig. 5

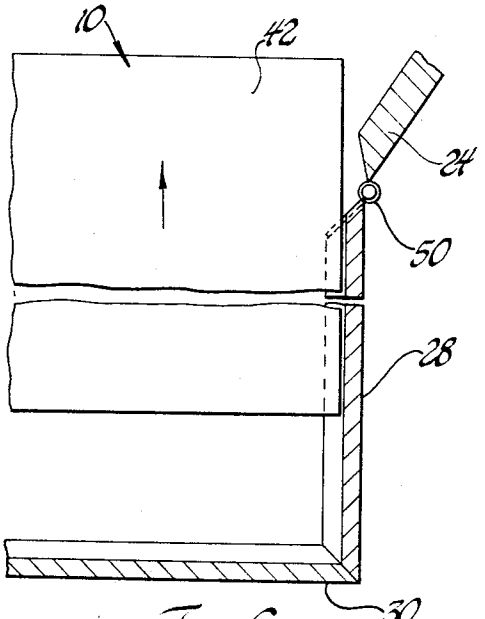


Fig. 6

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CARRYING CASE WITH REMOVABLE SIDE PANELS

This invention relates to luggage and more particularly to a carrying case having removable, reversible, and replaceable structural side panels.

It is well known that the typical piece of luggage, such as a small carrying case or attache case comprises a perimeter frame with integral parallel side panels, the perimeter frame being further comprised of two hinged portions which can be opened relative to one another in a clamshell fashion. Since the side panels of the carrying case are typically integral with the perimeter frame, they are neither removable nor susceptible of being significantly changed in appearance.

To personalize or otherwise vary the exterior appearance of luggage, including carrying cases and the like, the prior art teaches the use of side panels having transparent plastic envelopes into which one may slide one of an assortment of colored inserts. An example is shown in U.S. Pat. No. 3,556,187 issued on Jan. 19, 1971. Another prior art device comprises a carrying case with a basic body or bin which is adapted to receive snap-on side panels and end pieces. This is shown in U.S. Pat. No. 2,723,696 issued Nov. 15, 1955.

In accordance with the present invention, a luggage piece, such as a carrying case, is provided which permits the simple and expeditious removal, reversal, or replacement of structural side panels which may be durably constructed in many ornamental and pleasing colors and textures, thus, to provide the advantages of varied appearance and extended life in a luggage piece. In general, this is accomplished in a carrying case comprising two hinged shells, each comprising a perimeter frame which carries a structural side panel which is removably disposed therein.

In accordance with a more specific aspect of the invention hereinafter described in greater detail, the perimeter frames are constructed in such a way as to form a normally closed, typically rectangular, body, but which are provided with latch means operable only when the two shells are pivoted open relative to one another to permit the structural side panels to be removed. The side panels as will hereinafter be illustrated and described in greater detail may be slidably disposed in the perimeter frames so that when the frames are unlatched and opened as previously described, the side panels may be easily and quickly removed and reversed or replaced with other side panels.

The various features and advantages of the subject invention will become more apparent from a reading of the following specification which describes and sets forth an embodiment of the invention in specific detail. This specification is to be taken with the accompanying drawings of which:

FIG. 1 is a perspective view of an illustrative embodiment of the invention in a closed condition;

FIG. 2 is a perspective view of the illustrative embodiment wherein the perimeter frames are unlatched to permit the side panels to be removed;

FIG. 3 is a top view partly in cross-section of the embodiment of FIG. 1;

FIG. 4 is a side view partly in cross-section of the upper portion of the embodiment of FIG. 1;

FIG. 5 is a side view partly in cross-section of the embodiment of FIG. 1 in an open condition; and,

FIG. 6 is an end view in cross-section of a portion of the embodiment of FIG. 1.

Looking now to the drawings, the invention is shown to be embodied in an article of luggage in the form of a carrying case **10** comprising complementary shells **12** and **14** pivotally connected to one another by hinges **38** to open and close the case **10** in the normal clamshell fashion. Shell **12** comprises a substantially rigid perimeter frame of rectangular configuration and including sections **16, 18, 20,** and **22.** Each section of frame **12** may be fabricated from a variety of materials including both metals and plastics. Similarly, shell **14** comprises four rigid sections **24, 26, 28,** and **30.** The bottom sections **22** and **30** are interconnected by the hinges **38** as best shown in FIG. **5.** The depth of the perimeter frames **12** and **14** may vary relative to one another with one frame being deeper than the other or, alternatively, they may be of equal depth as is approximately shown in the drawings. The two perimeter frames **12** and **14** are provided with suitable latching hardware **32** and **34** to lock the two frames together during normal use in transit. In addition, a handle **36** is securely mounted on the top section **16** of perimeter frame **12** for carrying and general transportational purposes. Hardware **32** and **34** may take various forms, a suitable latch being disclosed in U.S. Pat. No. 3,031,874, issued May 1, 1962.

Continuing with the description of the carrying case **10** shown in the drawings, the perimeter frames **12** and **14** are augmented to form a closed rectangular article of luggage by the addition of removable structural side panels **40** and **42** of which side panel **40** is operatively associated with perimeter frame **12** and side panel **42** is operatively associated with perimeter frame portion **14.** As is suggested in FIG. **2** by the presence and absence of cross-hatching, the side panels **40** and **42** may be in themselves identical, but provided with opposite surfaces of different appearance, texture, or color for purposes to be described.

Each of the side panels **40** and **42,** best shown in FIG. **2,** is made up of a solid, fairly rigid material such as metal or plastic and is of a rectangular configuration. The side panels **40** and **42,** thus, are received by a track or slot of rectangular cross-section which extends around the interior surface of each perimeter frame. The slot or track formed in the top section **16** of frame **12** is indicated at **44** and is adapted to receive the upper edge of the side panel **40.** Similarly, a slot or track **46** is formed longitudinally along the interior surface of the top section **24** of the other perimeter frame **14** to receive the top edge of the side panel **42.** As is indicated in the various drawings, the track or slot extends completely about the interior surface of each perimeter frame and, thus, completely captures and holds in place the side panel with which it is associated to, thus, provide a dust-proof and otherwise highly secure seal for the interior of the carrying case **10.** Although not shown in the drawings, it is to be understood that the edges of the side panels may be reinforced or otherwise provided with elements which increase the effectiveness of the seal between the side panels and the slot or track in the perimeter frame with which they are associated.

To remove the side panels **40** and **42,** the perimeter frames **12** and **14** are provided with additional latch means in the form of hinges **48** and **50** which are shown to pivotally interconnect the top section **16** and side

section **20** of perimeter frames **12** in one instance, and the top section **24** and side section **28** of the perimeter frame **14** in the other instance. In addition, the latch means includes selectively operable latches **52** and **54** which are disposed to selectively interconnect the top section **16** and side section **18** of perimeter frame **12**, in one instance, and the top section **24** and side section **26** of perimeter frame **14** in the other instance. The latches **52** and **54** include the usual alternating eye hinge elements on the respectively joined perimeter frames as best shown in FIGS. **3**, **4**, and **5** and further include L-shaped removable hinge pins **56** and **58**, respectively, to hold the eye elements together when in place. The hinge pins **56** and **58**, as best shown in FIG. **3**, are oriented in such a way as to be removable only by movement toward the center of the carrying case **10**, this movement being impossible because of the interference between the pins **56** and **58** when the case is closed and latched, as shown in FIG. **3**. However, when the carrying case **10** is split for normal opening in the clamshell fashion, as suggested in FIG. **5**, sufficient clearance is provided to permit the hinge pins **56** and **58** to be removed. Once the hinge pins **56** and **58** are removed, the two top sections **16** and **24** may be pivoted upwardly away from the two side sections **18** and **26**, as shown in FIG. **2**, thus, permitting the side panels **40** and **42** to be removed upwardly out of the slot or track in which they rest. Side panels **40** and **42** may then be reversed, one side for the other, or they may be replaced with an entirely separate set of side panels, depending upon the particular taste and attitudes of the user. The latches **32** and **34** are typically provided with a locking mechanism, although no such locking mechanism will be specifically described herein, such that complete security is provided for the carrying case **10** notwithstanding the use of the removable side panel **40** and **42**.

In operation, one simply uses the carrying case **10** as one would use any small piece of luggage; that is, access to the contents of the carrying case **10** is normally accomplished by use of the latches **32** and **34** and the clam-shell hinge **38**. However, when one wishes to reverse or replace the side panels **40** and **42**, one opens the carrying case **10**, separating the two perimeter frames **12** and **14** from one another by at least the amount indicated in FIG. **5**, and removes the hinge pins **56** and **58** from the hinge-type latches **52** and **54**. Once this is accomplished, the top sections **16** and **24** are pivoted upwardly permitting the side panels to be readily removed and replaced.

It is to be understood that various structural modifications as well as aesthetic variations may be accomplished in the specific embodiment illustrated herein and such variations and modifications will be apparent to those of ordinary skill in the art. For example, the hardware which is illustrated herein may be improved upon by the use of more sophisticated elements including spring members which keep the hinge pins **56** and **58** from being fully physically removed from their associated parts, thus, to avoid loss, etc. In general, the application is to be construed as illustrative, rather than limiting, in its purposes.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. In an article of luggage, such as a carrying case, first and second shells which are pivotal relative to one another in a clamshell fashion, each shell comprising a normally closed perimeter frame, first and second rigid side panels removably disposed in frames of the first and second shells, respectively, and first selectively operable latch means to open the frames to permit removal of the side panel, said first latch means including first and second fixed portions adjacently disposed on the first and second shells, respectively, and first and second movable portions operatively associated with the first and second fixed portions, respectively, for unlatching the frames, said first and second movable portions being movable only towards one another whereby the adjacent locations thereof prevents unlatching of the frames except when the shells are pivotally separated from one another.

2. Apparatus as defined in claim **1** including second selectively operable latch means to latch the two perimeter frames together.

3. Apparatus as defined in claim **1** including a carrying handle on at least one of the perimeter frames.

4. Apparatus as defined in claim **1** wherein each of the perimeter frames includes a slot track extending fully around the interior surface thereof in a closed fashion, the side panels being slidably insertable into the slot track whereby such side panels are captured in position when the perimeter frames are closed.

5. Apparatus as defined in claim **4** wherein the side panels are identical but have distinct ornamental surface designs on the opposite sides thereof.

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