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SHIPPING CONTAINER FOR FRANGIBLE MATERIAL

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FIG. 1

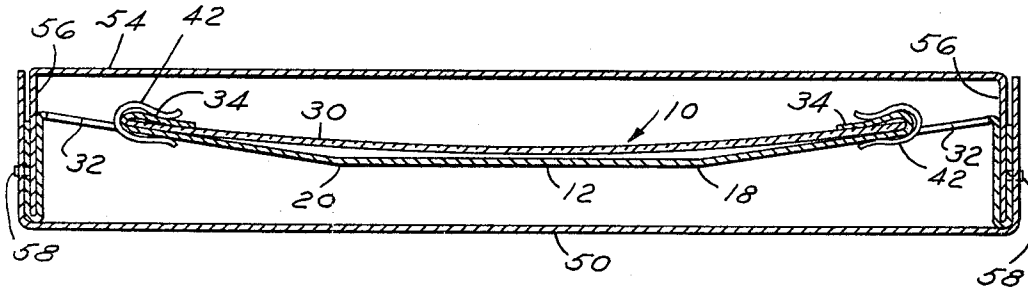
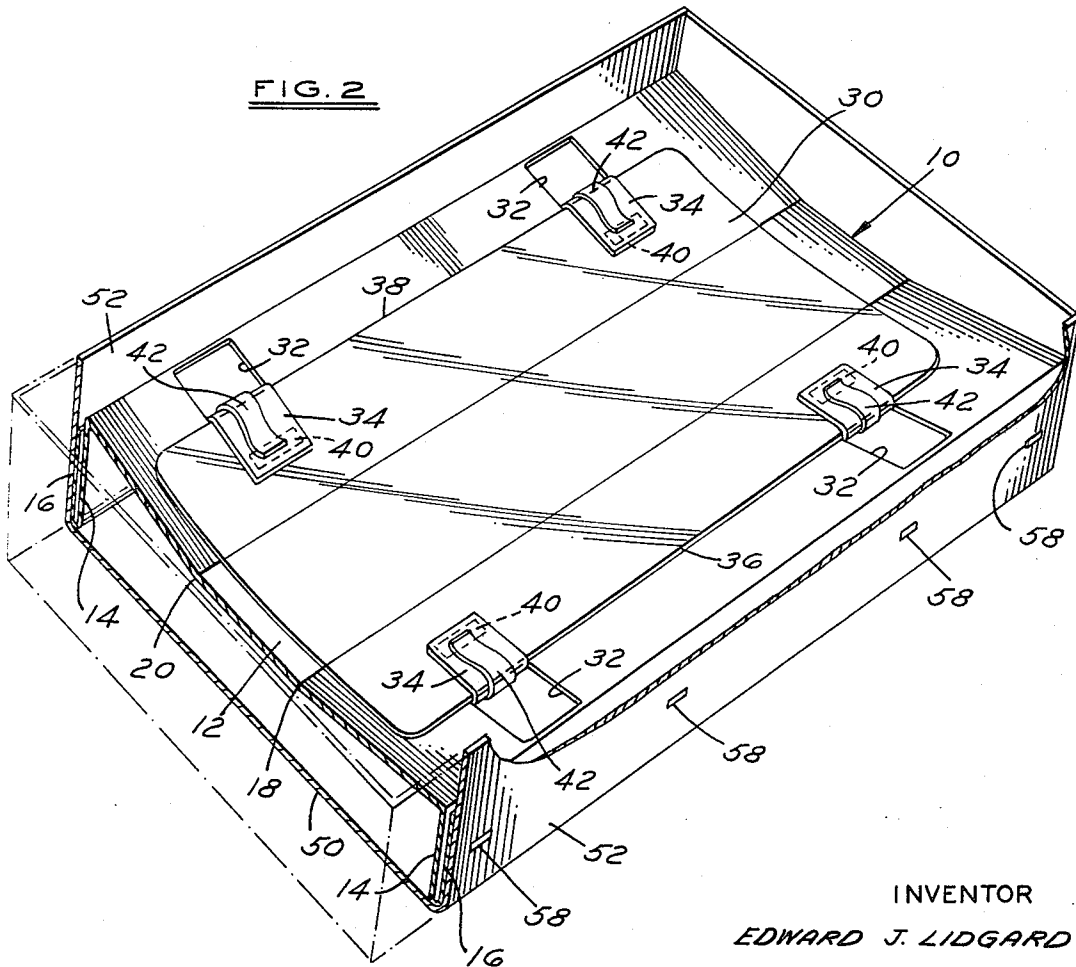


FIG. 2



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**SHIPPING CONTAINER FOR FRANGIBLE MATERIAL**

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2 Claims. (Cl. 206-62)

**ABSTRACT OF THE DISCLOSURE**

A packaging unit for relatively flat frangible material wherein the material can be confined against any possible edge damage within the packaging unit and also protected from impact, the main feature being a panel which is spaced from the walls of the enclosure and which contains integral units for securely locating the panel.

This invention relates to a shipping container for frangible material such as glass panels and the like and is particularly adapted for use with either flat or curved glass.

Style design changes in automobiles, as well as varying sizes of vehicles, requires considerable versatility in packaging to avoid the necessity for an individual package for each size and shape.

It is an object of the present invention to provide a shipping container combination which can be utilized for many different sizes and shapes of material as well as for flat and curved panels.

It is another object of the invention to provide a shipping container which protects the glass on all of its edges as well as against penetrating side shocks on the container itself.

It is a further object to provide a container having the necessary versatility above described and yet which is reasonably inexpensive.

Other objects and features of the invention will be apparent in the following description and claims in which the principle of the invention and the operation is described in connection with the best mode contemplated.

Drawings accompany the disclosure and the various views thereof may be briefly described as:

FIGURE 1, a sectional view of a container constructed in accordance with the present invention.

FIGURE 2, a perspective view of the container with the cover removed.

Referring to the drawings, it will be seen that the basic support for a panel is composed of a cradle-like element 10 which is composed of a main support panel 12 with side legs 14, each having a return bend 16. The main panel 12 may be formed with creases 18 and 20 which permit the panel to be readily conformed to a curved piece of glass 30, for example, as shown in FIGURES 1 and 2. Thus, either a flat piece or a curved piece can be readily supported.

At points near the corners of the panels 12 are pierced holes 32 which create folding tabs 34. If desired, these tabs can be formed with spaced transverse fold marks (not shown) so that they may be folded readily at varying lengths over the edges 36 and 38 of varying size panels 30. The underside of the tabs 34 as they are shown, or

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the area of panel 12 directly below them, is preferably coated with a double sided adhesive tape 40 which has an adhesive relationship to glass without having an etching effect. Metal clamping clips 42 are then arranged to be applied through the holes 32 to clip over the tabs 34 as they pass over the bight of the tab and a portion of the panel 12. This locks the tabs to the glass and holds the frictional areas in close contact therewith. The holes 32 can be such that the tabs are adapted to a variety of sizes of glass panels and, as indicated before, a variety of curvatures. The container is completed by dropping the unit 10 with its side walls 14, 16 into a box having a base 50 and side walls 52. Then a cover member having a top panel 54 and side walls 56 is dropped into the assembly and the side walls 56 will enter the slot formed between the side walls 14, 16 of the member 10.

Then a through stapling action utilizing staples 58 through the side walls 52 will transfix all of these overlapping walls so that the entire package is unitized and the cradle element 10 is securely fixed intermediate the flat panels 50 and 54 of the container. The ends of the structure are closed in a conventional manner by end panels (not shown) on either the bottom of the box or the top or both. Thus, it will be seen that the panel 30 is supported with all of its edges protected by the container and it is cradled in the box in such a way as to insulate from the shocks that are imparted to the container as it moves through shipping channels.

If desired, the walls 52 of the bottom container can be stapled only to the return folds 16 of the cradle element 10 making it possible to apply and remove the top 54 which may be secured in a conventional manner.

What is claimed as new is as follows:

1. A device for shipping a flat sheet of material and adapted to conform to a sheet having a curvature which comprises a bottom container, a cradle element positionable in said bottom container having a main support sheet and side leg portions folded substantially perpendicular to said sheet and having a reverse fold panel spaced from said leg portions, a top element having depending side walls positionable between the legs and the reverse fold of the cradle element to lock the cradle element, and tab portions struck out of said main support sheet of said cradle portion adapted to be folded inwardly over the surfaces of a sheet to be shipped at the edges thereof at varying dimensions, and means applicable through the hole from which said tabs are struck for resiliently retaining said tabs against said sheet to be shipped.

2. A device as defined in claim 1 in which the bottom container has side walls lying adjacent said reverse fold panels wherein said device may be unitized by stapling the side walls of the top, bottom, and the legs of the cradle portion together.

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