

April 13, 1965

C. A. MUNANA ETAL

3,178,092

BOX

Filed June 15, 1964

2 Sheets-Sheet 1

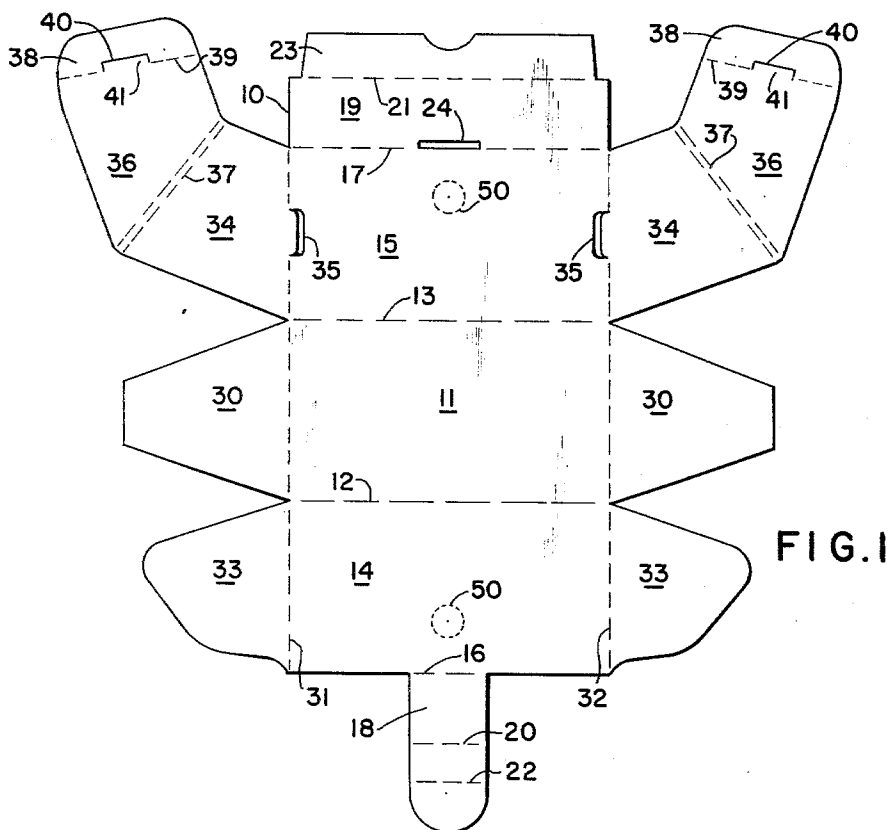


FIG. 1

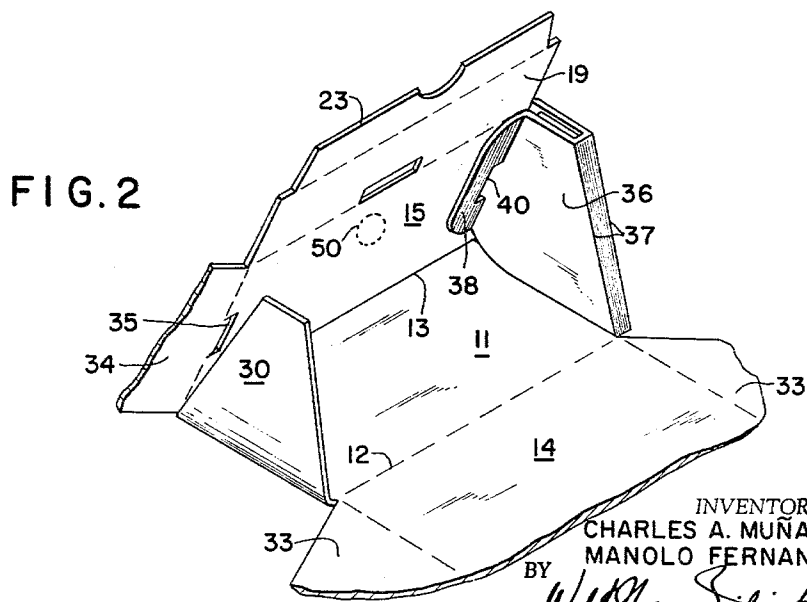


FIG. 2

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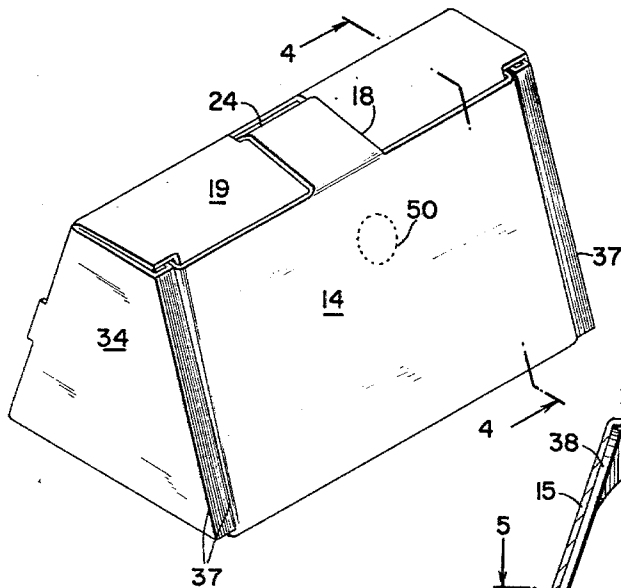


FIG. 3

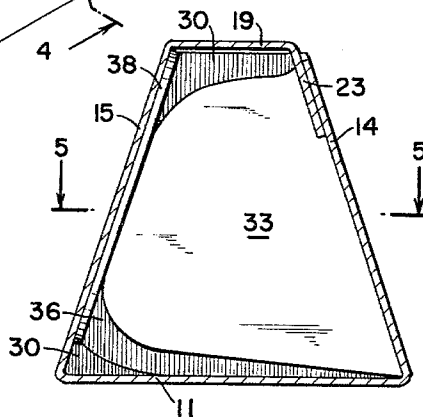


FIG. 4

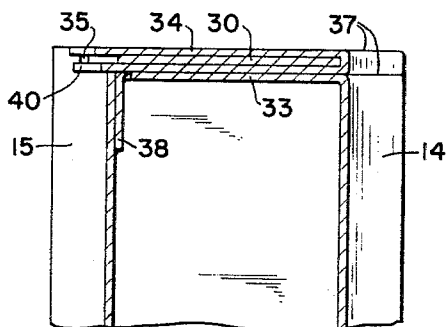


FIG. 5

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3,178,092
BOX

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2 Claims. (Cl. 229—22)

This invention relates to a pentahedronal container, and one-piece blank therefor. More particularly, it relates to a novel box adapted for packaging objects of irregular shape such as electric irons.

The packaging of an appliance such as an electric iron poses problems of economy and attractiveness, because of the irregular shape of the iron. The packaging must also be sturdy in view of the weight of the individual iron and the need to keep its face smoothly polished and unmarked.

In seeking to solve these problems, it has now been found that a box of five surfaces or sides made from a blank cut from corrugated paperboard or the like admirably serves.

For a better understanding of the present invention, recourse should be had to the attached drawings wherein FIGURE 1 shows a plan view of the blank from which the box of the present invention is constructed;

FIGURE 2 shows an isometric view of a box partially formed from the blank of FIGURE 1;

FIGURE 3 shows an isometric view of a box completely formed from the blank of FIGURE 1;

FIGURE 4 shows a sectional end view of the box of FIGURE 3, taken along line 4—4; and,

FIGURE 5 shows a sectional plan view of the box of FIGURE 4, taken along line 5—5.

As depicted in FIGURE 1, blank 10 is comprised of a rectangular bottom panel 11 hingedly connected along longitudinal foldlines 12 and 13 to rectangular first and second side panels 14 and 15. Side panel 14 is additionally hingedly connected along a longitudinal foldline 16 to a retention strap 18 having foldlines 20 and 22 which will be further discussed below, while side panel 15 is hingedly connected along longitudinal foldline 17 to top panel 19 which is, in turn, hingedly connected along a scoreline or longitudinal foldline 21 to tuck flap 23. Means 24 defining a slot along foldline 17 for receiving strap 18 can also be seen.

Also to be seen in FIGURE 1 are rhombic first intermediate end panels 30 hingedly connected along lateral foldlines 31 and 32 to bottom panel 11 and rhomboidal interior end panels 33 hingedly connected along foldlines 31 and 30 to side panel 14. Similarly, rhombic exterior end panels 34 are hingedly connected along lateral foldlines 31 and 32 to side panel 15, though in this case the connection is at one of the two non-parallel edges of such end panels. Side panel 15 is further furnished at or near the midpoints of its ends and adjacent such edges with means 35 defining locking slots.

Finally, FIGURE 1 shows rhomboidal second intermediate end panels 36 which are hingedly connected along oblique double scoreline 37 to the other of the two non-parallel sides or edges of exterior end panels 34 and it shows end flaps 38 hingedly connected along scoreline 39 to panels 36 and in which are disposed three-sided cuts 40 defining locking tabs 41.

FIGURE 2 shows the box of the present invention partially assembled and ready to receive its contents, e.g., a new electrical iron. The box is assembled by erecting rhombic first intermediate end panels 30 perpendicularly to bottom panel 11. Then, side panel 15 is raised to lie generally against one edge of end panels 30, rhombic

exterior end panels 34 are disposed by folding along scorelines 31 and 32 to abut end panels 30 outwardly thereof, and rhomboidal second intermediate end panels 36 are disposed by folding along double scorelines 37 to abut end panels 30 inwardly thereof. This latter disposition can, however, be effected only by disposing end flaps 38 parallelly to and abuttingly against the inside of side panel 15 and, further, by introducing locking tabs 40—which are exposed when end flaps 38 are so disposed by a folding along scorelines 39—into locking slots 35 in side panel 15.

As shown in FIGURES 3 to 5, the assembly of the box of the present invention is completed when rhomboidal interior end panels 33 are disposed by folding along foldlines 31 and 32 to lie perpendicularly to side panel 14, side panel 14 is disposed by folding along scoreline 12 to lie parallel to the end panel structure with end panels 33 forming the innermost ply thereof, top panel 19 is made to lie over to open upper end of the receptacle thus for erected tuck flap 23 is disposed between and interiorly of side panel 14 and top panel 19, and retention strap 18 is introduced into slot 24 and extended thereby to lie between the handle and the upper surface of the electric iron within the box and to hold the box closed. FIGURE 3 also shows one of two finger-holes 50 defined by circular lines of perforation on side panels 14 and 15. These can be punched out by the purchaser of the iron when he seeks to carry it home.

What is claimed is:

1. A one-piece blank for a pentahedronal box comprising a rectangular bottom panel, first and second rectangular side panels hingedly connected along longitudinal foldlines to the bottom panel, a retention strap hingedly connected along a longitudinal foldline to the first rectangular side panel, a top panel hingedly connected along a longitudinal foldline to the second rectangular side panel, means defining a slot adapted to receive the retention strap and disposed between the second rectangular side panel and the top panel, a tuck flap hingedly connected along a longitudinal foldline to the top panel, rhombic first intermediate end panels hingedly connected along lateral foldlines to the bottom panel, rhomboidal interior end panels hingedly connected along lateral foldlines to the first rectangular side panel, rhombic exterior end panels hingedly connected each at one edge along lateral foldlines to the second rectangular side panel, means defining locking slots in the second rectangular side panel adjacent such edge, rhomboidal second intermediate end panels hingedly connected along oblique double foldlines to the rhombic exterior end panels at the other edge thereof, end flaps hingedly connected along oblique foldlines to the rhomboidal second intermediate end panels, and means defining three-sided locking tabs in the end flaps adjacent the oblique foldlines.

2. A pentahedronal box formed from a one-piece blank comprising a rectangular bottom panel, first and second rectangular side panels hingedly connected along longitudinal foldlines to the bottom panel and disposed at acute angles with respect to the bottom panel, a retention strap hingedly connected along a longitudinal foldline to the first rectangular side panel, a top panel hingedly connected along a longitudinal foldline to the second rectangular side panel and disposed over the panel, means defining a slot adapted to receive the retention strap and disposed between the second rectangular side panel and the top panel, a tuck flap hingedly connected along a longitudinal foldline to the top panel and disposed between the top panel and the first rectangular side panel, rhombic first intermediate end panels hingedly connected along lateral foldlines to the bottom panel and disposed perpendicularly thereto, rhomboidal interior end panels hingedly con-

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nected along lateral foldlines to the first rectangular side
 panel and disposed perpendicularly thereto inwardly of
 the rhombic first intermediate end panels, rhombic ex-
 terior end panels hingedly connected, each at one edge
 along lateral foldlines to the second rectangular side
 panels and disposed perpendicularly thereto outwardly
 of the rhombic first intermediate end panels, means de-
 fining locking slots in the second rectangular side panel
 adjacent such edge, rhomboidal second intermediate end
 panels hingedly connected along oblique double foldlines
 to the rhombic exterior end panels each at the other edge
 thereof and disposed between the rhombic first inter-
 mediate end panels and the rhomboidal interior end
 panels, end flaps hingedly connected along oblique fold-
 lines to the rhomboidal second intermediate end panels

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and disposed parallelly to the second rectangular side
 panel inwardly thereof, and means defining three-sided
 locking tabs in the end flaps adjacent the oblique fold-
 lines and disposed in the locking slots.

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