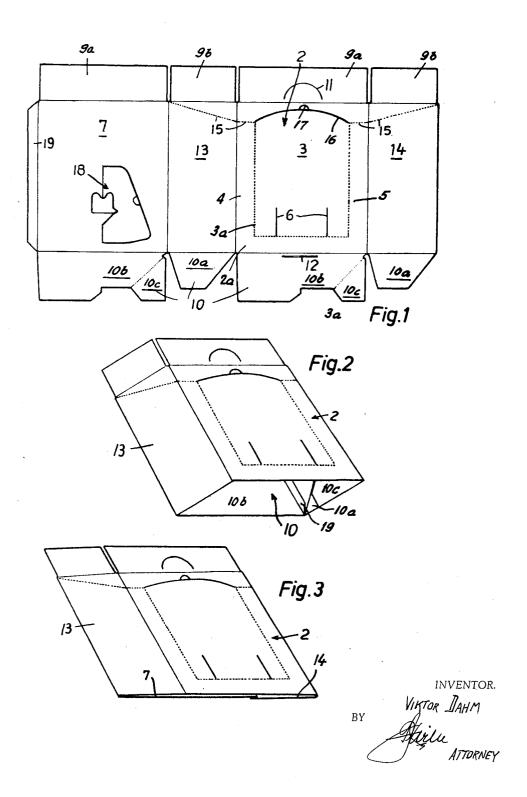
FOLDABLE BOX FOR PACKAGING AND DISPLAYING MERCHANDISE

Filed July 27, 1964

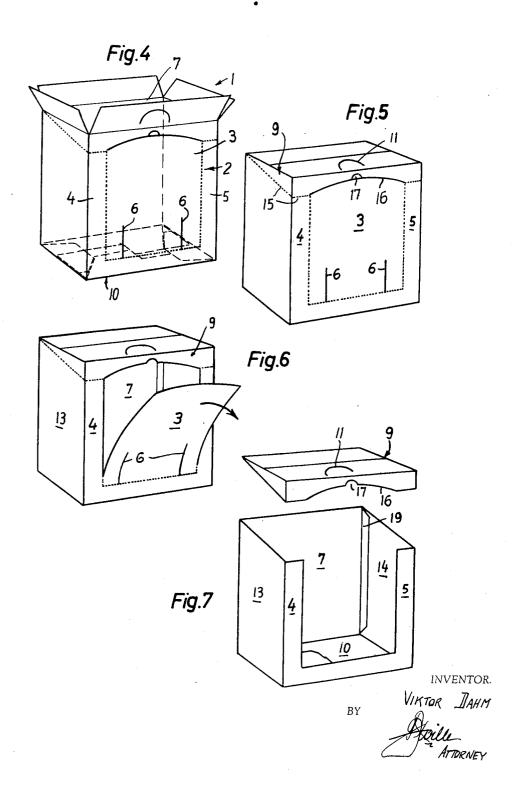
3 Sheets-Sheet 1



FOLDABLE BOX FOR PACKAGING AND DISPLAYING MERCHANDISE

Filed July 27, 1964

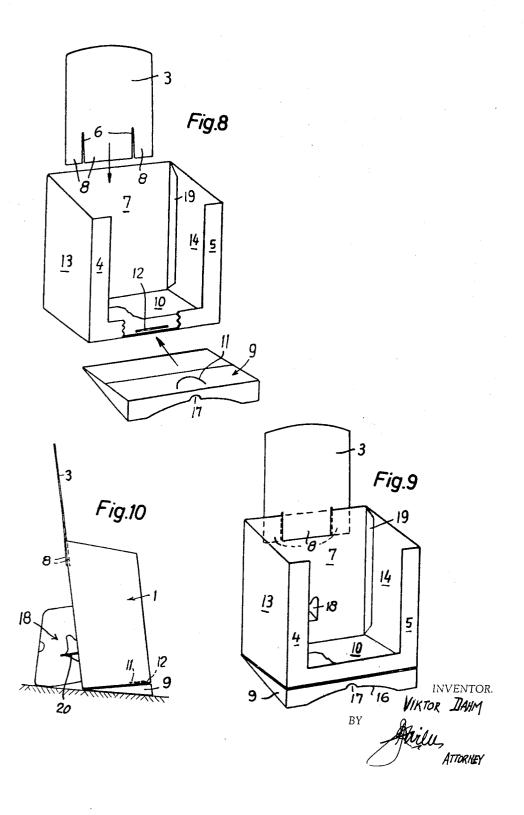
3 Sheets-Sheet 2



FOLDABLE BOX FOR PACKAGING AND DISPLAYING MERCHANDISE

Filed July 27, 1964

3 Sheets-Sheet 3



## United States Patent Office

Patented Nov. 23, 1965

1

3,219,181
FOLDABLE BOX FOR PACKAGING AND
DISPLAYING MERCHANDISE
Viktor Dahm, Winterthur, Switzerland, assignor to Novoratrag A.G., Zurich, Switzerland, a corporation of

Switzerland
Filed July 27, 1964, Ser. No. 385,156
Claims priority, application Germany, Aug. 30, 1963,
L 45,730

3 Claims. (Cl. 206-45.21)

This invention relates to boxes, and more particularly to folding boxes serving, when filled with merchandise, as containers when closed and as display stands when opened.

An object of the invention is to provide a folding box 15 which, on opening, permits display of the therein contained merchandise to a greater extent and more advantageously than do prior art boxes.

A further object is to provide a folding box made from a unitary blank of foldable material of which the box 20 walls include one or more tear-away portions which, upon removal therefrom, are mountable in particular locations relative to the opened box to provide a very favorable and extensive view and display of the therein contained merchandise.

A further object of the invention is to provide a method, and the box product of the method, for the manufacture of foldable boxes from a unitary blank of material in which tear-away portions are arranged as portions of the box walls, thus economizing both as to material 30 and labor in preparing the box blank.

Still a further object of the invention is to so preform the prepared tear-away portions of the box that upon removal from the box walls per se, the removed tear-away portions are positively connectable to the opened box in 35 its display condition.

The above, and other, objects and features of the invention will be more readily understood from the following description of an illustrative embodiment thereof when read in conjunction with the appended drawing in which:

FIGURE 1 is a plan view of the flat blank material for the inventive box after making the contour cuts, the edge folds, and the tear lines;

FIGURE 2 is a perspective view of the box made from the blank of FIGURE 1 after glueing the longitudinal 45 seam and the parts of the self-locking bottom, in the semifolded condition:

FIGURE 3 is a perspective view of the manufactured box according to FIGURE 2 but completely folded, as stored in its empty condition and shipped to the customer 50 of the boxes for filling;

FIGURE 4 is a perspective view of the unfolded and erected box with its self-locking unfolded bottom closed and its top open for filling;

FIGURE 5 is a perspective view of the filled box with 55 the top sealed and ready for shipment to the buyer of the merchandise enclosed in the box;

FIGURE 6 is a perspective view of the box of FIG-URE 5 with a portion of the front wall torn away;

FIGURE 7 is a perspective view of the box of FIG-60 URE 6 with the portion of the front wall entirely removed, as also the top removed;

FIGURE 8 is a perspective view of the box of FIG-URES 6 and 7 illustrating how the removed front wall and top portions are securable, respectively, to the upper 65 edge of the back wall and to the box bottom as a base;

FIGURE 9 is a perspective view of the box according to FIGURE 8 set up as a display with the removed front wall tear-away portion secured to the upper edge of the back wall, and the removed top positioned below and connected to the box bottom as a base; the box thus standing inclined and tilted toward the back; and

2

FIGURE 10 is a side view of the box set up for display, the view showing the back support in its secured position.

Box 1 comprises front wall 2 with a removable portion 3 prepared for ready removal, portion 3 after being torn away leaving border portions 4 and 5 interconnected by lower border portion 2a. The box further comprises side walls 13 and 14 and rear or back wall 7 provided with a pivotable and securable support 18 extending rearwardly of the box when unfolded. The side walls 13 and 14 each has an integral flap 10a, and front and rear walls 2 and 7 each has an integrally formed bottom flap 10b, flaps 10a and 10b overlapping each other when the blank is folded to form box bottom 10. Each flap 10b at one end has a portion 10c which is bendable along a crease at  $45^{\circ}$  to the long dimension of flap 10b. of the box is formed by overlapping flaps 9a and 9b, of which flaps 9a are integral with the tops of front and rear walls 2 and 7, flaps 9b being integral with the tops of side walls 13 and 14. Flaps 9a and 9b are fastened to each other by glueing, stitching, etc., after filling merchandise into the box. In the blank, rear wall 7 also has vertically pivotable thereto an integral gummed flap 19 which is glued to the inner face of the free end region of side wall 14 of the blank when forming the box on folding the blank longitudinally substantially in half along the edge crease joining front wall 2 and side wall 13.

The unitary blank from which the box is folded, is first printed in its flat condition with such advertising matter as is desired. After such printing, the necessary contour cuts are made therein, including (a) arcuate cut 16 along the top of tear-away portion 3 in front wall 2 including finger recess 17 to facilitate grasping the upper end of portion 3 when the latter is to be removed, (b) slit cuts 6 in the lower region of tear-away portion 3, (c) a semi-circular cut through flap 9a of front wall 2 to form a flap 11, and (d) the cut for linear slit 12 in bottom flap 10b of the front wall. Preferably simultaneously tear line 3a, defining the shape of tear-away portion 3, and tear line 15, defining the limits to which the upper portions of front wall 2 and of side walls 14 and 13 are to be torn away integral with box top 9, are made in the blank, as are the edge creases between the various adjoining regions of the walls, and between portions 10a and 10c of flaps 10b.

After the printed and cut blank is folded along the edge crease between front wall 2 and side wall 13, flap 19 is glued or otherwise attached, as above stated, to the inner surface of side wall 14 along the free edge of the latter, the attaching preferably being by automatic glueing machinery. Thereafter bottom flaps 10a, 10b and 10c are overlapped by folding and attached to each other, likewise preferably by automatic glueing. The box is then filled with merchandise and, after such filling, top 9 is then closed shut, again preferably by automatic glueing or sealing.

When the contents of the box are to be displayed, tearaway portion 3 is removed by grasping the upper end region thereof by puncturing finger recess 17 and tearing out portion 3 along its tear-line 3a. Then the box top 9 integral with upper region 16 of front wall 2 and the top portions of end walls 13 and 14 above tear line 15 is removed. Flap 11 is pushed upward from removed top 9 and, positioning the removed top 9 beneath the bottom 10 of the box, flap 11 is pushed through linear slit 12 and bent over in so doing. As shown in FIGURE 10, the box exposing its contents stands upright on removed top as a base tilted to the rear at its upper region. In this position the box is braced by back support 18 extending perpendicularly from rear wall 7 and secured in place by formed cross-piece 20, preferably punched from back support 18. It will be noted that the pair of spaced

slits 6 cut in the bottom region of tear-away portion 3 forms a plurality of tabs 8 by which, after removal from the front wall, tear-away portion 3 is mountable on the top edge region of box rear wall 7 in such opened display condition. Thus such printed matter as was initially applied thereto on the flat blank from which the box is formed may be faced at an appropriate height facing the viewer to advise him of the characteristics and advantageous uses of the displayed contents, and the price thereof. Thus everything printed is visible on the closed box and can so remain on the box used for display by printing the same on tear-away portion 3 and having the printed matter thereon facing the viewer also when so mounted on the rear wall top after removal of portion 3 for the display condition.

It will be noted that removal of tear-away portion 3 from comparatively large front wall 2 still leaves a border framing the merchandise and holds the merchandise securely while according maximum visibility thereof for display purposes. The provision of preformed slits 6 at 20 the lower end region of removable portion 3 permits the retention of all the information relative to the product in the display condition of the box at an advantageous point being viewed by the interested party, the potential buyer, whether the box be full or but half or less full 25 of the merchandise. Furthermore using the removed top as a base not only enhances the richness of the display but also stabilizes the display box by attachment thereto, and at the same time elevates the display while tilting it to provide added eye-catching appeal. By having the removed box top portion include a portion of the box front wall but no portion of its rear wall, the display is shorter in front than in back providing a decidedly advantageous and more complete view of the merchandise. Furthermore, the arched curved shape of the upper end of the tear-away portion, when mounted as described atop the rear wall of the display box, makes a very favorable impression. The material of the inventive box may be cardboard, plastic, combination thereof, etc., although for inexpensive boxes cardboard is particularly to be consid- 40 ered. The embodiment hereinabove described and illustrated in the drawing is illustrative of the invention only and in no way limitative thereof. Various modifications will suggest themselves to the skilled workers in the art but it is to be expressly undertood that the invention is 45 limited only by the claims hereof. Thus tear lines may be perforations, as shown, or tear threads, etc.

What I claim is:

1. A box for packaging merchandise when closed and

for displaying the therein contained merchandise when partially opened, comprising a top wall, a bottom wall, a front wall, a rear wall, a pair of side walls, each the front and rear walls being of an area larger than the other walls, a first tear-away portion in the front wall, a first tear line in the front wall linearly defining each the lower and both lateral sides of the first tear-away portion, an arcuate cut through the front wall defining the upper side of the first tear-away portion, a pair of second tear lines, each second tear line extending laterally from the first tear-away portion at its upper region to the respective adjacent side wall, and an auxiliary third tear line in each side wall from the adjacent end of the second tear line extending to the side wall, each auxiliary third tear line extending diagonally upward substantially to the top of the side wall junction with the rear wall, the pair of second tear lines and the auxiliary third tear lines defining a second tear-away portion comprising the box top, the upper portion of the front wall above the arcuate cut and a triangular region above the auxiliary third tear line of each side wall, and means in the first tear-away portion for mounting it on the upper region of a wall of the box on removal of the first and second tear-away portions from the box.

2. The box according to claim 1 in which the front wall includes a border about the tear-away portion, and the means for mounting the removed first tear-away portion is at least a pair of spaced slits in the lower region of such tear-away portion.

3. The box according to claim 1 in which the second tear-away portion includes a preformed tab integral with the box top, the preformed tab being extensible from the second tear-away portion, and a preformed slit in the box bottom for engagement with the preformed tab on positioning the removed second tear-away portion with the box top thereof uppermost beneath the box bottom.

## References Cited by the Examiner UNITED STATES PATENTS

1.033,550	7/1912	Crankshaw.	
2,186,170	1/1940	Hall	206-45.21
2,294,965	9/1942	Davidson	20645.21
2.790.542.	4/1957	Hillman	_ 20645.2

THERON E. CONDON, *Primary Examiner*. JOHN M. CASKIE, *Examiner*.