

Aug. 10, 1954

A. BERKE

2,686,000

RECEPTACLE WITH DETACHABLE COMPARTMENTS

Filed Aug. 21, 1951

2 Sheets-Sheet 1

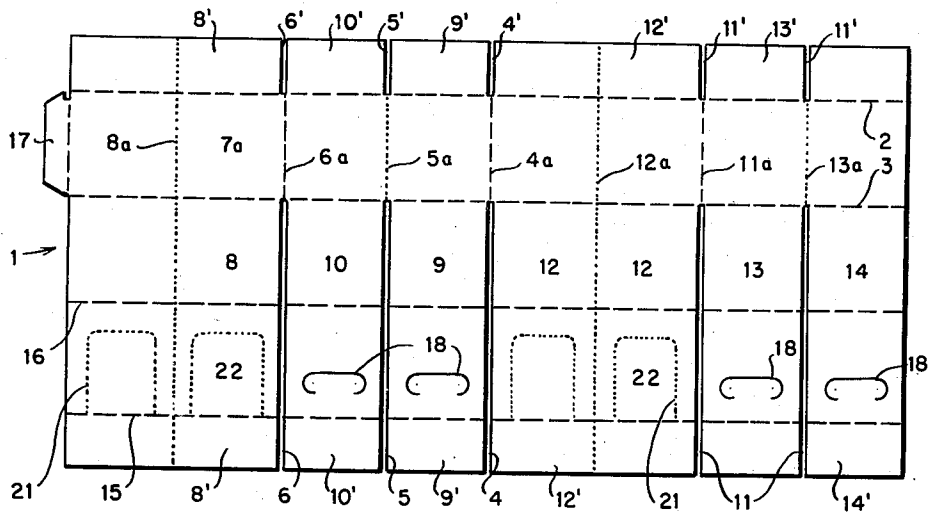


FIG. 1

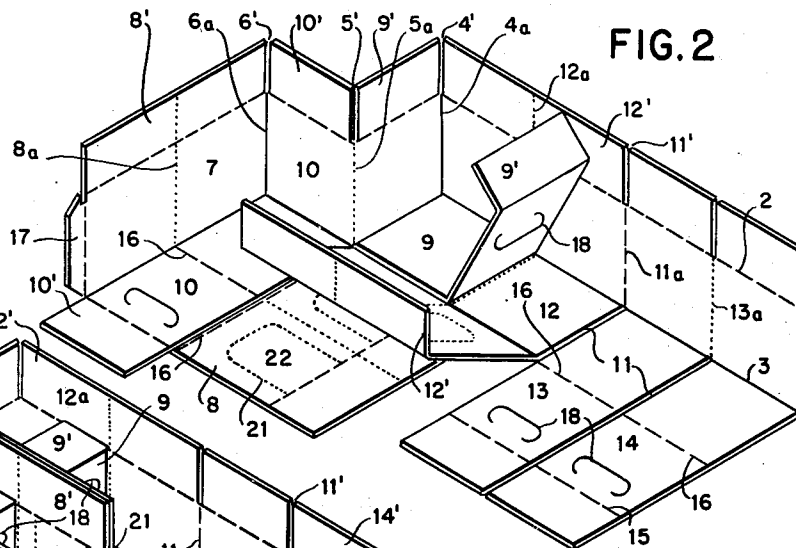
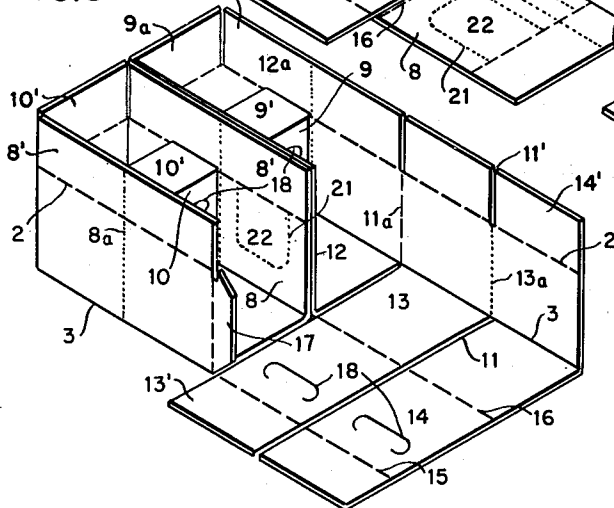


FIG. 2

FIG. 3



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FIG. 4

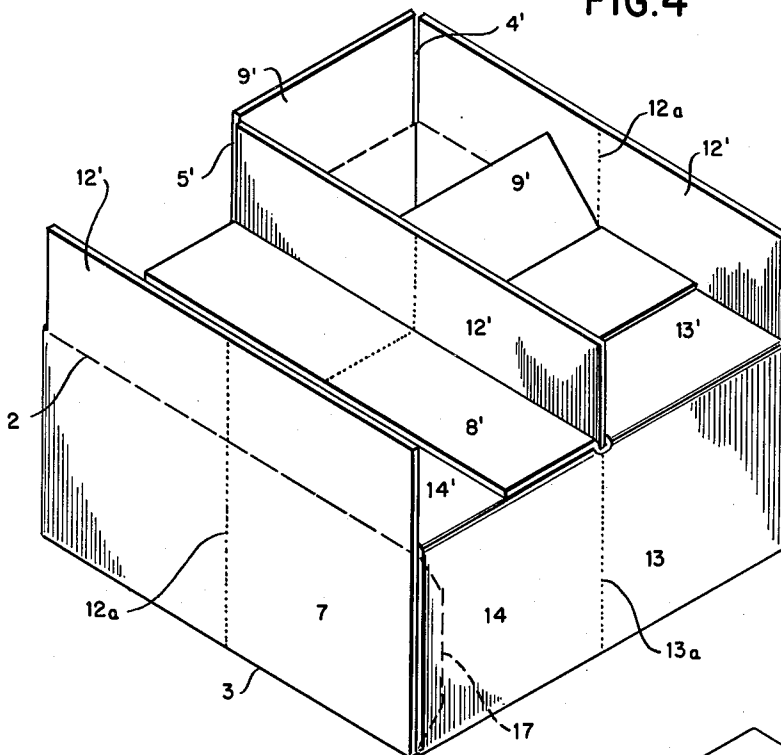


FIG. 5

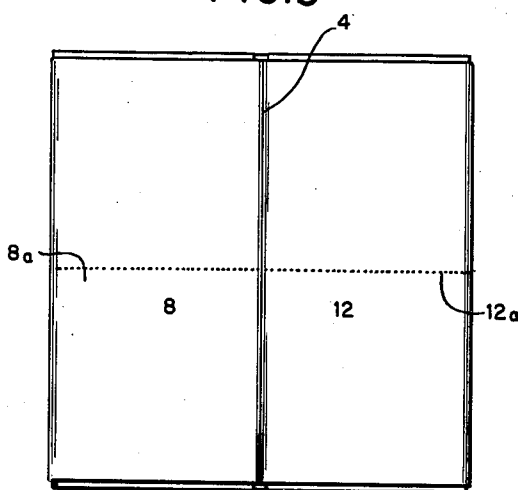
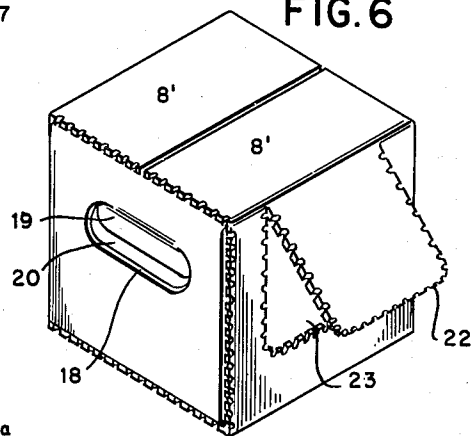


FIG. 6



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RECEPTACLE WITH DETACHABLE
COMPARTMENTS

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5 Claims. (Cl. 229—28)

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My invention is an improved receptacle; and particularly a receptacle for the storage and shipment of articles of merchandise and the distribution and sale thereof, easy to handle and affording great economy in production.

An important object of this invention is to provide a container or receptacle so constructed that it has detachable portions enclosing separate compartments each adapted to enclose a quantity of the merchandise in the receptacle. Hence if a customer desires to buy only so much of the merchandise as is disposed in one or more of the portions, instead of the entire receptacle or carton, he can be accommodated. Each portion when severed from the others, fully envelops what is within it and remains a complete packaging unit, which the patron can easily carry away with him.

Preferably the receptacle is made of sheet material such as cardboard, cut and bent into the form required.

Other objects and advantages are set out in the following description and the novel characteristics are defined in the claims. The drawings show a preferred embodiment of the improvement, but variations in minor respects may of course be adopted without departure from the principle which distinguishes the invention.

On the drawings,

Figure 1 is a plan view of a blank of cardboard having an outline with cuts and score lines therein according to my invention;

Figure 2 shows the sheet or blank in the first stage of formation of the receptacle;

Figure 3 shows a further stage;

Figure 4 is a perspective view of the completed receptacle intact, with all portions in place;

Figure 5 is a bottom plan thereof; and

Figure 6 shows one of the portions detached.

The blank 1 of cardboard or other suitable material has longitudinal score lines 2 and 3 extending from end to end. The blank is rectangular in shape, with the one score line 2 adjacent one long side and parallel thereto. The other score line is parallel to the first and lies between the line 2 and the longitudinal center line of the blank 1. Extending into the blank from the opposite long side or edge is a transverse cut 4, in mid-position, with its inner end at the line 3. Between this line and one end of the blank are similar cuts 5 and 6 also terminating at the line 3. The cuts 4, 5 and 6 are equidistant from one another and parallel to one another and the ends of the blank. The cut 6 lies halfway between the

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cut 4 and the adjacent end of the blank and the cut 5 is midway between these two cuts.

The score lines 2 and 3 mark off a longitudinal strip 7. At the opposite side or edge are short parallel transverse cuts 4', 5' and 6' terminating at the line 2 and in line with the cuts 4, 5 and 6 respectively. Transverse score lines 4a and 6a run across the strip 7 to unite the cuts 4 and 4', 6 and 6' respectively, and the adjacent ends of the cuts 5 and 5' are connected by a line of perforations 5a.

The lines 6, 6a and 6' mark off a section 8 lying across one end of the blank 1 and covering a fourth of its entire area. Between this section and the lines 4, 4a and 4' are two adjacent transverse equal sections 9 and 10, each covering one-eighth of the blank. On the other half of the blank, two parallel transverse cuts 11 extend inward to the score line 3 from the same side or edge as the lines 4, 5 and 6. The cuts 11 are each in line with a transverse cut 11' on the opposite edge, extending in as far as the line 2. One cut 11' is joined to the aligned cut 11 by a score line 11a, and the other cut 11' is joined to the remaining cut 11' by a line of perforations 13a. Between the transverse section 9 and the nearest cuts 11 and 11', that are joined by the score line 11a, is a transverse section 12 equal in area to the section 8, and the last-named lines together with the other two lines 11 and 11a and the perforations 13a, mark off transverse sections 13 and 14, the latter running across the adjacent end of the blank and the former between the sections 14 and 12. Each section 13 and 14 is of the same size as the sections 9 and 10. The sections 8 and 12 are bisected by lines of perforations 8a and 12a respectively, running across the middle of these sections from one long side of the blank to the other.

The score lines 2 and 3 are matched by similar parallel score lines 15 and 16 extending from end to end of the blank 1 on the other side of the longitudinal center line thereof. These lines are the same distance apart from each other and at the same distances respectively from the other long side or edge of the blank 1, as are the lines 2 and 3 from the side edge of the blank nearest to the lines 2 and 3. The parts of the strip or area of the blank between the lines 3 and 16 are all at the bottoms of the several compartments of the receptacle when the latter is finished.

To give the box or receptacle its desired shape the blank is bent along the line 3 to bring the strip 7 and the other portions of the blank along

the adjacent edge into upright positions. The strip is then bent along the lines 4a, 5a and 6a to make the upright parts of the sections 9 and 10 perpendicular to each other and to dispose the upright part of the section 8 crosswise of the blank 1. The sections 9 and 10 are thus spread apart along the full length of the line 5, as shown in Figure 2. The section 9 is now superposed in part on the section 12, and the horizontal part of the section 10 overlies part of the section 8, which has part under the section 12 and extends toward the section 13. The cuts 4, 5 and 6 between the sections 8, 9, 10 and 12 enable the sections to be moved into the various locations here mentioned.

Next, by bending up part of the section 9, now extending lengthwise of the blank about part of the score line 16 crossing it, and turning up part of the section 12 about the part of the score line 16 thereon, there is produced a compartment at one corner of the receptacle when finished, with a capacity or volume of one-fourth of the whole. The unlifted part of the section 8 is then bent along part of the line 16 crossing it and swung about the line 5a to carry it against the adjacent part of the section 12 extending up from the line 16 thereon. The section 10 is swung through a quarter turn with the section 3 and its unraised part now lies between the upright parts of the section 8, and when the part of the section 10 between the part of the line 16 and the adjacent end is bent up, another compartment is produced beside the first. This stage is illustrated in Figure 3.

The last step consists in lifting the non-upright parts of the sections 13 and 14, swinging them about the line 11a and disposing said parts between the upright parts of the sections 12 and 3 respectively. These sections are then bent about the part of the line 16 thereon, and the parts of each section 13 and 14 between said line and the adjacent end then stand upright and are flush with the adjacent upright edges of the sections 9 and 10. The result is another pair of compartments as indicated on Figure 4. One end of the strip 7 has a hinged flap 17, which is secured by staples to the opposite end of the strip 7 in the section 14. The parts are all thus retained in place.

The parts 9', 10', 13' and 14' at the longitudinal edges of the blank beyond the lines 2 and 15 provide cover flaps to be turned down and close the tops of the four compartments, one at each corner of the receptacle. These flaps are layered with glue and parts 3' and 12' along the edges of the sections 8 and 12 are then folded down and retained by the adhesive. These parts 8' and 12' extend the full length of the finished carton and fully seal the four compartments.

Each compartment can be fitted with partitions if desired so as to hold several bottles, cans or other articles. If a customer wants to buy only a quarter of the articles, the dealer severs the blank along the lines of perforations 5a and 8a or 12a, or 13a and 8a or 12a, and a quarter of the receptacle is detached. Severance along the lines 5a and 13a will divide the container in half.

The sections 9, 10, 13 and 14 have cuts 18 in the vertical parts below the top or cover flaps marking off flaps 20 that can be pushed in to open hand holes 19. These flaps are all inside the container and are only exposed when a portion is detached. Also the sections 3 and 12 have cuts or perforations 21 marking off parts 22 that can be cut loose so as to produce an opening 23 for each compartment to facilitate removal of

the contents. These openings are in the parts of the sections 8 and 12 that lie in contact with each other and likewise are not visible until portions of the receptacle are separated.

Therefore the invention is well adapted to serve its intended purpose. The blank is easily shaped and cut and can be quickly folded and set up to make the receptacle, and the latter can be divided with an ordinary knife to detach the portions thereof.

Though the receptacle is shown as square the invention is not limited to such a shape but may be embodied in receptacles or other configuration.

Having described my invention, what I believe to be new is:

1. A receptacle containing compartments, the receptacle having two superposed layers at the bottom of each compartment, and portions connected to both said layers and forming sides of the compartments, said receptacle being marked along lines between its top and bottom adjacent edges of the compartments to permit detachment of each compartment from the remainder of the receptacle, each of the lowermost layers forming the bottom of two compartments and the portions connected to each layer forming opposite sides of one of said two compartments.

2. A receptacle containing compartments, the receptacle having two superposed layers at the bottom of each compartment, and portions connected to both said layers and forming sides of the compartments, said receptacle being marked along lines between its top and bottom adjacent edges of the compartments to permit detachment of each compartment from the remainder of the receptacle, each of the innermost layers being coextensive with the bottom of one compartment and the portions connected to each of said innermost layers forming opposite sides of one of said compartments.

3. A receptacle containing compartments, the receptacle having two superposed layers at the bottom of each compartment, and portions connected to both said layers and forming sides of the compartments, said receptacle being marked along lines between its top and bottom adjacent edges of the compartments to permit detachment of each compartment from the remainder of the receptacle, each of the lowermost layers forming the bottom of two compartments and the portions connected thereto forming opposite sides of said two compartments, each of the innermost layers being as large as the bottom of one of said compartments, and the portions connected to each of said innermost layers forming the remaining sides of one of said compartments.

4. A receptacle made of a piece of flexible sheet material having opposite side edges and ends and transverse score lines and cuts delineating sections running from one side edge to the other of said sheet, and two pairs of longitudinal score lines extending from end to end thereon, one line of each pair being located near the middle of the sheet and the other near a side edge thereof, said cuts all extending inward from one side edge and between some of said sections, said sheet material being bent along said score lines and cuts so that portions of some of said sections extend across and overlie portions of other sections to form bottoms of said compartments, while the remaining portions of each of said sections each form opposite sides of one of the compartments.

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5. A receptacle made of a piece of flexible sheet material having opposite side edges and ends and transverse score lines and cuts delineating sections running from one side edge to the other of said sheet, and two pairs of longitudinal score lines extending from end to end thereon, one line of each pair being located near the middle of the sheet and the other near a side edge thereof, said cuts all extending inward from one side edge and between some of said sections, one section adjacent the center and another at one end of the sheet material being twice as large as the other sections, which are equal in size, said sheet material being bent along said score lines and cuts so that portions of the other sections overlaid portions of said central and end sections at the bottoms of the compartments and the remaining portions of each section form opposite sides of

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one of said compartments, said receptacle being scored along the corners of adjoining compartments to facilitate detachment of each.

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