Jan. 22, 1957 A. BERKE 2,778,522

DIVISIBLE RECEPTACLE

Filed May 26, 1955 2 Sheets-Sheet 1

Fig. 2

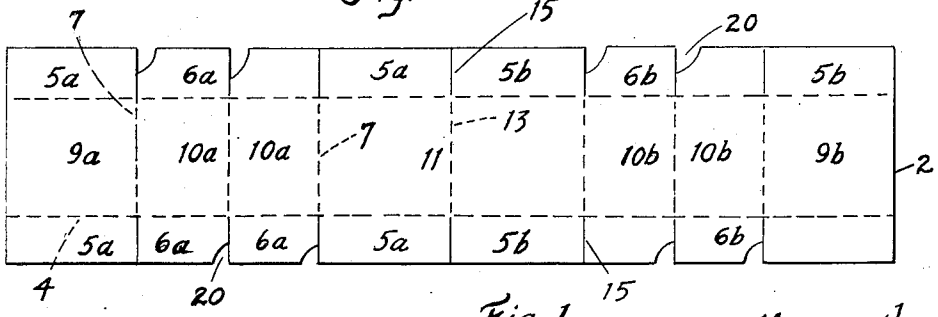
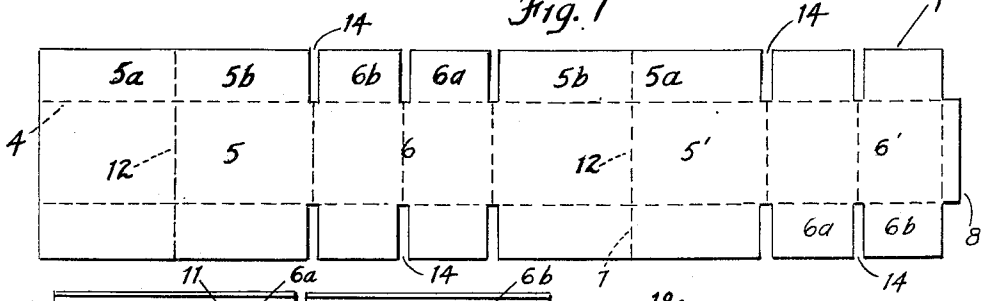
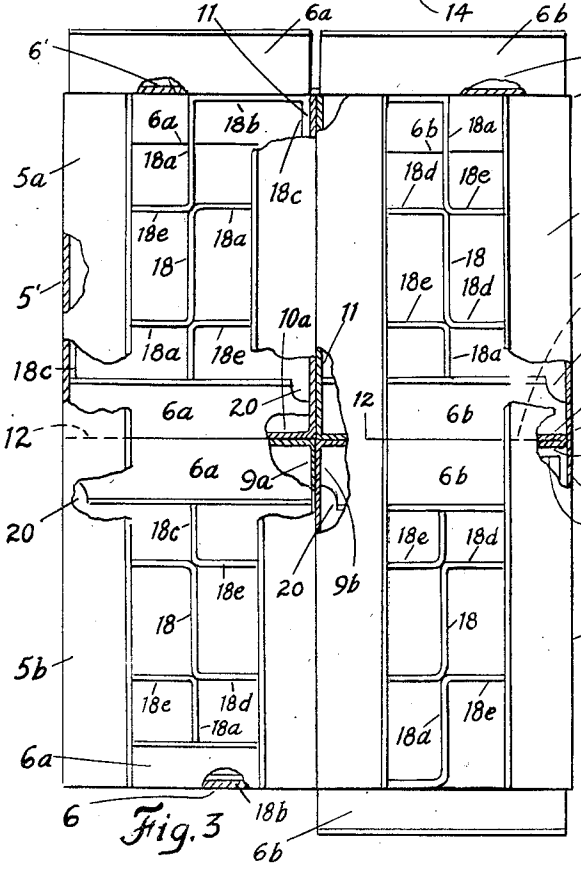


Fig. 1





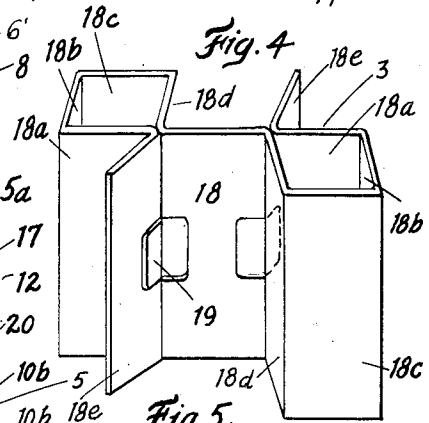
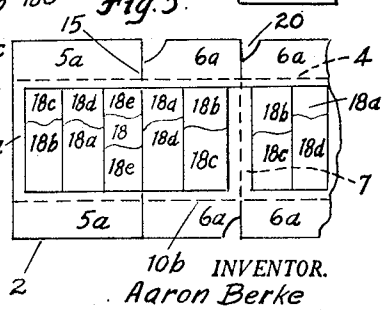


Fig. 5



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Filed May 26, 1955 2 Sheets-Sheet 2

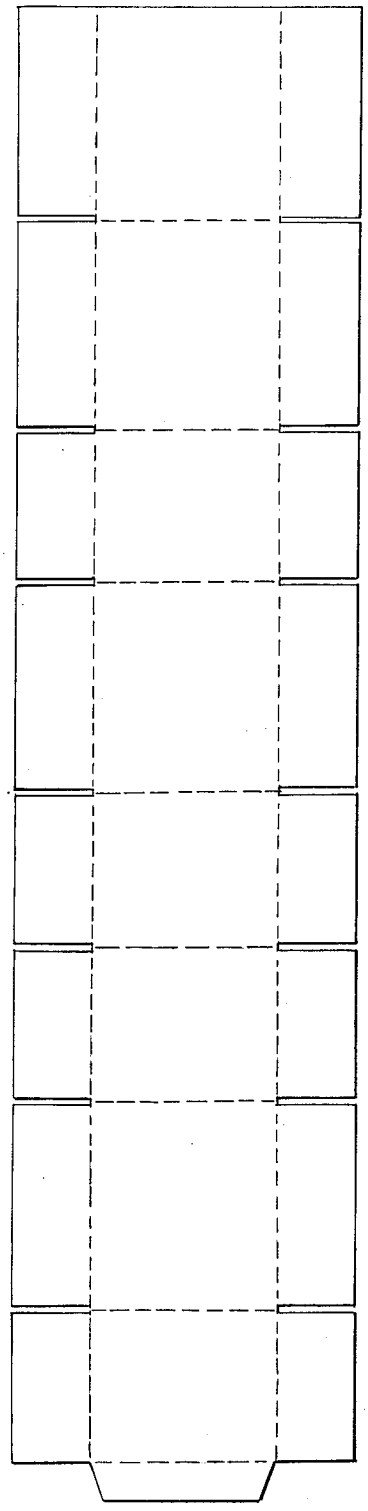


Fig. 6

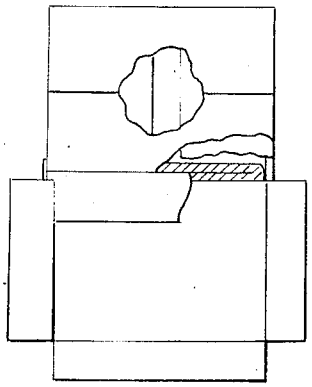


Fig. 7

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2,778,522

DIVISIBLE RECEPTACLE

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Application May 26, 1955, Serial No. 511,355

1 Claim. (Cl. 217—33)

This invention is an improved receptacle; especially a receptacle for the storage and shipment of articles of merchandise and the distribution and sale thereof, easy to handle, inexpensive to produce, and comprises sections that can readily be severed into separate units.

The chief object of this invention is to provide a container or receptacle so constructed that it has detachable sections enclosing separate compartments, each of which is adapted to enclose a quantity of the merchandise inside of it. The receptacle can be utilized and shipped as a whole, but if a customer desires to buy only so much of the merchandise as is disposed in one or more of the sections, instead of the full receptacle or carton, he can be accommodated. Each section when severed from the others, remains entirely sealed and fully envelops what is within it and becomes a complete smaller package or parcel, which the patron can easily carry away after purchasing.

It is preferable to construct the receptacle of sheet material such as cardboard, cut and bent into the form required.

Another object is to provide a novel member for dividing each section into pockets, each adapted to receive a single article.

The objects and advantages are clearly 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 general plan in which the invention resides.

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, to be set up as an outer casing for the receptacle.

Figure 2 is a similar view of another blank for setting up the inner compartments and defines the detachable sections.

Figure 3 shows in plan the finished receptacle ready to be closed and sealed, after filling.

Figure 4 is a perspective view of a member for dividing the compartments into pockets.

Figure 5 shows a detail of the structure.

Figures 6 and 7 show respectively another blank and in top plan a divisible box produced therefrom.

The receptacle as illustrated in the drawings comprises a blank of cardboard 1, bent to make the outside casing, and another blank 2, for insertion into the casing and capable of being shaped to mark off compartments in the casing and cooperate therewith so as to define the sections that can be separated from the receptacle and from one another. A member 3 is placed in each section or compartment to divide it into pockets, each of which is large

enough to hold a bottle, can, or other single container. See Figures 1, 2 and 4.

The rectangular blank 1 shown in Figure 1 is elongated with parallel longitudinal score lines 4 extending from end to end and transverse score lines dividing it into long sections 5 and 5′ and shorter portions 6 and 6′, the sections or portions 5 and 6′ being at the ends and the sections 5 and 5′ having the other section 6 between them. The two sections 5 and 5′ are each bisected by a transverse line of depressions or perforations 12, extending entirely across the blank 1.

The other sheet member 2 has similar score lines 4 and 7 dividing off portions 9*a*, twin portions 10*a*—10*a*, 11 twin portions 10*b*—10*b*, and 9*b*, the portions 9*a* and 9*b* being adjacent the ends, the portion 11 in the middle, and two pairs of the twin portions between the portion 11 and the portions 9*a* and 9*b*. The portions 5 and 5′ of the blank 1 have a transverse central score line 12 extending across the lines 4 to both side edges of the blank; and the portion 11 of the blank 2 has a transverse central score line 13 also extending entirely across the blank 2.

In both side edges of the blank 1 is a pair of cuts 14 extending inward as far as the score lines 4, and in line with the score lines 7 marking off the portion or area 6, with another cut 14 midway between the two. The opposite edges of each of these cuts are separated from each other. Also near the end of this blank at each side edge are two similar cuts both in line with the score line 7 between the portions 5′ and 6′, and two others in line with the middle of the portion 6′. In each portion 6 and 6′ one of the transverse score lines 7 is in line with the middle cuts 14. The cuts 14 in the edges adjacent the area 6 mark off twin flaps 6*b* and 6*a* on both edges of the blank 1; and the remaining cuts mark off twin flaps 6*a* and 6*b* adjacent the portion 6′. All these flaps are hinged along the score lines 4.

In the blank 2 are transverse cuts 15 on both side edges; opposite and in line with all the transverse score lines 7 and line 13. These cuts extend in as far as the lines 4, and mark off twin flaps 6*a*, one each at the ends of the portions 10*a* between the portions 9*a* and 11, and twin flaps 6*b*, one at each end of the portions 10*b* between the portions 11 and 9*b*. The cuts 15 also mark off flaps 5*a* and 5*b* connected respectively to the flaps 9*a* and 9*b*, and in the blank 1, the central score lines 12 mark off flaps at each side edge 5*a* and 5*b* adjacent the portion 5 and similar flaps 5*a* and 5*b* adjacent the section 5 at one end; and flaps 5*b* and 5*a* adjacent the section 5″; all the flaps 5*a* and 5*b* being connected to each other at the score lines 12.

The receptacle is set up by bending up the blank 1 about the score lines 7 between the portions 5, 6, 5′ and 6′ and attaching the flap 8 to the free terminal edge of the portion 5 or by securing the two ends with an adhesive strip. The portions 6 and 6′ then are the ends and the portions 5 and 5′, that are somewhat longer than the portions 6 and 6′, are the sides with the two flaps 5*a*—5*b* on the sides and the flaps 6*a* and 6*b* on the ends along both free or upper and lower edges of the rectangular casing 17.

The blank 2 is then bent about the line 13 and cuts 15 in the middle to superpose halves of the portion 11 on each side of said line and to superpose also the portions 9*a* and 9*b*. Each half of the blank 1 is now bent further about the line 7 between each pair of portions 10 and 10*b*, and the lines between these portions and the portions 9*a*, 11, and 9*b* so as to move the portions 10*a* and 10*b* outward from the portions 9*a*, 11 and 9*b*, and into

superposed positions. The twin portions 10*a* and 10*b* then lie transverse to the superposed portions 9*a* and 9*b* and the superposed halves of the central portion 11. The overlying halves of the portion 11, and superposed portions 9*a* and 9*b* are long enough to fit snugly inside the casing 17 and lengthwise thereof, and the superposed parts 10*a* and 10*b* are of such a size as to lie snugly across between the sides 5 and 5′ of this casing. The portion 9*b* and half of the portion 11 will face the side 5 of the casing, and the portion 9*a* and other half of the portion 11 will thus face the side 5′ of the casing 17.

The two flaps 6*a* and 6*c* of the casing 17 will then be in line with the flaps 6*a* of the member 1 in the casing and the two flaps 6*b* of said member 1 are in line with the two flaps 6*b* of the casing 17. Hence the casing 17 has four inside compartments which can be closed at top and bottom by folding the flaps 6*a* and 6*b* over each compartment, and bending down over these flaps the longer flaps 5*a* and 5*b* along the portions 9*a*, 11 and 9*b*, and gluing or otherwise securing the longer flaps along the sides to the shorter flaps beneath them. These flaps 5*a* and 5*b* are made wide enough to cover bottom and top sufficiently to close the receptacle.

The receptacle can be cut into four sections or parts along the lines 12 in the portions or sides 5 and 5′ of the casing, and along the adjacent score lines 7 in the sections 6 and 6′. The cutting will be extended through the hinged junction of the portions 10*a* and 10*b* and the junctions of the folded halves of the portion 11 of the inside folded blank 1. If for example this operation is performed to sever the upper right hand quarter of the receptacle, the severed section will comprise the upper half of the side or portion 5 and flap 5*a* thereon, half the portion 6′ and flap 6*b* thereon, of the casing 17; half the portion 11 and one of the portions 10*b* (attached to the part 11) with flap 6*b* thereon. The vertical sides of the detached section will all be held rigid by the short flaps 6*b* and the longer flaps 5*a* over the flaps 6*b* and glued thereto and the section thus is a completely sealed package, on top and bottom.

The various positions of the portions of the casing 17 and inside folder number 1 are fully illustrated in Figure 3 with the flaps disposed in open position to be clearly visible. The flaps 6*a* and 6*b* inside the casing appear under the side flaps 5*a* and 5*b* while one of the flaps 6*a* at an end of the casing is shown as turned in, with the other three projecting outward. The flaps 5*a* and 5*b* are wide enough to cover substantially the whole top and bottom.

The receptacle so constructed can be used with or without the members 3 to divide the compartments into pockets. The member 3 is a strip of cardboard or other sheet material with transverse score lines at virtually equal distances from another and the ends to mark out a section 18 at the center and sections 18*a*, 18*b*, 18*c* and 18*d* at each side of the section 18 bent to form square tubes. At the extremities are out jutting sections 18*e*. One tube is adjacent on face of the section 18 and the other tube is adjacent the opposite face. The sections 18 and 18*a* are in substantial alinement and the sections 18*e* project in opposite directions. When placed in the compartments of the receptacle, the portions of the member 3 will delineate six square spaces in each.

The member 3 has tabs 19 cut out of each side of the midsection 18 and glued or otherwise secured one to each terminal section 18*e* at the middle thereof. These tongues or tabs hold the sections in position so that the member retains its form in the compartments. But the member 3 can be collapsed about the junctions of the portions 18*b* and 18*c*, 18*d* and the midsection 18, and the inner edges of the terminal portions 18*e* so that the latter portions overlie the section 18, one against each face thereof.

The height of the transverse sections of the member 3 is a little less than the distance between the score lines 7 on the blank 2. One of these members 3 is attached to each section 10*a* and 10*b* and each section 9*a* and 9*b* and each half of the section 11 of this blank. The junction is made preferably by gluing each portion 18*c* and 18*b* to the blank 2. For example the portion 18*c* is glued to the section 9*a* near the free edge and the portion 18*b* is affixed to the adjacent section 10*b*. See Figure 5. The length of the folded member is such that it extends from near the free outer edge of the section 9*a* almost to the junction of the sections 10*a*. When said sections 9*a* and 10*a* are in the same plane, the member 3 is collapsed, but when said sections are moved to a right-angled position, the section 9 pushes the portion 18*c* at one end of the member 3, and the adjacent section 10*b* pushes the portion 18*b* at the other end. The member 3 is thus set up as shown in Figure 3. A member 3 is attached in the same way to the section 9*b* and each half of the section 11, and extends over one section 10*b* and the remaining section 10*b*. All the members 3 are properly distended when the sheet 1 is folded so as to divide the receptacle into compartments and pushed into the casing 1.

The blank 1 and blank 2, the latter with the members 3 attached can be shipped flat and distended or folded into two or more layers into a smaller space.

The notches 20 in the flaps 6*a* are for convenience in closing the receptacle by mechanical means. They are so located that a moving part of a machine can swing and push down both flaps 6*a* and 6*b* at the lower end of the receptacle as shown on Figure 3 and simultaneously the upper pair of flaps 6*a* and 6*b* at the middle of Figure 3, passing through the notches in the lower pair of flaps in the middle of Figure 3. Another moving part of such a machine will push down both flaps 6*a* and 6*b* at the top and the lowermost flaps 6*a* and 6*b* in the middle of Figure 3 passing through the notches 20 in the uppermost pair of flaps 6*a* and 6*b* at the middle of Figure 3.

The blank 21 of Figure 6 also has longitudinal parallel score lines 4 and transverse parallel score lines 7 dividing off various portions, two wide portions 22 side by side being at one end. Between the ends are two other equally wide portions 22 which are connected to a pair of narrower portions 23, side by side between said other wide portions 22. At one end is a third narrower section 23, one wide section 22 lying between this third section 23 and the pair of adjacent portions 23; which are connected to the remaining other wide portion by a similar narrow section 23. At the ends of all the transverse score lines 7 are cuts 14 with separated edges marking off along the both edges of the blank the flaps 22*a* and 22*b* adjacent each section 22, and flaps 23*a* and 23*b* adjacent each section 23. The terminal section 23 has a hinged flap 8 with a line of indentations or perforations 12 at its junction with the last-named section 23.

To form a box with this blank the flap or tab 8 is affixed by glue or otherwise to the narrow section 23 nearest to the pair of wide sections 22 at one end of the blank. The blank is then set up to present a closed outline as indicated in Figure 7, with the two adjacent wide portions 22 inside, folded against each, and disposed crosswise within. When filled with merchandise the flaps 22*a* and 22*b* are all turned over, and the flaps 23*a* and 23*b* turned over against the flaps 22*a* and 22*b* and glued fast. The result is a rigid box or receptacle with two fully sealed halves or compartments. The halves can be served from each other by cutting along the lines 12 and 12′ and each will then be a complete single package. Each compartment may have a partition similar to the member 3 therein if desired.

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

A division member for a receptacle, said member consisting of a flat central section, flat sections hinge-connected one to each side of the central section and extending laterally therefrom in opposite directions, flat sections hinge-connected one to each of the last-named sections extending longitudinally of said member, other

flat sections one hinge-connected to each longitudinally extending section and bent towards the plane of the central section, and additional flat sections one hinge-connected to each of said other sections and bent towards the central section and lying substantially in the plane of the central section, and flat sections one hinge-connected along one edge to each of said additional sections, adjacent the central section and extending laterally outward therefrom in opposite directions, the opposite edges of the last-named sections being free and means for affixing the last-named laterally extending sections to the central section.

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