Oct. 2, 1951 R. W. WARD 2,569,963

DISPENSING CONTAINER

Filed Aug. 1, 1950

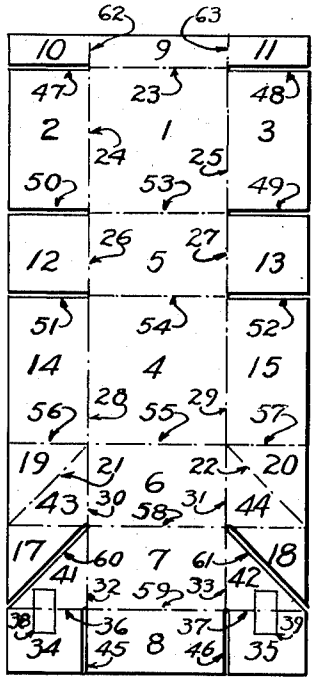

Fig. 1

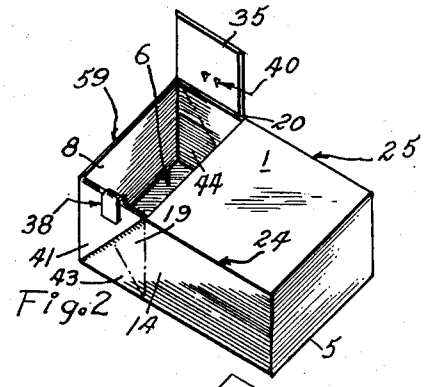

Fig. 2

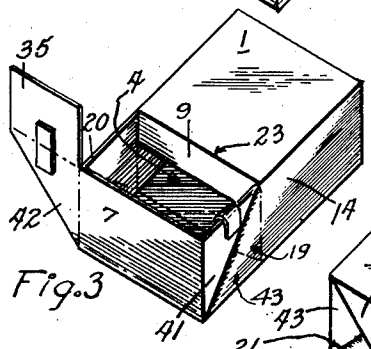

Fig. 3

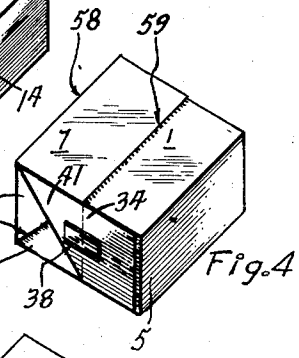

Fig. 4

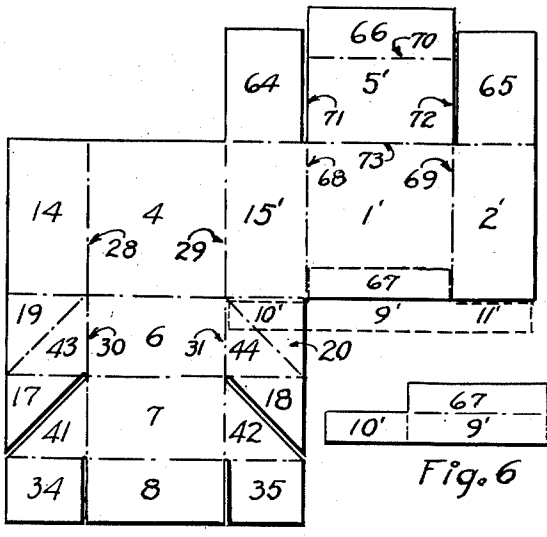

Fig. 5

Fig. 6

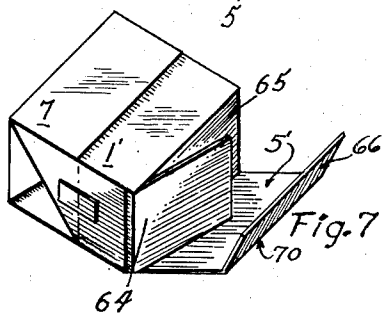

Fig. 7

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DISPENSING CONTAINER

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1 Claim. (Cl. 229—44)

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This invention relates to a container for storage, shipment, and display of small parts. More specifically, it deals with a closable six-sided container having, among other features, an expansible end portion which is uncovered in expanded form, and a baffle for restricting egress of contents into the uncovered end portion.

Among the advantageous features of the present invention is the fact that the container may be made substantially from a single sheet of stock. Also, it enables shipping of the contents in a strong, completely closed box which, when desired, may be readily and easily expanded at its end portion to provide an uncovered display section into which flow from the covered portion is partially restricted.

The invention will be more readily understood by reference to the drawing in which Figure 1 is a plan view of a preferred embodiment of the container of the present invention in knocked-down form. Figure 2 is an isometric view of the container of Figure 1 in assembled and expanded form, with one of the reinforcing flaps raised out of position. A similar view of the same container with the reinforcing flap portion bent away from the container proper is depicted in Figure 3, while Figure 4 illustrates the completely closed container in condition suitable for shipping. Another modification of the container of the present invention, in knocked-down form, is presented in plan view in Figure 5, while Figure 6 shows an attachable portion fitting onto an edge of the sheet in Figure 5. An isometric view of the partially closed container of Figures 5 and 6, and showing details of the back entry feature, is illustrated in Figure 7. Similar numerals refer to similar parts in the various figures.

Referring again to the drawing, the various sections in the flat sheet of Fig. 1 are bent at the scored lines 23, 53, 54, 55, 58, 59, etc. to form the container depicted in Figs. 2–4. Section 1 forms the top 1 when the container is in open condition as in Figs. 2 and 3, and end section 9 acts as the downwardly directed baffle which partially restricts egress of the contents of the container when the latter is in open condition.

Sections 2 and 3 are folded at right angles to section 1, forming the sides of the enclosed container, while small strips 10 and 11 are folded over and glued or otherwise attached to the inside surfaces of sections 2 and 3 respectively, thus acting as supports for baffle 9. Likewise, sections 12, 13, 14, and 15 are folded at right

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angles to the adjacently attached sections, sections 12 and 13 being disposed inside the container, glued to sections 2 and 3 respectively, while sections 14 and 15 are disposed over sections 2 and 3, so that sections 1, 4, 5, 14, and 15 are exposed on the outside, acting respectively as top, bottom, back and sides of the enclosed section of the container in the form depicted in Figs. 2 and 3.

Section 8 is folded over completely in contact with section 7 and section 7 is folded at right angles to section 6 which forms the front of the container when it is closed as in Fig. 4. Triangular ends 17 and 18 are disposed and glued between sections 7 and 8, and side sections adjacent section 6 are provided with diagonal scoring 21 and 22, as indicated, to provide separately movable portions 19 and 43 on one side and 20 and 44 on the other, these being bent at scorings 30 and 31 to be disposed at right angles to section 6, thus forming the sides of the open portion of the container shown in Figs. 2 and 3, while section 7 serves as the front portion.

Flaps 34 and 35 attached to triangular sections 41 and 42 serve as reinforcing sections to keep front 7 firmly disposed when the container is in open condition. In such case, flaps 41 and 42 are folded laterally against sides 43 and 44 respectively, and flaps 34 and 35 are folded over into the container against the inside surfaces of sections 19—43 and 20—44, thus preventing folding along diagonal scorings 21 and 22.

Resilient metal strips 38 and 39 may be cemented or fastened (by means of clips 40) to sections 34—41 and 35—42 respectively, straddling scored lines 36 and 37 respectively and acting as holding means for holding down flaps 34 and 35 when they are folded over, as in Fig. 2.

When the container of Fig. 1 is in open condition as in Figs. 2 and 3 (except that flap 34 is folded down), the contents stored under top section 1 may be fed out under baffle 9 onto base 6 of the folding portion, by a jiggling action on the container, thus enabling egress of a portion of the contents onto base 6 for examination or display. Overturning of the container will spill only the small portion of the contents exposed on base 6.

To close the container into the form shown in Fig. 4, flaps 34 and 35 are lifted and edge 58 is pushed toward the main body of the container, whereupon collapsing takes place along scored diagonal lines 20 and 21, and folding takes place along scored lines 56 and 57, causing base 6 to hinge on scored edge 55 and act as the front for

the closed container, while section 7 overlaps top 1. Flaps 34 and 35 and triangular strips 41 and 42 to which they are attached are folded down over the sides 14 and 15 of the container.

A modification of the foregoing container is shown in Figs. 5, 6, and 7. This unit is similar to that disclosed in Figs. 1–4, with the exception that it is provided with a full-opening back portion to facilitate packing the contents into the container. In knocked-down condition, the package resembles the plan view depicted in Fig. 5. Fig. 6 is a separate view of a strip which is pasted onto the main portion of the pattern to provide the baffle section.

In order to provide for the rear opening portion of the container, the top section 1' has been disposed to the right of bottom section 4. In assembly, scored sections 29, 68 and 69 are folded upwardly and over bottom 4, while side portions 14 and 19—43 are bent upwardly along scored sections 28 and 30, side 2' thus fitting inside and overlapping side 14. Strip 67 is glued onto section 1' and baffle 9' is then folded downwardly, while flaps 10' and 11' are folded inwardly into the folded container on sections 2' and 15'. Strips 10' and 11' are glued onto side sections 2' and 15' and thus act as reinforcing means for the baffle.

When top section 1' is superimposed over bottom section 4, flaps 64 and 65 are folded towards each other and back section 5' is locked in place by inserting flap 66 between top 1' and flaps 64 and 65, as in Fig. 7.

The forward folding portion of the container including sections 6, 7, 8, etc. is manipulated in the same manner as that already outlined for Figs. 1–4.

Baffle 4 may be of sufficient height to restrict the interior cross-sectional area by 25% to 50%, preferably about one-third. The height of section 6 is substantially equal to the height of the container, thus enabling section 6 to act as a front for said container when the latter is in collapsed or closed condition.

Separating cuts 47, 48, 49, 50, 51, 52, 60, 61, 45, 46, 71, and 72 are cuts made to facilitate assembly of the container and are designated by double lines.

It is apparent from Figure 5 that back 5 can be attached to the rear edge of section 4 and flap 65 may be attached to the rear edge of section 14.

I claim:

A container having a flat top, which covers all but a rectangular forward portion of said container and terminating in a straight line forward edge, a flat bottom section, flat sides, flat back and front sections, a downwardly directed baffle extending from said forward edge of the top and from one side to the other to partially restrict the cross-section of said container, the forward portion of the sides of the container being made of flexible sheet material capable of being scored, said rectangular forward portion spanning a distance from said baffle to said front section substantially equal to the height of said container, thereby making it possible to slide said front section over the top when the forward portions of the sides are collapsed by pushing the front section upwardly and over the top, a scoring on said bottom section directly beneath and in line with said baffle, facilitating raising of the forward position of the bottom section, a diagonal scoring on each of the forward portions of the sides to facilitate collapse thereof, protrusions on the front section extending from the sides thereof, and upwardly directed flaps extending from the upper portions of said protrusions, the width of said flaps being substantially equal to the width of the collapsible portions on said side sections of the container, said flaps acting as reinforcing means for holding open the collapsible side portions when they are turned down adjacent thereto within the container.

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