CONTAINER FOR PACKAGING AND DISPENSING INTERFOLDED PAPER SHEETS

Filed Aug. 19, 1938

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Patent and Trademark Office
This invention relates to a container adapted for the purposes of packaging and dispensing interfolded paper sheets, particularly interfolded paper towels.

5 The container of the present invention is eminently suited for the foregoing purposes. It presents the advantages that it is fabricated from paperboard or its equivalent at such low cost as to be discarded after its contents have been dispensed; that it is sufficiently strong to remain intact while in use, for instance, while fastened to a wall; and that its bottom includes internal trusses which, besides being reinforcements for the bottom, serve to guide smoothly the successive sheets of a stack of interfolded sheets to a dispensing slot in the bottom. Generally stated, the container hereof is formed up from an appropriately precut and prescored blank furnishing all the necessary container parts and reinforcements, the container bottom being developed from suitable blank portions turned from the back and front members toward each other to provide the bottom and to define a dispensing slot. Each bottom portion has an extension that is bent upwardly from a line of score into the container, the extensions being fastened at their inner end portions to the inner walls of the front and back members and extending in converging relationship from said walls to the dispensing slot edges to afford a hopper-shaped support on which rests the stack of interfolded sheets placed in the container.

With the foregoing and other features and objects in view, the instant invention will now be described in further detail with particular reference to the accompanying drawing, wherein,

Figure 1 shows in plan view a paperboard blank precut and prescored for ready formation into the container hereof.

Figure 2 shows in perspective the finished container developed from the blank of Figure 1, the container being open with its front raised to reveal the internal container structure and with its front side wall portions slightly sprung apart to reveal their reinforcements.

Figure 3 depicts in perspective the closed container viewed from one side of its front face.

Figure 4 is a vertical central section through the container on the line 4—4 of Figure 3.

50 The precut and prescored container blank shown in Figure 1 may advantageously be one piece of paperboard, cardboard, or equivalent sheet material of sufficient strength, stiffness, and other qualities to serve satisfactorily the purposes hereof. The blank comprises substantially similar front and back members 16 and 11, respectively, and a top portion 12 disposed between the front and back members and defined by a pair of parallel transverse lines of score a—a and b—b constituting the upper edges of the front and back members, respectively. A side wall portion 13 projects from each side of the front and back members and is defined by a vertical line of score x—x, such line of score for each of the back side wall portions being essentially a straight-line continuation of such line of score for the corresponding front side wall portion. The front and back members each have a bottom portion 14 projecting from a transverse line of score y—y, which marks the lower edge of the front or back member, as the case may be. Each bottom portion 14 has a second transverse line of score z—z that constitutes the edge of a dispensing slot 24 through the container bottom and that defines an extension 15 for the trusses created inside the container adjacent to the dispensing slot.

A tab 18 is shown in Figure 1 as projecting from each side of the top portion 12 and as being defined by a pair of slots 17 extending transversely and parallelly from each side edge of the blank to a line of score a—b running between the parallel transverse lines of score a—a and b—b and constituting essentially a straight-line continuation of the vertical lines of score x—x. Projecting also from each side of each bottom portion 14 is a tab 18 defined by a transverse slot 19 extending inwardly from each side edge of the blank to a line of score y—z also constituting essentially a straight-line continuation of a line of score x—z. Such tabs 16 and 18 are designed to reinforce the side and bottom walls of the container developed from the container blank, as will presently appear.

In developing or forming up the container from its blank, each tab 18 is bent downwardly from its line of score y—z and is secured, as by suitable adhesive, against a corresponding side wall portion 13 of the back member, as shown in Figure 2. The tab 18 projecting from each side of each bottom portion 14 is bent from its line of score y—z and is secured, as by suitable adhesive, against a corresponding side wall portion 13. It is preferable, as shown in Figure 2, that the tabs 18 associated with the front member be secured to the inner faces of the front side wall portions and that the tabs 18 associated with the back wall member be secured to the outer faces of the back side wall portions, since the front side wall portions are caused in closing the container to lap over the back side wall portions and the par-
ticular locations described for such tabs ensure the desired smoothness and finished appearance on the outside of the container as well as the desired smoothness in the interior of the container. As a consequence, with absence of edges or interrupted feed of the interfolded sheets stacked in the container.

Each extension 15 of the bottom portions 14 may be of trapezoidal shape and be bent upwardly from the line of score 12 into the container and its inner end portion 15a may be secured, as by suitable adhesive, to the inner wall of the front or back member, as the case may b. The inner end portion 15a of each extension 15 is preferably defined from the rest of the extension by a line of score 12, as this facilitates flat securement of such portion against the inner front or back wall of the container, as the case may be, and the desired converging relationship of the two extensions, from the front and back walls to the edges of the dispensing slot 24, as best shown in Figure 4. The extensions 15 thus afford a hopper-shaped support on which may rest a stack C of the interfolded sheets placed in the container, as depicted in dotted outline in Figure 4. The extensions or extensions 15 not only reinforce or hold up the container bottom against possible collapse, but they furnish a trough-like approach to the dispensing slot 24 and thereby promote the desired smoothness of operation of feed of sheets to the dispensing slot when the sheets are withdrawn from the container.

As already indicated, the side walls of the front member are designed to overlap the side walls of the back member. With the back member resting on a table or flat support, the container may be loaded with a stack of the interfolded sheets, whereupon the front member may be brought down from its position shown in Figure 2 to the closed position of Figure 3 with its side walls sprung into lapping position over the side walls of the back member. The side walls of the back and front members may be glued or otherwise fastened together so that the container cannot be refilled without damage and thus present the advantage of being a non-refillable dispensing cabinet. The container hereof may be readily and economically equipped with such accoutrements as are customary in the usual cabinets for dispensing interfolded paper sheets. Thus, a paperboard or equivalent strip 19 may be adhesively or otherwise secured to the outer back wall so that it furnishes a central eyecutted tab portion 20 immediately above the upper back edge for fastening to a wall or other support. The eyecutted or aperture portion 20 may, as shown, be reinforced by an angular paperboard piece 21 comprising a horizontal portion 21a adhesively or otherwise secured to the container top. Also, the front member may have a narrow, central, vertical slot 22 near its lower edge through which the sheet supply in the cabinet may be sighted so as to enable the user to know when the supply is nearing exhaustion or has been exhausted.

Again, the lower edges of the side walls may be centrally notched or otherwise formed, as at 23, next to the dispensing slot, thereby enabling the user to insert readily a prying instrument into the container for pushing out through the dispensing slot any lowest sheet that may accidentally fall to have its end fold or flap thrust through the dispensing slot by the removal of the immediately preceding sheet from the container, as is normally the case in dispensing interfolded paper sheets. The slot 22 and the notches 23 are, of course, created in the container blank; and a suitable notch 25 may be cut in the front bottom extension end portion 15c at the region where such portion registers with the slot 22.

1. A paperboard, box-like container adapted for packaging and dispensing interfolded paper sheets and formed up from a precut and prescored blank comprising substantially similar front and back members, a top portion disposed between said front and back members and defined by a pair of parallel transverse lines of score constituting the upper edges of said front and back members, a side wall portion projecting from the lower edge of each said front and back members, each said lower edges being defined by a transverse line of score and said bottom portions being turned from said last-named lines of score toward each other to provide a container bottom having a dispensing slot therethrough, each said bottom portions having a second transverse line of score definitive of an edge in said dispensing slot and of an extension bent upwardly from said second transverse line of score into the container interior, said extensions being secured at their inner end portions to the inner walls of said front and back members and extending in converging relationship from said walls to the edges of said dispensing slot to afford a hopper-shaped support on which rests a stack of interfolded sheets placed in said container.

2. A paperboard, box-like container adapted for packaging and dispensing interfolded paper sheets and formed up from a precut and prescored blank comprising substantially similar front and back members, a top portion disposed between said front and back members and defined by a pair of parallel transverse lines of score constituting the upper edges of said front and back members, a side wall portion projecting from each side of each said front and back members, a side wall portion projecting from each side of each front and back members and defined by a vertical line of score, the side wall portions of the back and front members being in lapping relationship, and a bottom portion projecting from the lower edge of each said front and back members, each said lower edges being defined by a transverse line of score and said bottom portions being turned from said last-named lines of score toward each other to provide a container bottom having a dispensing slot therethrough, each said bottom portions having a second transverse line of score definitive of an edge in said dispensing slot and of an extension bent upwardly from said second transverse line of score into the container interior, said extensions being secured at their inner end portions to the inner walls of said front and back members and extending in converging relationship from said walls to the edges of said dispensing slot to afford a hopper-shaped support on which rests a stack of interfolded sheets placed in said container.

3. A paperboard, box-like container adapted for packaging and dispensing interfolded paper sheets and formed up from a precut and pre-
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scored blank comprising substantially similar front and back members, a top portion disposed between said front and back members and defined by a pair of parallel transverse lines of score constituting the upper edges of said front and back members, and defined by a pair of parallel transverse lines of score constituting the upper edges of said front and back members, a side wall portion projecting from each side of the front and back members and defined by a vertical line of score, the side wall portions of the back and front members being in lapping relationship, a bottom portion projecting from the lower edge of each said front and back members, each said lower edges being defined by a transverse line of score and said bottom portions being turned from said last-named lines of score toward each other to provide a container bottom having a dispensing slot therethrough, each said bottom portions having a second transverse line of score definitive of an edge in said dispensing slot and of an extension bent upwardly from said second transverse line of score into the container interior, said extensions being secured at their inner end portions to the inner walls of said front and back members and extending in converging relationship from said walls to the edge of said dispensing slot to afford a hopper-shaped support on which rests a stack of interfolded sheets placed in said container, and a tab projecting from each side of each said bottom portions and being defined by a line of score extending between said two transverse lines of score in each said bottom portions, each said last-named tabs being bent from its line of score and being secured to a corresponding side wall portion of said container.

4. A paperboard, box-like container adapted for packaging and dispensing interfolded paper sheets and formed up from a precut and prescored blank comprising substantially similar front and back members, a top portion disposed between said front and back members and defined by a pair of parallel transverse lines of score constituting the upper edges of said front and back members, a side wall portion projecting from each side of the front and back members being secured together in lapping relationship, a tab projecting from each side of said top portion and being defined by a line of score extending between said parallel transverse lines of score, each said tabs being bent downwardly from its line of score and being secured to a corresponding side wall portion of said back member, a bottom portion projecting from the lower edge of each said front and back members, each said lower edges being defined by a transverse line of score and said bottom portions being turned from said last-named lines of score toward each other to provide a container bottom having a dispensing slot therethrough, each said bottom portions having a second transverse line of score definitive of an edge in said dispensing slot and of an extension bent upwardly from said second transverse line of score into the container interior, said extensions being secured at their inner end portions to the inner walls of said front and back members and extending in converging relationship from said walls to the edge of said dispensing slot to afford a hopper-shaped support on which rests a stack of interfolded sheets placed in said container, and a tab projecting from each side of each said bottom portions and being defined by a line of score extending between said two transverse lines of score in each said bottom portions, each said last-named tabs being bent from its line of score and being secured to a corresponding side wall portion of said container.

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