

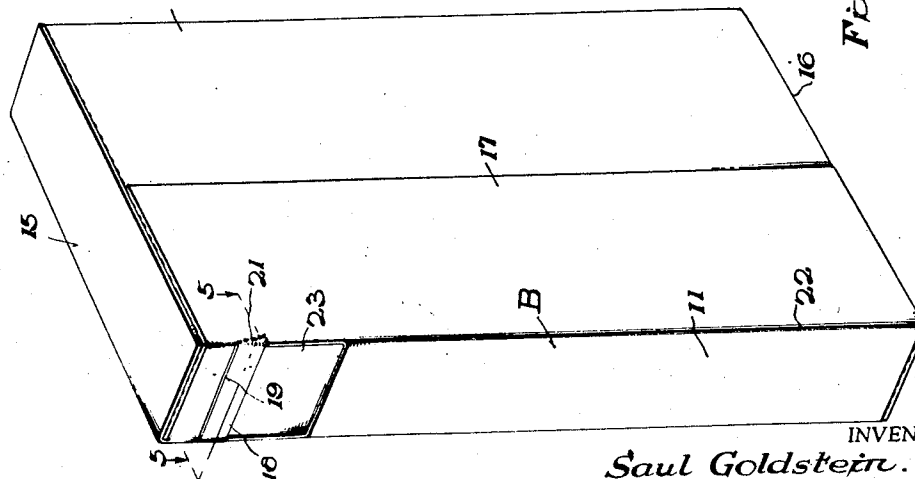
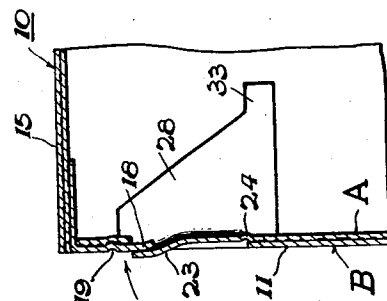
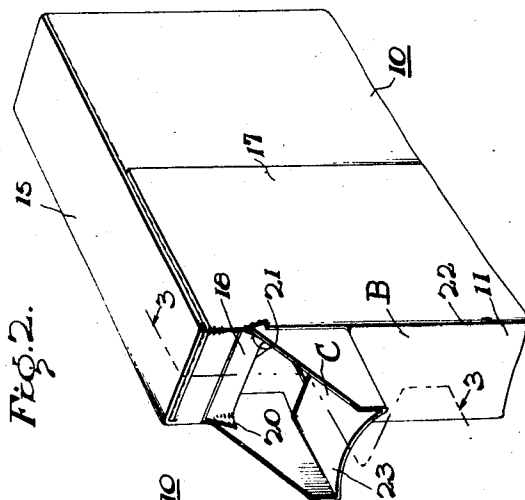
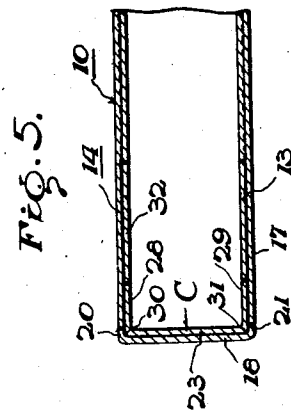
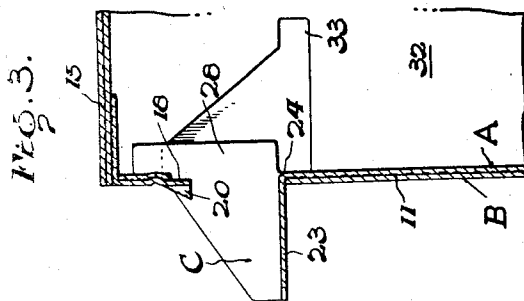
Feb. 8, 1955

S. GOLDSTEIN
DISPENSING CONTAINER

2,701,679

Filed Oct. 15, 1952

2 Sheets-Sheet 1



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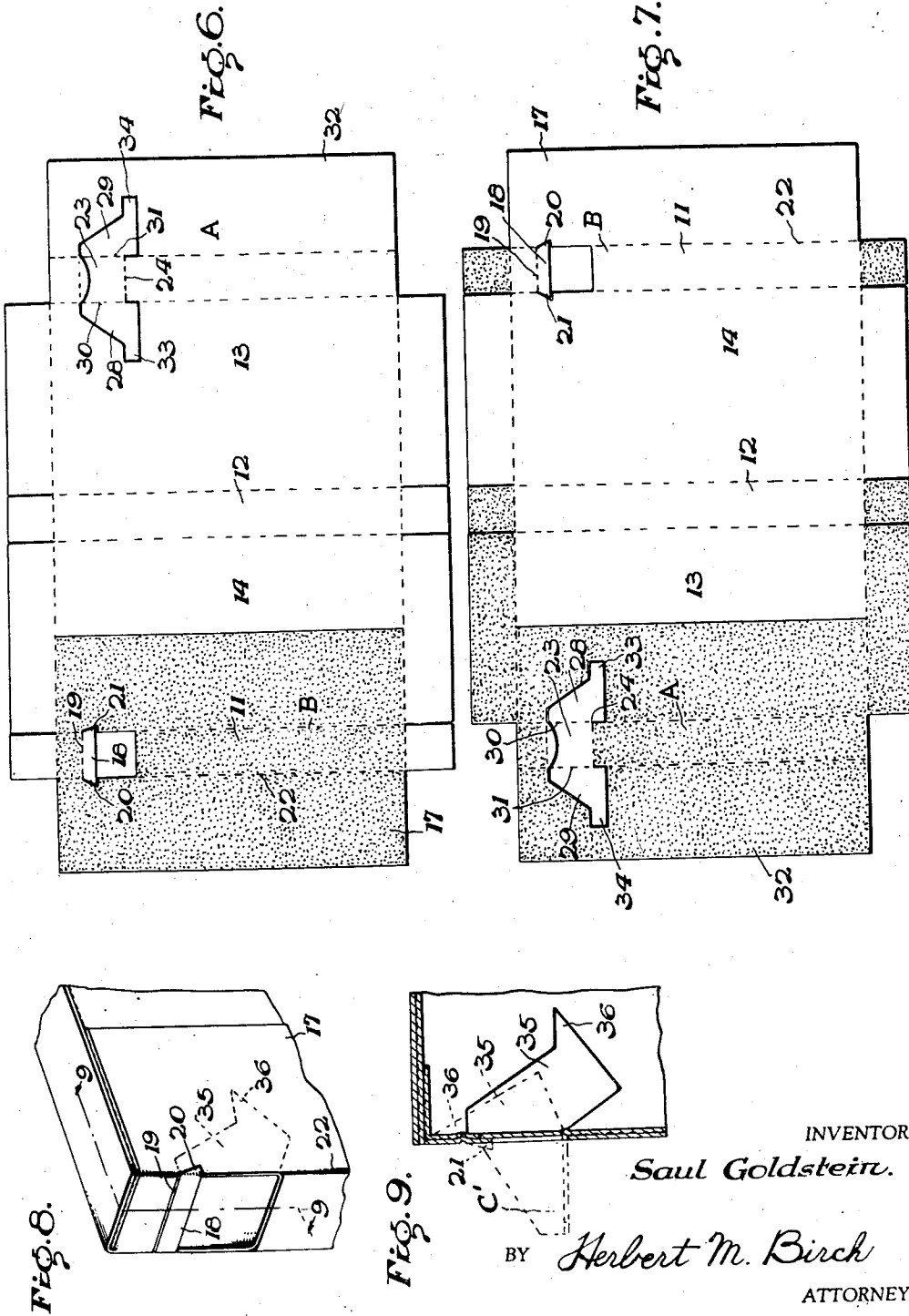
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2,701,679

DISPENSING CONTAINER

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2 Claims. (Cl. 229—17)

The present invention relates to a dispensing container having a pouring spout for discharge of the container's contents and is of the general nature of my prior Patent No. 2,576,595, issued November 27, 1951.

An object of the invention is to provide a single sheet of material for completely forming the container and the pouring spout in one line scoring and cutting process.

Another object is to provide stop means for limiting the open pouring position of the spout, which normally serves as a closure for the container.

Still another object is to provide means for retaining the pouring spout in open pouring position, until manually released to return the spout to container closing position. For example, heretofore such spouts when pulled out to pouring position tend to spring back to a partially closed position, thereby making the pouring process faulty and inefficient. Accordingly, a specific object of this invention is to so form a pouring spout from a side wall of the container as to frictionally engage with opposite sides of the container to thereby hold the spout extended in pouring position.

With the above and other objects in view, the invention consists in the construction, arrangement and combination of parts hereinafter described and particularly set forth in the claims.

In the drawings like parts throughout the several views are given like numerals and are thus identified in the following detailed description.

Figure 1 is a perspective view of a container set for use with the pouring spout in closed position and embraced by a spout controlling tab formed across the spout supporting side wall and from a minute portion of two adjacent opposite side walls.

Figure 2 is a similar view to Fig. 1 showing the spout in open position and frictionally held open by the spout control tab yieldably wedged between the wings of the spout.

Figure 3 is a cross section view taken along the section line 3—3 of Fig. 2 and showing a free side edge of the spout control tab urging the side of the spout into frictional engagement with an interior side wall of the container and the stop lugs of the spout in operating position.

Figure 4 is a longitudinal cross section view showing the spout closed against the control tab after the initial opening of the spout.

Figure 5 is a cross section view taken on the line 5—5 of Figure 1.

Figure 6 is a plan view of the inside of the blank from which the container and spout are formed showing the cut portions and score lines thereof.

Figure 7 is a plan view of the outside of the blank from which the container and spout are formed.

Figure 8 shows the spout cam or control tab closed over the upper lip of the spout in a second form of spout, such as in

Figure 9 which is a cross section on line 9—9 of Figure 8.

Referring in detail to the drawings and first with particular reference to Figure 1, there is illustrated a container 10. This container is rectangular and comprises four upright side walls herein given the general numerals 11, 12, 13 and 14, and top and bottom walls 15 and 16, see Figs. 6 and 7. One upright side wall of the container, for example 11, and a small portion of the connecting walls 13 and 14 at right angles thereto are of two plies, namely, A and B. The inner ply is indicated

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by A and the outer by B as in Figures 6 and 7. Corresponding parts of the plies A and B are glue-coated, so that when folded will come into face to face contact. The outer ply of the wall 11 is incised to form a rectangular opening partially overlapped by a tab 18 attached at the upper end to the outer ply B by a score line 19. Each free side edge 20 and 21 of the tab 18 includes a small part of the side wall 14 and the extended portion 17 pivoted to wall 11 by score line 22. These side edges 20 and 21 function as cam means for spreading apart the wing-like members hereinafter described of the pouring spout C, see Fig. 2.

The inner ply A of the wall 11 is incised to provide a rectangular panel 23. This panel is substantially equal in width to the width of the said wall and is divided into upper and lower sections. The upper section is pivoted to the lower section by a transverse score line 24 and the lower section is adhesively fixed to the outer ply B below said rectangular opening and the upper section above the score line 24 is positioned opposite to the opening, so as to be pulled through the outer ply opening when desired. Thus the lower edge of the outer ply opening, which is in alignment with the score line 24 when the carton is folded serves as a fulcrum for the pivoted rectangular section 23 when it is pulled outward to pouring spout position, see Figs. 2 and 3.

The pouring spout C comprises in addition to the pivoted rectangular section 23, side wing-like members 28 and 29, see Figs. 5, 6 and 7. These wing-like members are carried solely by section 23 and are pivotally connected by parallel score lines 30 and 31 along each longitudinal edge of said pivoted section 23. These members 28 and 29 are formed together with stop lugs 33 and 34 from a part of side wall 13 and inner ply panel 32 adjacent wall 14 when folded, shown in Figures 6 and 7 as a blank or in Figure 5 when folded.

Embodiment 2

A second embodiment of the present invention is illustrated in Figures 8 and 9, wherein the stop lugs and wing-like members are formed differently, so as to provide greater frictional resistance or braking action to opening and closing the spout C'. The stop lugs 36 are best shown in solid and dotted line positions in Figure 9, which the wing-like members 35 show in either figure. The remaining parts are identical with embodiment 1.

Operation

The forming of the blank into the container or carton is believed clear from the drawing, that is, it is folded on the score lines so that ply B overlaps ply A and becomes glued together by facing adhesive coated portions.

After assembly the spout will appear for form 1 as in Figure 1, and for form 2 as in Figure 8. All that is required to use the pouring spout is to raise the cam tab 18 and pull out the panel 23 of the spout C until stopped by the stops. During this pull out action the cam edges 20 and 21 force or spread apart the wing-like members into frictional engagement with the sides 13 and 14 and firmly hold the spout in operative position for efficient pouring.

After a desired quantity of substance to be dispensed has been poured from the container, the spout C is pushed into closure position with the upper free edge of panel 23 overlapping the cam tab 18, see Figure 4.

Although only two embodiments of the present invention have been illustrated and described, it is to be expressly understood that various changes may be made without departing from the scope of the invention. For example, changes may be made in the particular materials and shapes specified of the parts, as will be readily understood by a person skilled in the art. For a definition of the scope of the invention, reference is had primarily to the appended claims.

What is claimed is:

1. A pouring spout for cartons having a relatively narrow side upright two-ply wall with respect to the attached right angular relatively wider side walls, comprising a pivoted rectangular panel incised transverse the width of the inner ply of said narrow wall and being

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substantially equal to the width of said wall, side wing-like members pivoted solely to said panel, a rectangular opening formed in the outer ply of the narrow wall corresponding to the size of the said pivoted panel, and a cam tab lapping the top of said opening attached at the upper end to the outer ply of said narrow side wall by a score line, said tab including a pair of cam means comprising a small part of each of said relatively wider side walls along each side edge of the tab, said cam means frictionally engaging the interior sides of said wing-like members and spreading said members into frictional engagement with the said relatively wider side walls of the container when the spout is pulled out into pouring position.

2. A container for use in dispensing a substance, said container being fabricated of a single sheet of material having side walls and relatively narrow end walls, one upright end wall thereof being two plies in thickness, the outer ply of said one end wall being incised to form a rectangular opening partially closed by a tab attached at the upper end of the outer ply by a score line, a rectangular panel substantially equal in width to said one end wall incised from the inner ply of said one end wall, said panel being divided into lower and upper sections, said upper rectangular section of the panel being pivoted to the lower section of the panel by a transverse score line, the lower of said sections being coated with adhesive and adhesively fixed to said outer ply below said rectangular opening and the upper of said sections being positioned opposite to said outer ply opening and substantially equal in size to said opening, the lower edge of said outer ply opening being in alignment with the said transverse score line of said rectangular inner ply panel whereby said upper section of the rectangular panel

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may be downwardly and outwardly displaced over the said lower edge of said outer ply opening to form the bottom of a pouring spout, said lower edge of the outer ply opening serving as a fulcrum for said upper section of said panel, wing-like members carried solely by said rectangular panel, said wing-like members being pivotally connected to said panel by parallel score lines along each longitudinal edge of said upper panel section, stop lugs carried by said wing-like members engageable with the inner ply of the wall portion above the top edge of said rectangular opening when the upper section of the rectangular panel is pulled outward through the said rectangular opening in the outer ply, and extended side edges integral with said tab, said side edges being formed from each side wall of the container contiguous to said upright two ply end wall, said tab with said side edges being slightly wider than said upper section of said panel, said side edges of the tab frictionally engaging between the interior sides of the said side wing-like members and forcing them into frictional engagement with the side walls of the container connected at right angles to said one end wall.

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