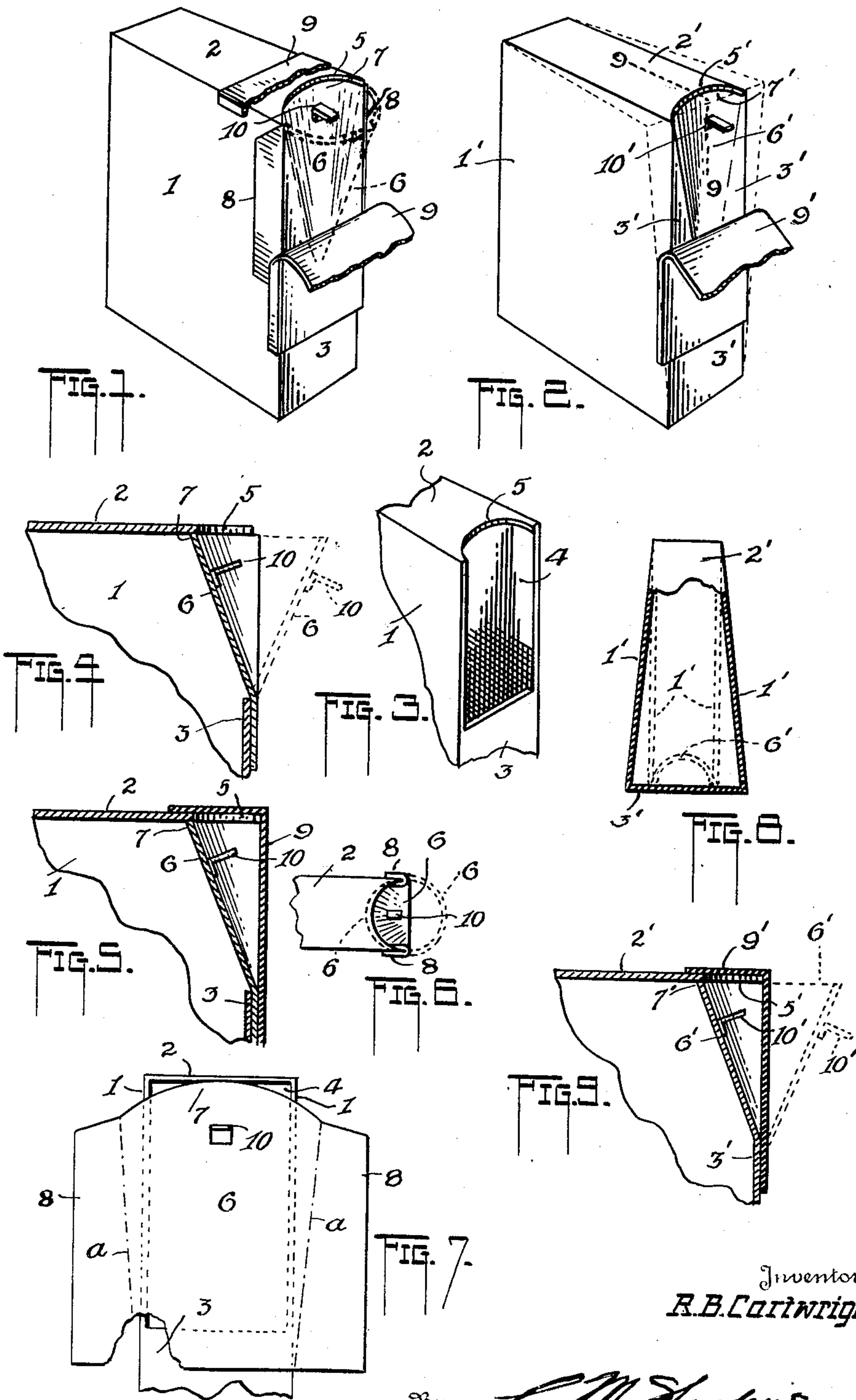


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DISPENSING CONTAINER

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DISPENSING CONTAINER

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This invention pertains to paper boxes for packaging cereals or other dry flowable materials. More particularly the invention is directed to the structure in boxes or packages of relatively stiff paper wherein a portion thereof serves alike as a pouring spout, and as a closure member.

In the present instance a portion of the structure is so constructed and arranged as to lie adjacent the top wall of the box and in one position thereof to cooperate with said wall to form a closure while in another position form a pouring spout.

In addition, the structure employed is such that an air tight seal for the housed contents of the package is provided as will appear herein aided by the appended drawing forming part hereof wherein:

Figures 1 and 2 are perspectives of a box of the present invention and wherein the two serve like purposes but differ slightly in structure one from the other.

Figure 3 shows in perspective a portion of the box of Figure 1 as it appears during fabrication.

Figure 4 is a vertical section of the box of Figure 1.

Figure 5 is also a vertical section of the box according to Figure 4 showing the completion of the sealing thereof.

Figure 6 is a plan of a portion of the box of Figure 1 showing two positions of a portion that forms a pouring spout, as well as a closure for said box.

Figure 7 is an elevation of one of the narrow sides of the box of Figure 1 and the position thereof of a closure portion prior to its attachment to said box.

Figure 8 is a plan of the box shown in Figure 2 during its fabrication, and

Figure 9 is a vertical section of the box as produced on line 9—9 of Figure 2.

Paper boxes for packaging cereals in loose form, and other dry flowable commodities, usually, as is known, are constructed of relatively thick paper for providing sturdy packages, and are flat in form and whose broad sides are connected by narrower sides, and flat top and bottom portions.

In accordance with the present invention, one of the narrow walls of the box, referred to as the front wall, is provided with a flexible upper portion connected to the side walls of the box but free to move relative to the top wall of the box, this flexible portion being in one position centrally depressed inwardly to form a closure and in another position outwardly extended to form a pouring spout. When depressed inwardly, said flexible portion of the front wall forms a closure

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with the top wall of the box. When extended outwardly to form a spout, the flexible portion also allows introduction of a discharge nozzle for filling of the box with a commodity. That this may be understood reference is had to Figures 1 and 3, for example, wherein one of the broader sides of the box is denoted at 1, while 2 is the top portion or wall.

In constructing the box a lower part only of a front narrow wall is employed, an opening 4 being thus left below and extending to the plane of said top wall, see Figure 3, and, in addition, said top wall is recessed as at 5 so that a wider gap is provided at the top corner of the box where, ordinarily, the top and narrow wall meet. At the gap thus created is placed a flexible portion 6 by which such gap may be either exposed or closed, as desired. In this connection attention is directed to Figure 7 wherein said portion 6 is shown in its developed form, or before its attachment to the box. It is noted that the top edge 7 thereof is preferably arched and lies between dotted lines, *a, a*, of that figure, while opposite flap portions 8 extend beyond or outward from said lines *a, a*.

It is also noted that the edge of the arched portion 7 may lie substantially flush with the top 2 of the box, while the lower edge of said portion 6 extends below the edge of the side 3 at the named opening 4.

Since this portion takes up two opposite positions its lateral measurement, as shown in Figures 2 and 6, must be such that it may lie within the box beneath to top 2 as in Figures 4 and 5, adjacent or beyond the recess 5, as well as to lie outward from the box to serve as a pouring spout. Consisting of fairly heavy paper this said portion is secured at its lower edge by gluing or cementing it to the wall 3, while the flaps 8 are likewise affixed to opposite walls 1. In thus attaching the material the flaps in being drawn toward each other for their attachment, thus provide the required "fullness," the material at the dotted lines *a, a*, being abutted upon the upright box corner.

The upper arched edge of the said portion appears somewhat as in Figure 7 when said portion lies midway of its extremes of swinging movement, but when lying at either extreme said edge substantially parallels the plane of the top 2 at the recess 5, or, as shown, it may lie beneath said top beyond the recess, the arched edge of the portion 6 in the position shown in Figure 4 taking a straight line when the portion lies at either of its extreme positions.

In attaching the portion 6 to the front side

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or wall 3 to close the opening 4, said portion, for practical purposes, may be considered a continuation of said side.

It is the desire of all manufacturers and distributors that materials packaged shall be kept air tight, and as moisture proof as possible. As an aid to such desire an additional closure is shown in Figures 1 and 5. That is to say, a strip of material 9 may be affixed to the box to overlie the position of the portion 6 and the adjacent top corner of the said box.

The box shown in Figures 2, 8 and 9 follows the intent of the earlier figures. In this form, however, the box during its manufacture may be so manipulated that the corner thereof to carry the pouring spout is initially made wider than the balance thereof. That is to say, in Figure 8 and the box sides are denoted at 1', the top and front sides being represented at 2' and 3' respectively, and as before a recess 5' is provided in the former. It is observed that the width of said front side or wall 3' at its lower portion is the width of the box to be completed. However, its upper portion as well as the top portion adjacent thereto are wider than the box to be finished as denoted by the broken lines in Figures 1 and 8. By means of a suitable die, or other means, not shown, the said front wall 3' is then buckled to an extent sufficient to bring the opposite walls 1' into parallelism thus creating the spout portion 6' as an integral part of the structure, and which, as before, may be moved to opposite extreme positions, the top edge of said portion 6' having the arched form also, as in Figure 7, to provide a tight closure beneath the top 2' when said portion passes inwardly beyond the recess 5', this also being true in Figure 1.

As the completing step a strip 9' may be provided to cover the position of the portion 6' as described in respect to the form first described.

Though of no importance here, it may be stated that, naturally, the top 2' is also widened at the spout position. But since, during the manufacture of the box, the top is usually of an open flapped construction it can be readily adapted to conform to the final proper width to conform with the balance of said box.

Quite naturally, the material as cut for the second form described will provide for the arching of the wall 3' at 7' for the purpose already brought out herein.

It is thus seen that the box or package as provided can be readily supplied with the material and the latter can as readily be poured.

That the portion 6 may be more readily withdrawn outward to its dispensing position, if desired, a pull tab 10 may be affixed thereto as in figures of the first form described, this tab being denoted also at 10' in Figures 2 and 9 of the second described form.

It is to be stated that the recess 5, 5' in the top 2, 2' is desirable when the material stored is of large type such as corn flakes, said recess and the recess created by the open spout portion permitting a free flow; a material of smaller particles, as corn meal, for example, will flow freely without providing or requiring said recess 5, 5'.

What is claimed is:

1. A rectangular container including parallel

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side walls, a front wall connecting said side walls, and a top wall having a recess extending rearwardly from the plane of the front side of the container and opening upon said front side, part of said front wall being flexible and arcuately curved in a lateral direction adapted to swing with respect to side walls and lying between the same in one position thereof in close proximity to the margin of said top wall at said recess forming with said top wall a closure for the container, and in another position lying outward from the plane of said front side of the latter in spaced relation to the said margin of the top wall providing an escape opening for the contents of said container.

2. The structure defined in claim 1 including a sealing member affixed to the container overlying part of the top wall and covering the front side of said container when the flexible part of the front wall is in the position first named.

3. A dispensing container comprising a top wall, spaced parallel side walls joined to said top wall, and a front wall, said front wall including a flexible upper centrally depressed portion joined at its side edges to said side walls but being free to move relative to said top wall, said upper depressed portion of said front wall presenting an inwardly curved outer face, the depth of such curvature increasing progressively toward said top wall, the upper edge of said flexible portion abutting the under surface of said top wall to form a closure, and exposed pull tab means carried by said flexible upper portion of said front wall whereby the curvature of said flexible upper portion may be reversed to form a pouring spout presenting a convex outer surface.

4. A dispensing container comprising a top wall, spaced parallel side walls joined to said top wall, and a front wall, said front wall including a flexible upper centrally depressed portion joined at its side edges to said side walls but being free to move relative to said top wall, said upper depressed portion of said front wall presenting an inwardly curved upwardly flaring outer face, the depth of such curvature increasing progressively toward said top wall, the upper edge of said flexible portion abutting the under surface of said top wall to form a closure, whereby upon reversing the curvature of said flexible upper portion a tapered pouring spout is formed presenting a convex outer surface.

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