Feb. 6, 1945. A. MOLET 2,368,864

CARTON

Filed Oct. 29, 1942

Fig. 1

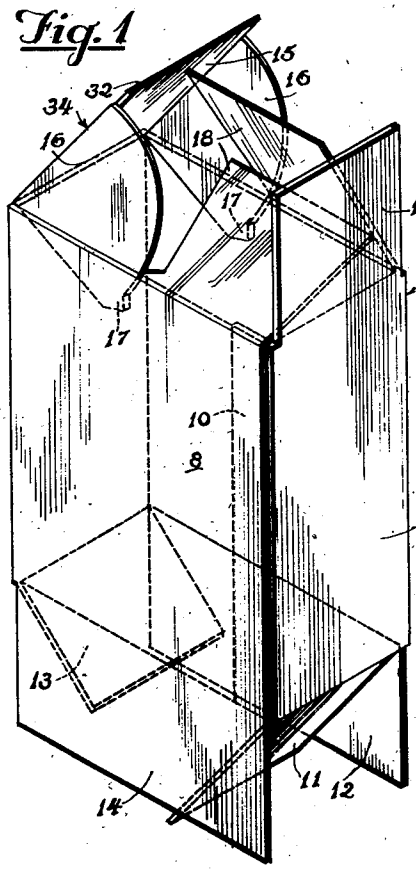


Fig. 2

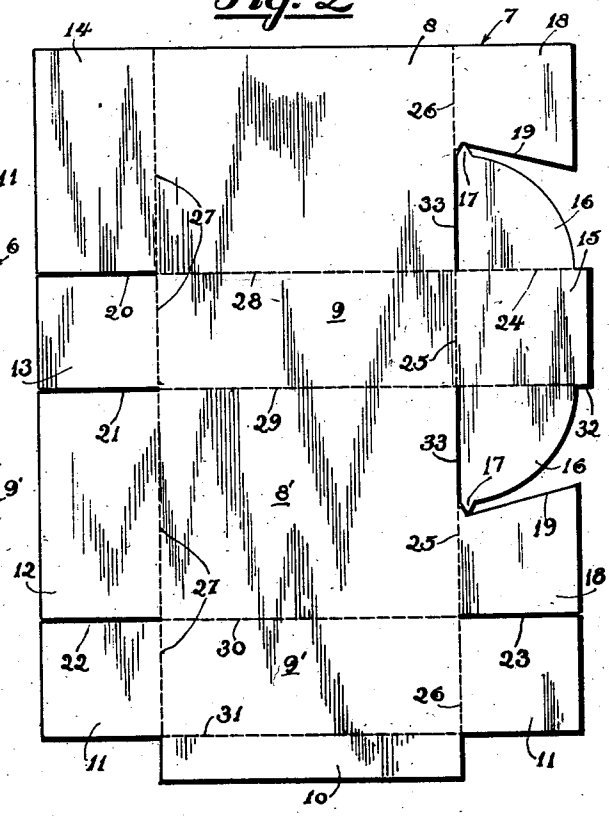


Fig. 3

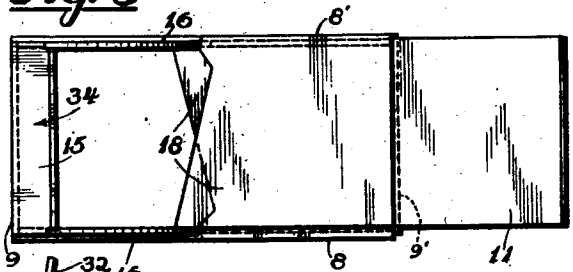


Fig. 4

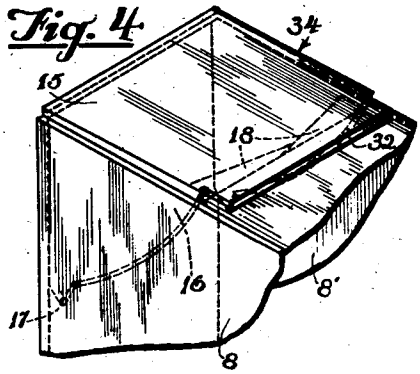
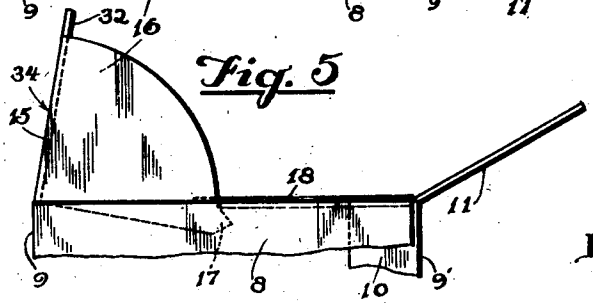


Fig. 5



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2,368,864

CARTON

Arthur Molet, Chicago, Ill.

Application October 29, 1942, Serial No. 463,728

2 Claims. (Cl. 229—17)

This invention relates to a carton of the type involving a closure which when in its open position provides a pouring spout, and has for its primary object means for guiding and controlling the movement of said closure, the said carton being formed from one blank of material.

Attempts have been made prior to this invention to form a closure type of pouring spout in cartons, however, the same proved objectionable for various reasons, one reason being that in most instances such closures while they provide an opening for pouring out the contents, they did not provide satisfactory closure means.

In prior art attempts, no guides have been provided for the side wings of the pouring spout or closure, and for this reason the said side wings would be forced together by the material or contents within the carton, especially, if the same were of a granular nature, which would tend to wedge in between the said side wings and the wall of the carton, thus defeating the purpose for which the closure was originally provided.

My invention is so constructed that the carton is provided with guide ways for guiding the side flaps or wings of the closure in their movements, and for frictionally engaging the same in cooperation with the wall of the carton for maintaining the closure in a closed position.

Other feature, objects, and advantages resident in my invention will become apparent from an examination of the accompanying drawing in connection with the ensuing description wherein like numerals or symbols are used to designate like parts and in which;

Fig. 1 represents an isometric or perspective view of my invention showing the top and bottom thereof partially completed so as to more clearly elucidate the nature and construction of my invention.

Fig. 2 is a view showing the method of cutting the blank needed to construct or manufacture a carton in accordance with the teachings of my invention.

Fig. 3 is a top view of the view shown in Figure 5.

Fig. 4 is an enlarged fragmentary view in perspective of the closure means comprising the essential part of my invention.

Fig. 5 is a fragmentary front view of the top portion of the carton comprising my invention.

Referring to the drawing, Figure 1 illustrates a carton generally designated 6 comprising my invention which is almost completely folded to illustrate the nature of the construction. Referring to Figure 2, I will attempt to elucidate the manner of cutting the blank generally designated 7 in order to permit folding to such shape as indicated in Figure 1. The blank is made up of a series of walls 8, 8', 9 and 9'. The wall 9' extending somewhat further and providing a sealing tab 10 which permits securing the same to the wall 8 in order that the body of the carton be formed when folded over the weakened portions 28, 29, 30, and 31. The sides of the walls, 8, 8', 9 and 9' respectively, are scored as at 27, 26, and 25 in order to weaken the carton material and to permit folding the same on the said weakened lines.

Adjoining the edges 27, the flap portions 14, 13, 12 and 11 are integrally secured to the respective walls 8, 9, 8' and 9', the said flaps being separated by the incisions 20, 21 and 22 thus folding over as indicated in Figure 1 to form the bottom of the carton. In the standard carton, the top portion is similarly formed so that the carton is similarly closed on the top and when opened will not provide a pouring spout nor a closure for closing the same and thus will not prevent dust, dirt and other objectionable matter within the atmosphere from admixing with the contents.

In order to permit a construction of a carton such as my invention provides, the blank for the top portion is cut as indicated at the right hand side of Figure 2, and it indicates a flap 18 which is but a portion of an imaginary flap similar to the one designated 14 on the opposite side. The closure spout is formed from material taken from adjacent flaps in order to form the resultant flaps 18 and thus provide the central flap 15, which is hinged at 25, with side wings 16 having heel portions 17 by virtue of the incisions 33 cut co-linearly with the weakened portions 25 and 26

The flap 15 is also scored at 24 in order to weaken the same and permit the wings 16 to be folded at right angles thereto. The recesses formed by the heel portions 17 are connected to the edge of the flap 18 by bias lines 19 convergent toward one another. It is also to be noted that the central flap 15 is provided with an extension 32 which may be covered with glue or other sealing material so that when the carton is filled and closed for distribution, the seal will be of a more or less permanent nature, yet when the carton is to be distributed to consumers, the consumers by breaking the seal portion under the flap 32 will have a pouring spout and closure which will open up almost to an erect position because the wings 15 span substantially 90°, and thus provide a good sized opening.

The edges 19 of the flaps 18 will be folded over in a manner so as to provide a frictional guide way between the edges 19 and the inner portion of the walls 8 and 8' of the carton, thus from the very beginning of movement of the closure, the wings 16 will be caused to move in a direction closely adhering to the inner portions of the walls 8 and 8', especially, if the carton is to be filled with granular material which would have a tendency to wedge between the wings 16 and the inner portion of the walls 8 and 8' causing the flaps or wings 16 to converge toward one another and defeat the purpose of providing a sanitary seal.

It is contemplated that the guide ways being also sufficiently narrow and restricted with respect to the closure flaps 16, so that sufficient frictional resistance will be afforded for maintaining the closure spout 34 in its closed position, at the same time the wings will be maintained from becoming distorted by contents within the carton wedging between the walls and the wings when the said closure is operated.

My invention, primarily, provides a closure which has the auxiliary attributes of furnishing a pouring spout at the same time.

Altho, I have indicated a preferred form of my invention and inasmuch as it is susceptible of many alterations, modifications and improvements, I reserve the right to all such alterations, modifications and improvements which come within the scope and spirit of my disclosure and within the purview of the foregoing description; my invention to be limited only by the subjoined claims.

Having thus described and revealed my invention what I claim as new and desire to secure by Letters Patent is:

1. A carton blank comprising, a number of wall portions, flap portions hingedly secured to opposed edges of each of said wall portions, and a pouring spout and closure blank portion comprising, an intermediate flap portion having hingedly secured thereto wing portions shaped to the configuration of a quadrant of a circle, the said wing portions formed from material taken from flap portions adjacent said intermediate flap portions, the edges of said adjacent flap portions adjacent the said wing portions converging toward each other and having their free ends spaced from one another a distance less than the spaced distance of the free ends of the said wing portions, the length of each of said adjacent flap portions being less than the width of the said intermediate flap portion only substantially to the extent of the thickness of one of said wing portions.

2. A carton formed from a single blank comprising, a pouring spout and closure integrally hinged with one wall of the carton and adapted for closing a portion of the top of the carton, said spout having side wings slidable against the interior surfaces of opposite walls of the carton, and flaps integrally hinged with the upper ends of said opposite walls and folded in overlapping relationship for closing the remainder of the top of the carton, each flap having its edge adjacent said spout cut on a bias from a point in its hinge portion adjacent one edge of an adjacent wing to the opposite edge thereof in the direction of the spout so as to clear the edge of the wing of the spout adjacent the hinge and overlap the inner face of the other wing for the purpose set forth.

ARTHUR MOLET.