

June 19, 1923.

1,459,110

J. LOUFEK

PAPER CARTON

Filed Dec. 8, 1921

Fig. 1

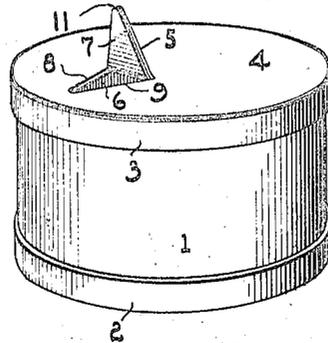


Fig. 2

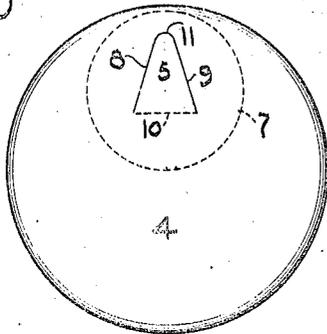


Fig. 3

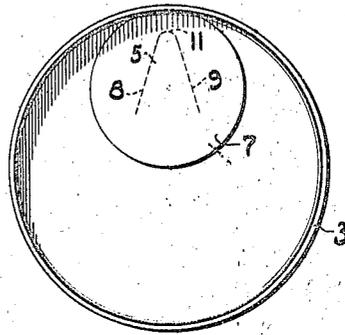


Fig. 4

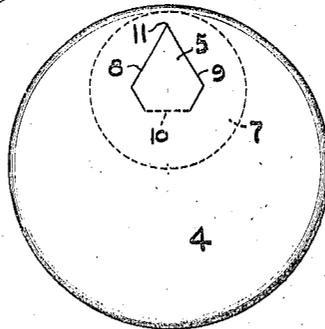


Fig. 7

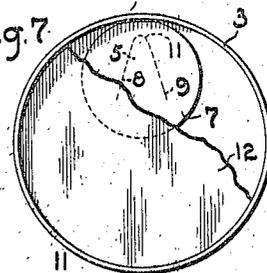


Fig. 5

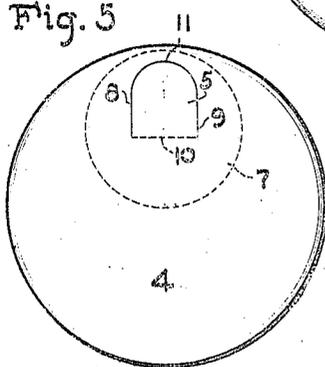
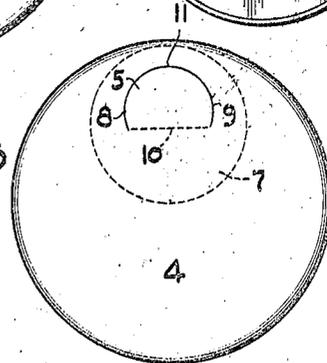


Fig. 6



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JOSEPH LOUFEK, OF KEOKUK, IOWA, ASSIGNOR TO IOWA CAN COMPANY, OF
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PAPER CARTON.

Application filed December 3, 1921. Serial No. 520,999.

To all whom it may concern:

Be it known that I, JOSEPH LOUFEK, a citizen of the United States, residing at Keokuk, in the county of Lee and State of Iowa, have invented a new and useful Paper Carton, of which the following is a specification.

This invention relates to containers, and is more particularly directed to closures for containers whereby ready access to the contents of the containers may be had.

It is old in the art to outline closures for containers by perforations or slits in order to direct or indicate certain lines for cutting the unutilized portions of the containers for releasing the closures. The disadvantage of such a construction is that not only the contents of the container are exposed to the atmosphere but the contents seep through the perforations.

It has also been proposed to construct separate closures made independently of the containers and secured in place by a seal cemented on the outer surface of the container and over the opening. This construction has its disadvantages since the weight of the contents of the container, when thrown directly against the cemented portion of the seal will force the closure open, if the cement is weakened by moisture or by any other cause. Furthermore, the seal being cemented to the outer surface is in danger of being abraded or weakened by wear in handling or contacting with the surfaces of other containers when packed in crates.

It is an object of this invention to provide a new and improved closure or flap which is partly cut from the material of the container, and which is held in place by a seal applied to the inner surfaces of the closure and the wall of the container so that whether the seal be thoroughly cemented or not, the weight of the contents of the container will exert sufficient pressure upon the seal in cooperation with the rigidity of the closure or flap to maintain the seal fast against the inner wall of the container.

It is a further object of this invention to provide a new and improved closure or flap for a restricted opening in some part of the container which is partially stamped out from the material of the container, leaving an uncut portion forming a hinge for the closure. The closure is maintained in closing position in the opening by a seal, which functions not only as a means for retaining the

closure in place and as a supplementary closure for the opening, but provides a reinforcement for the material connecting the closure to the container, and which material forms a hinge upon which the closure swings.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing in the drawing, but may be changed and modified so long as such changes and modifications mark no material departure from the salient features of the invention as expressed in the appended claim.

In the drawing:—

Fig. 1 is a view in perspective of the container provided with a slip cover with the closure in open position.

Fig. 2 is a plan view of a slip cover showing the closure defined by a single angular cut.

Fig. 3 is a bottom plan view of a slip cover showing a seal cementing the closure in place.

Figs. 4, 5 and 6 are plan views of slip covers showing the various forms of closures that may be used.

Fig. 7 discloses a modification of the seal, the figure being on a reduced scale.

Referring more particularly to the drawing, 1 indicates a package or carton of cylindrical shape adapted to be employed as a container for granular salt or other granular material, and is provided with a bottom slip cover 2 cemented to the same, and a top slip cover 3 which is adapted to be cemented to the container after the carton has been charged with some kind of material. The top 4 of the slip cover 3 is stamped by some cutting tool to cut out two sides of a tongue, flap or closure 5, shown in V-shape in Figs. 1, 2 and 3, but which may be of any one of the designs disclosed in Figs. 4, 5 and 6, nevertheless the shape of the closure 5 being immaterial. The cutting of the top 4 to form the tongue or flap provides a restricted opening 6 in the slip cover 3, whereby the contents of the container 1 may be poured from the same, the tongue or closure 5 functioning as a spout and aiding in directing the flow of the material pouring from the container.

The tongue or flap 5 is held in position upon the underneath side of the slip cover 3 by means of a seal 7 made of relatively stiff paper, one of the surfaces of which is provided with some form of cement. The disk or seal 7 has a greater area of surface than the closure. The cemented or adhesive surface of the seal is moistened and applied to the inner surface of the slip cover 3 and the inner surface of the closure 5 so that the seal will embrace a sufficient portion of the material surrounding the opening 6 to maintain the seal in place. The seal is also adapted to cement the closure 5 within the opening 6 of the slip cover 3, so that the closure when locked in place forms with the top 4 a substantially unbroken surface.

The cover 3 is now in condition to be applied to the container 1 to retain the contents of the container, and is therefore sealed to the container in the same manner as is the bottom slip cover 2.

When it is desired to remove the contents of the container, a sharp knife or other implement is forced along the cut portions 8 and 9, defining the closure or flap whereby the seal 7 is cut through along these lines, when the free end or lip 11 of the closure 5 may be pried upwardly by means of a knife and the closure bent back upon the dotted lines 10 shown in Figs. 2, 4, 5 and 6, where it serves as a spout.

It will be seen that a portion of the seal 7 defined by the edges 8 and 9 of the closure 5 will remain cemented to the closure 5 and thereby form a reinforcement for not only the closure, but for that portion of the slip cover which connects the closure 5 with the top 4 of the slip cover and defined by the dotted line 10 of Figs. 2, 4, 5 and 6. The dotted line portion 10 provides a hinged connection between the closure and the slip cover. By this reinforcement, the lip is not readily torn from the slip cover or the material broken at the dotted line or hinged portion 10 of the closure.

It frequently happens in handling containers filled with material, that the containers may be inverted with the top cover 3 bearing the weight of the contained materials. The weight of the contents being thrust against the top closure 3, will likewise bear against the closure 5, tending to force the closure to an open position and spill the contents of the container, but since the seal 7 is cemented to the inner surface of the top closure 3, the weight of the material will be equally borne by the seal and the closure and more firmly lock the seal in place. Furthermore, there is some rigidity in the tongue 5 per se and also in the hinged portion 10 of the closure, and as the closure 5 is securely fastened to the seal 7, it will also cooperate with the seal in resisting the breaking of the seal.

In Fig. 7, I have shown a parchment sheet 12 completely covering the inside of the cover 3 and applied over the sealing disk 7, and this may sometimes be employed either as a further protection, or in lieu of the disk 7. In the latter case, the parchment sheet will act as a seal.

What is claimed is:—

A container having a wall, provided with a restricted opening, a hinged closure or flap for said opening cut from the material of said wall and provided with an uncut portion continuous with the wall and functioning as a hinged mounting for the closure, and a seal cemented to the closure and to the inner surface of the wall of the container for closing the opening and maintaining the closure in the plane of the wall and forming when cut along lines defined by the periphery of the closure a reinforcement for the closure and the hinged mounting, said seal, wall and closure, cooperating to maintain the closure in position within the confines of the opening against internal pressure.

In testimony that I claim the foregoing as my own I have hereto affixed my signature.

JOSEPH LOUFEK.