June 5, 1934. E. P. HERRMANN 1,961,559

PAPER CONTAINER

Filed Dec. 30, 1932

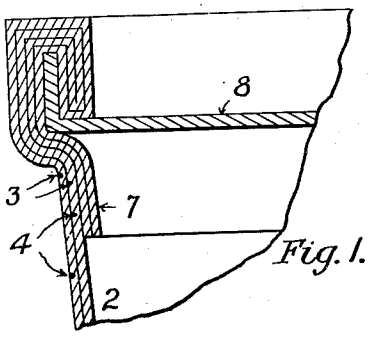


Fig. 1.

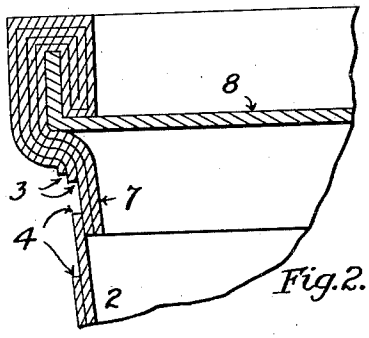


Fig. 2.

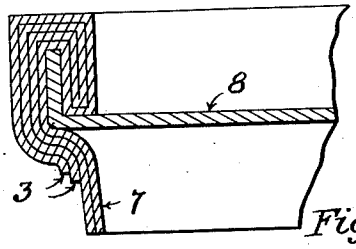
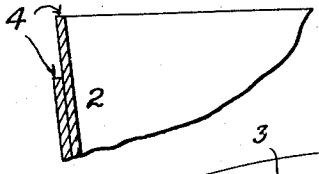


Fig. 3.



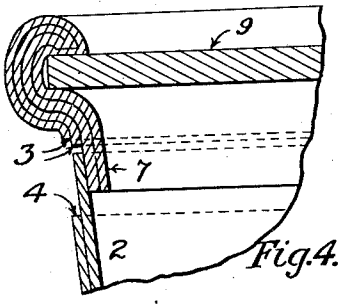


Fig. 4.

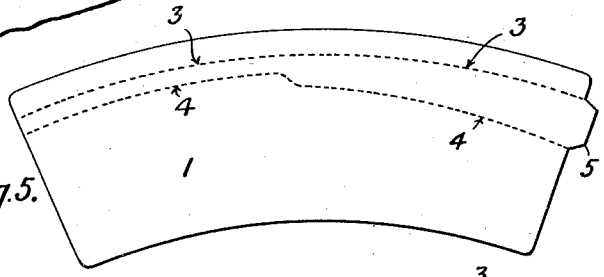


Fig. 5.

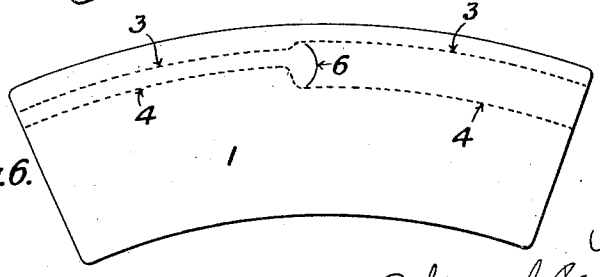


Fig. 6.

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UNITED STATES PATENT OFFICE

1,961,559

PAPER CONTAINER

Edmund Paul Herrmann, Orange, N. J.

Application December 30, 1932, Serial No. 649,647

2 Claims. (Cl. 229—51)

This invention relates to paper containers such as are described in the application of Elmer Zebley Taylor Serial No. 570,427 filed 22nd October 1931, and my own prior application Serial No. 632,598 filed 10th September 1932, and comprising in each case a conical double-walled body in one end of which a bottom is secured. After filling, a closure is to be applied to the other end, and special means are described in both of the said prior applications for subsequently opening the container, consisting in the formation of two weakening lines around the part of the blank which forms that end of the body at which the container is to be opened, so that the portion between such weakening lines can be torn out, thus enabling that end of the body and the closure secured therein to be removed, exposing the contents for use as required.

In the preferred form described in the two prior applications above referred to the container is intended to be opened at the smaller end, but according to the present invention the container is to be opened at the larger end, the construction being such that the removed end with the closure secured therein can if desired be conveniently used as a closure fitting inside the upper end of the opened container.

The invention is illustrated in the accompanying drawing, in which Fig. 1 is an enlarged view of part of the upper end of a container formed according thereto, Fig. 2 a similar view when the removable strip has been torn out, Fig. 3 a similar view showing the portion to be used as a cover completely detached and ready to be used as a cover, and Fig. 4 a modified arrangement in which a disc closure is employed instead of the flanged closure shown in Figs. 1, 2 and 3, the detached cover portion being however here shown in position as a cover. Figs. 5 and 6 are plan views of the blank for the body, and illustrate two suitable arrangements of the weakening lines.

Referring to Fig. 5 of this drawing it will be seen that as in the application of Elmer Zebley Taylor Serial No. 570,427 above referred to the blank 1 for the conical body 2 of the container is formed with two weakening lines 3, 4, of which the line 3 is approximately parallel with the edge of such blank 1, while the line 4 preferably as shown extends parallel therewith for that portion of the blank which when rolled up forms the inner wall of the container, and then is arranged spirally around the part forming the outer wall, and that a tab 5 is formed on the end of the blank between such weakening lines 3 and 4, the object being that, when the container is to be opened, on grasping the tab 5 the strip between the weakening lines 3, 4, can be torn out, leaving the upper end of the container, above the weakening lines, free to be removed.

Fig. 6 shows the modified arrangement of the weakening lines 3, 4, described in the specification of my prior application Serial No. 632,598 above referred to, and in which it will be seen that such weakening lines are arranged parallel with each other and with the edge of the blank 1 in that portion of the latter which forms the inner wall of the container, and wider apart but also parallel with each other and the edge of the blank in the portion to form the outer wall. In this case there is no tab 5 on the edge of the blank, but a cut 6 is made through such blank at a suitable point so that when the container is to be opened the edge of such cut, forming a tab, can be grasped, and by pulling same along the weakening lines in both the inner and outer walls at once, the opening is completed by a single turn around the container instead of the two turns necessary when the weakening lines are arranged as shown in Fig. 5.

In the manufacture of the improved container the blank 1, with either of the arrangements of weakening lines 3, 4, described, is rolled up to conical form, and a closure is applied to the smaller end thereof, but does not constitute a feature of the present invention. To complete the container a suitable formation is applied to the larger end, which is first turned inwardly so that its upper edge extends downwardly inside the container to a point below the lowermost of the weakening lines in the inner wall of the rolled-up body, as shown at 7 in Figs. 1 and 2. This doubled-in upper edge of the container is pressed out to a form suitable for the style of closure to be used, which may either be of the flanged type shown at 8 in Figs. 1, 2 and 3, or of the flat disc type shown at 9 in Fig. 4.

The completed container thus obtained is subsequently filled with the commodity for which it is intended, and the closure 8 or 9 applied, and the upper doubled-in edge is then turned over inwardly to secure such closure in place, as clearly shown in Figs. 1, 2, 3 and 4.

When it is desired to gain access to the contents it is only necessary to tear out the strip of the double wall between the weakening lines 3, 4, Fig. 1 showing the container before this is done, while Fig. 2 shows such strip removed. In Fig. 3 the upper end of the container, with the closure 8 secured therein, is shown entirely separated, and it will be seen that should it be de-

sired to close the container again if all the contents have not been removed, the depending edge 7 can as shown in Fig. 4 be entered into the remaining upper end of the container, and will form a practically airtight seal to protect the contents until again required.

What I claim and desire to secure by patent is:—

1. A conical paper container comprising a double-walled body and suitable end closures, the upper portion of the doubled wall of the body being doubled and turned inwardly and extending downwardly to a point below the lower side of the closure to be secured therein, and weakening lines being formed around the walls of the container to enable the portion between such weakening lines to be torn out, the thus separated upper end of the container subsequently serving as a temporary closure by fitting into the remaining upper end of the container.

2. A conical paper container comprising a double-walled body and suitable end closures, and in which weakening lines are formed to enable the portion of the body between such weakening lines to be torn out, the upper edge of the body being turned inwardly and downwardly to a point below the lowermost weakening line in the inner wall, and a closure being secured in position in the downwardly extending portion.

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