Nov. 7, 1950 P. V. DI COSMO 2,528,948

PLUG-TYPE CONTAINER CLOSURE WITH TRANSPARENT WINDOW

Filed Aug. 14, 1946

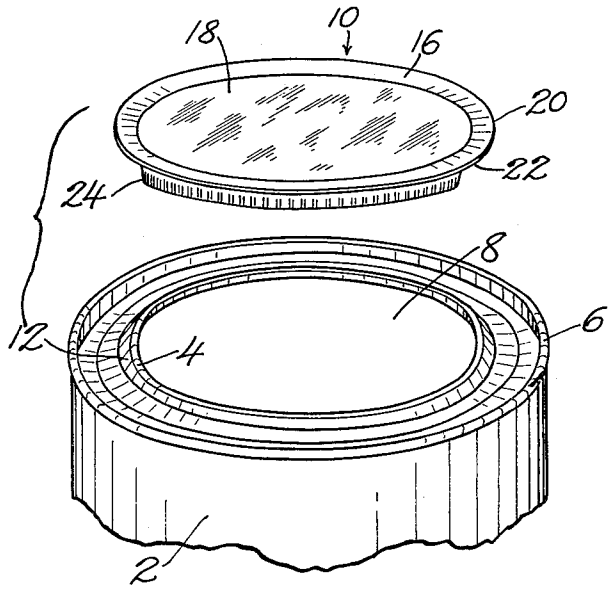


Fig. 1.

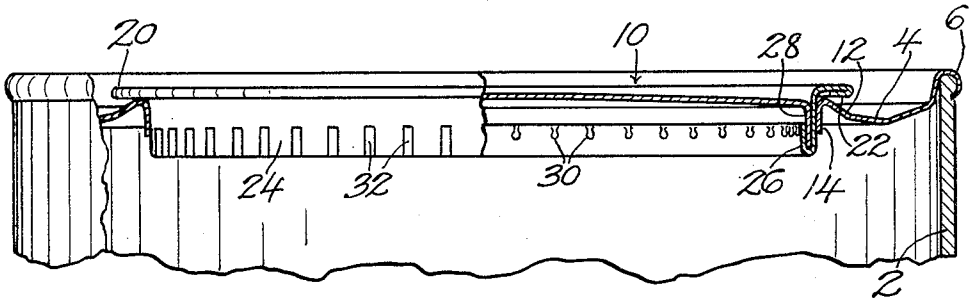


Fig. 2.

INVENTOR.
PASQUALE V. DI COSMO
BY Albert Sperry
ATTORNEY

Patented Nov. 7, 1950 2,528,948

UNITED STATES PATENT OFFICE

2,528,948

PLUG-TYPE CONTAINER CLOSURE WITH TRANSPARENT WINDOW

Pasquale V. Di Cosmo, Hopatcong, N. J., assignor to The Canister Company, Inc., Phillipsburg, N. J., a corporation of New Jersey

Application August 14, 1946, Serial No. 690,500

1 Claim. (Cl. 220—82)

1

My invention relates to containers and particularly to containers having a closure which embodies a transparent element through which the contents of the container may be seen.

Containers have been produced heretofore with a transparent cover or closure which is fixedly attached to the container body in position to permit the contents of the container to be inspected. However, it is then necessary to break the transparent element in order to remove the contents from the container. Thereafter, a supplemental closure has to be used if the contents are to be protected.

It has also been common practice heretofore to provide containers with closures which are frictionally secured to the container body so as to be removable and replaceable, but such closures have been made entirely of metal.

To the best of my knowledge no one heretofore has ever produced a removable and replaceable closure for a container wherein the closure is frictionally held in place and embodies a transparent element through which the character and amount of the contents remaining in the container may be observed. In particular, my invention embodies a construction of this type which is as simple and economical to produce and as satisfactory in use as the closure herein illustrated and described.

One of the objects of my invention is to provide a container with a novel replaceable transparent closure.

Another object of my invention is to provide a container with a transparent closure which is frictionally held in place.

A particular object of my invention is to provide a simple and economical form of transparent replaceable closure adapted to be frictionally held in place on a container.

These and other objects and features of my invention will appear from the following description thereof in which reference is made to the figures of the accompanying drawing.

In the drawing:

Fig. 1 is a perspective of a portion of a typical container and closure embodying my invention with the closure positioned for application to the container; and

Fig. 2 is a vertical sectional view through the construction illustrated in Fig. 1 with the closure secured in place.

In that form of my invention illustrated in the drawing, the container has a body 2 which may be formed of fibrous material, metal or any other suitable composition. An end member 4 is preferably formed of metal and is secured to the container body by the bead 6 or otherwise. A central opening 8 is formed in the end member 4 to permit removal of the contents from the container and is shaped to receive a closure indicated generally at 10. The portion of the end member 4 about the opening 8 is inclined upward as shown at 12 and the inner edge of the member is turned inward and downward at 14 to provide an inwardly facing friction surface for engaging and retaining the closure 10.

2

The closure illustrated embodies a marginal friction element 16 and a central transparent element 18 which are permanently secured together. The friction element is formed of metal or other rigid material and presents an outwardly turned flange 20 which is reversely turned at 22 to provide a finished and reinforced edge which will permit the closure to be pried up to loosen it from the container without distorting or destroying the closure.

The inner portion of the friction element presents an outwardly facing, substantially cylindrical friction portion 24 shaped to engage and cooperate with the inwardly facing friction surface 14 of the end member 4 of the container to hold the closure securely in place. The inner edge of the friction element 14 of the closure is reversely turned at 26 and extends upward adjacent the inner face of the downwardly turned marginal flange 28 of the transparent element 18. The edge 26 thus serves as a retaining portion which cooperates with the friction portion 24 to secure the transparent element permanently in place with respect to the friction element of the closure.

The transparent element 18 may be formed of any suitable transparent material such as cellulose acetate or other transparent resinous composition. It preferably is sufficiently tough and pliable to permit the retaining portion 26 to be crimped or indented as shown at 30 to positively grip the marginal flange 28 of the transparent element. The friction portion 24 of the friction element also may be provided with slight corrugations or indentations 32 which cooperate with the indentations or crimping 30 to grip the flange 28 of the transparent element 18.

The corrugations or indentations 32 on the friction portion 24 of the closure also serve to increase the friction between the friction element and the end member 4 of the container body to secure the closure thereto. The friction portion 24 thus cooperates with the retaining portion 26 to hold the transparent element permanently in

place in the closure and cooperates with the end member 4 to hold the closure removably in place on the container body.

The elements of the closure and container body thus formed may be produced easily and economically with conventional container forming equipment. At the same time a removable and replaceable closure embodying a transparent element is provided so that the contents of the container may be inspected at any time to determine the nature and the amount thereof remaining in the container without removing the closure therefrom. The transparent element is not destroyed or injured in opening the container but serves instead to protect the contents from dirt, evaporation or deterioration.

While I have described a particular form of container and closure embodying my invention and have shown the construction thereof in the drawing, it will be apparent that numerous changes and modifications may be made in the form and construction thereof and in the arrangement of the elements embodied therein. In view thereof it should be understood that the construction shown and described is intended to be illustrative only and is not intended to limit the scope of my invention.

I claim:

A closure for a container comprising a transparent element in the form of a disc having a downwardly turned marginal edge, a friction element extending about said edge and having a portion presenting an outwardly facing friction surface for engagement with a container for securing the closure to the container, said portion presenting an inwardly facing surface engaged by the downwardly turned edge of said transparent element, and an upwardly turned extremity on said portion of the friction element extending within the downwardly turned edge of said transparent element short of the top thereof and cooperating with said inwardly facing surface to clamp said edge therebetween to secure the transparent element to the friction element, said portion and extremity thereby being of U-shape, said extremity and the lower portion only of said outwardly facing friction surface being formed with indentations for gripping said edge of the transparent element, the indentations on said outwardly facing friction surface also serving to increase the friction between such surface and the container wall.

PASQUALE V. DI COSMO.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,724,517	Rudd	Aug. 13, 1929
1,848,011	Hirsch et al.	Mar. 1, 1932
1,989,031	Westin	Jan. 22, 1935
2,076,342	Hildebrandt	Apr. 6, 1937
2,091,877	O'Neil	Aug. 31, 1937
2,141,184	Hothersall	Dec. 27, 1938