

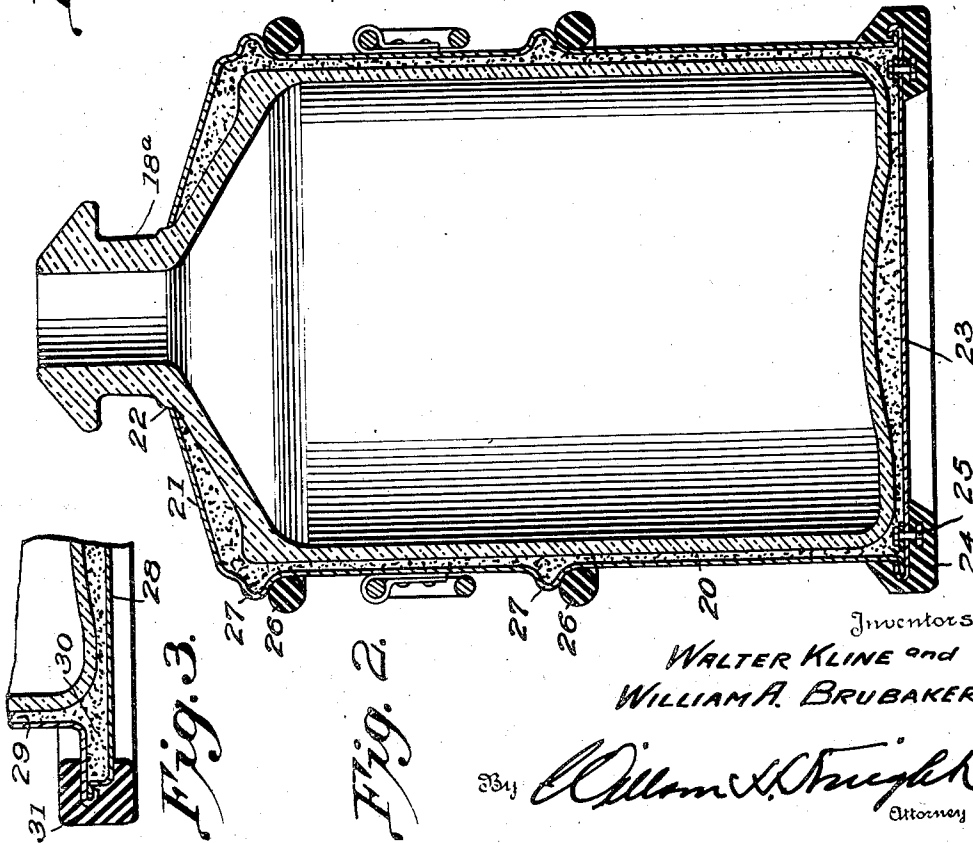
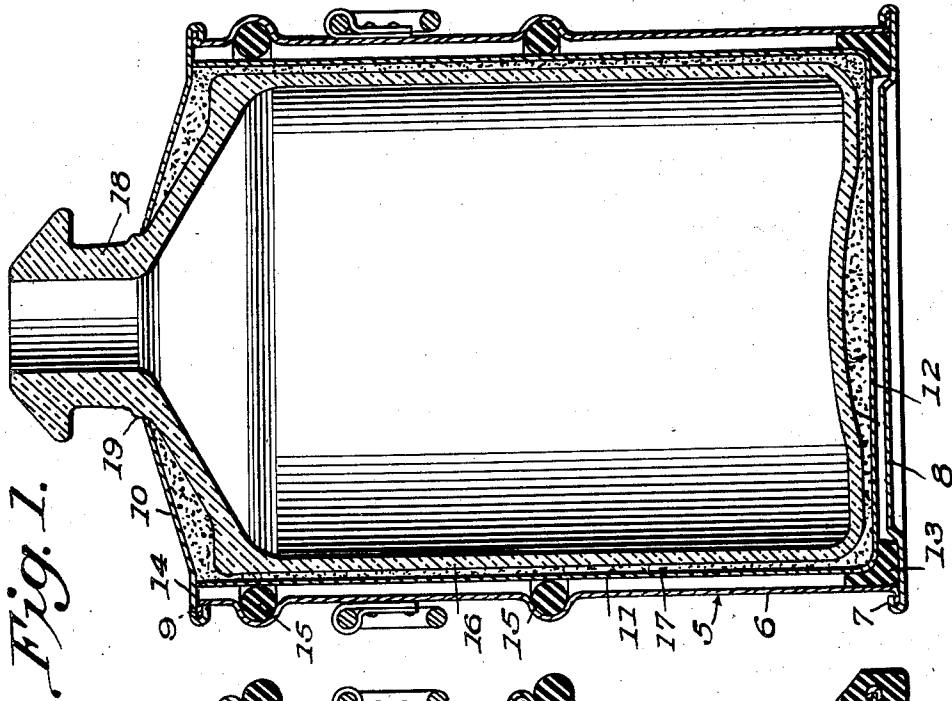
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SHIPPING AND/OR STORING CARBOY

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## UNITED STATES PATENT OFFICE

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## SHIPPING AND/OR STORING CARBOY

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## 1 Claim. (Cl. 220—10)

The present invention relates in general to shipping and/or storing vessels and has particular reference to a carboy or like container for shipping and/or storing liquids or solids under sanitary and other desirable conditions which prevail when a glass or other non-corrosive material is used as a receptacle.

One of the important features of the invention resides in the provision of means for protecting a glass or other fragile vessel when in transit or when stored so that the ordinary abuse to which the receptacle is subjected will not injure or otherwise destroy the same.

Another feature of the invention resides in the construction of a glass or other non-corrosive vessel which is adapted to contain materials for storing or shipping purposes and in which the materials are contained within such a vessel in an insulated condition so that the changes in temperature will not affect the qualities of the stored material, at least to the extent that such changes in temperature as may be expected under ordinary shipping and storing conditions will necessarily make a change in the condition of the material. In this connection we are particularly concerned with shipping and storing such liquids which require a more or less critical temperature between the time they are placed in the carboy and dispensed therefrom.

Due to the fragile qualities of such a container it becomes necessary to protect the same against handling abuses and it is therefore another object of the invention to construct a shipping and storing vessel in a manner to realize these advantages without increasing the cost of construction to a prohibited extent.

With these and other objects in view, which will be apparent from the following detailed description of the accompanying drawing we will now proceed to describe the construction of the invention with reference to the illustrative embodiment shown in the accompanying drawing.

In said drawing:

Fig. 1 is a view in vertical section of a carboy showing how the invention may be utilized for acid or the like containers;

Fig. 2 is a view similar to Fig. 1 but showing a modified form of the carboy and

Fig. 3 is a view in detail of still another modified form of carboy.

Referring now to the drawing in detail and with particular reference to Fig. 1, 5 represents a double wall metallic shell the outer wall 6 of which, at the lower portion is turned outwardly to leave an offset flange 7 around which the edge

of the bottom 8 is turned so as to join therewith. The upper end of the outer wall has a similar offset flange 9 around which the cover 10 is turned. The inner wall 11 of the shell is preferably fashioned with an integral bottom 12 which rests upon the circular corner seat 13. This seat also serves as a spacer for the inner wall and is made from rubber or the like material so as to provide the desired resilient protective cushion. This cushion is confined in place by upsetting the center area of the bottom so as to leave a restricted circular confine adjacent the outer wall 6. The open top of the inner wall abuts against the under side of the cover 10 at approximately the point where the shoulder 14 merges with the incline.

As additional spacing means for the double walls of the shell and at the same time provide resilient protective cushions, we employ circular rings 15 which are seated in the depressions or grooves made by corrugating the outer wall at spaced intervals.

Housed within the shell 5 is the non-corrosive inner container 16. This container is molded from some material suitable for the purpose and the same is embedded in an asphalt composition 17 which completely envelopes the same excepting the projecting portion 18 of the neck. This composition is poured in the space between the container 16 and the inner wall of the shell and fills the entire space around the container. This provides a protective covering for the container which also co-operates with the space between the walls of the shell to heat insulate the container.

The form in which the container is molded is of some importance because it provides for an increased thickness of the asphalt composition at locations where it is most desirable, for instance at the lower edge, the central portion of the bottom and over the top. It is of course understood that the asphalt composition is poured before the cover is set in place or else a pouring opening may be made in either the cover or the bottom of the shell.

The cover 10 is made with an opening to admit the neck 18 and the edge of the opening snugly fits the shoulder 19 on the neck.

In Fig. 2 we have illustrated a modified form. In this type the inner container, is substantially the same design but the shell is made with a single wall 20. The top or cover 21 is formed as an integral part of the shell. Like the cover 10 the edge of the opening in the cover which ad-

mits the neck 18 of the container fits snugly around the shoulder 22.

The bottom 23 is separately formed and joined to the side wall of the shell like the bottom 8. 5 24 represents a rubber or the like circular supporting rim 24 for the base of the carboy.

While this rim is molded to snugly fit the base of the carboy bolts, rivets or the like 25 may be used at spaced intervals to hold the rim in place.

10 The outside of the shell in this form is equipped with circular rubber or the like bumpers 26 as a protective measure. These bumpers encircle the shell just below the offset corrugations 27.

15 In Fig. 2 the asphalt composition is poured when the carboy is inverted and before the bottom 23 is set in place or else a pouring opening is provided through either the top or bottom.

In Fig. 3 we are illustrating a modified form 20 of base. Here both the bottom 28 and the side 29 are extended outwardly to provide an offset projection 30. They are joined together at their extremities by curling one around the other. A relatively thick band of rubber 31 is applied to 25 serve as a supporting base and shock absorbing bumper.

Where we have used the words "glass" or "non-

corrosive" as a descriptive term for explaining the nature and physical properties of the inner container it should be understood that we have in mind using not only glass but also pottery or other ceramic materials, enamel ware or even stainless steel. It is therefore pointed out that when we speak of "non-corrosive" material in the description and claim we wish the same to be interpreted as any material suitable for the purpose having the qualities described. 5 10

Having thus described an embodiment of our invention what we claim and wish to secure by Letters Patent of the United States is:

A carboy or the like receptacle comprising an outer shell and an inner non-corrosive container 15 spaced within said shell with the space therebetween filled with a poured protective substance, said container being fashioned with its upper portion presenting a relatively thick and abrupt offset shoulder leaving a substantial concave area inwardly of the shoulder to thereby 20 enlarge the space between it and the outer shell for accommodating an increase in the thickness of the poured protective substance at this particular location. 25

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