July 27, 1954 C. F. WARRICK 2,684,793

DEVICE FOR POURING LIQUIDS FROM CONTAINERS

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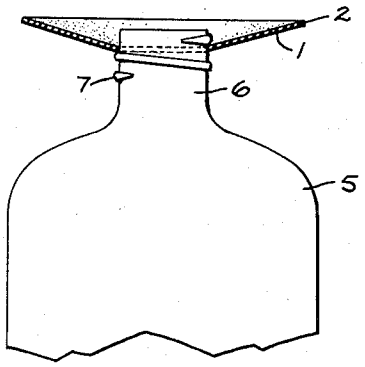


Fig. 3.

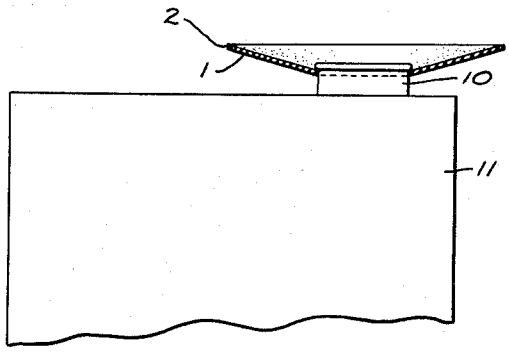


Fig. 4.

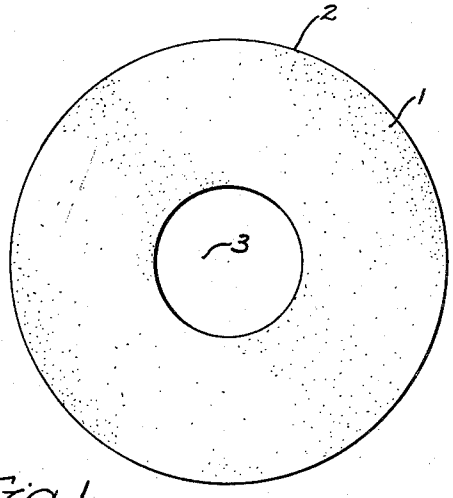


Fig. 1.

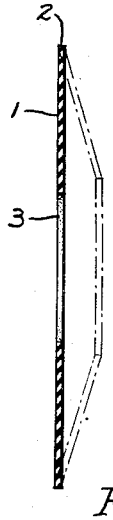


Fig. 2.

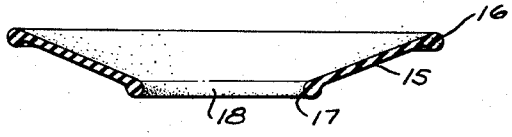


Fig. 5.

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DEVICE FOR POURING LIQUIDS FROM CONTAINERS

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2 Claims. (Cl. 222—567)

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Many different kinds of liquids are packaged in containers provided with an opening defined by a neck which is capped or closed with a cork or plug and which serves as an opening from which the contents may be poured when the cap is removed or the cork or plug removed. In some containers, particularly those of some considerable size, it has been the practice to place on the container a relatively expensive spout device which is attached to the neck and which frequently has a mounting so that the spout device may be shifted to and from pouring position. Many other containers have no such pouring device and, as a result, some of the contents is spilled and some flows over the exterior surfaces of the container and may come in contact with other articles or surfaces.

The object of this invention is to provide a simple improvement, the use of which may eliminate the necessity of embodying some form of metal spout attached to and constituting a part of a container, and which facilitates flow of the contents when poured from the container without having some of the contents spill over the edges of the opening.

The invention is applicable to containers for many kinds of substances, only a few of which need be mentioned. The device is particularly useful in pouring fuel oil, such as kerosene or the like, from a container to the tank of an oil burning stove. The danger of spilling the inflammable oil is materially reduced. Corrosive liquids or acids or solvents are examples of materials wherein it is undesirable to have spillage or any excess material on the external surfaces of the container. Such substances may attack the flooring of the room or the surface of the bench, sink, drain board or the like, where the material is poured. In the household the device may be conveniently used in pouring cooking oil, and such adhesive or sticky substances as molasses or syrup. Ofttimes it is necessary to pour some petroleum product from one container to another and the device may be used in such a process.

The invention embodies a simple, useful article in the form substantially of an apertured disc made of elastic material. This material may be rubber, either natural or synthetic, and where it is to be used with substances which may attack natural rubber, some form of synthetic rubber or plastic may be employed. The invention is disclosed in the accompanying drawings:

Fig. 1 is a view of a pouring device embodying the invention showing the same as being in the form of an apertured disc.

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Fig. 2 is a cross-sectional view and illustrating the shape the article may take when applied to a container.

Fig. 3 is a view showing a portion of the container with the device applied to the neck thereof.

Fig. 4 is a view similar to Fig. 3 showing a different form of container with the device applied to the neck thereof.

Fig. 5 is a sectional view showing a modified form of the invention.

The device constructed in accordance with the invention is conveniently in the form of a substantially flat disc, as shown in Fig. 1. This disc is illustrated at 1 and it may have a circular outer periphery 2 and a central aperture 3. The central aperture is the portion of the member which should have a dimension such that it is applicable to a container with which it is to be used.

The device is shown applied to a container in Fig. 3 wherein the container is in the form of a bottle 5 having a neck 6 which may be provided with an exterior thread 7 for the reception of a cap. The aperture 3 of a disc to be used with this container has a cross dimension less than the outside cross dimension of the neck 6. Ordinarily, the aperture 3 and the neck of the container are circular in cross section so that it may be said that the diameter of the aperture 3 is less than the outside diameter of the neck 6. The device is applied to the neck by stretching the elastic material. The device may be more or less snapped onto the neck. The result of this is that the material is stretched and the diameter of the aperture 3 is thereby increased as shown in the dotted lines of Fig. 2. Accordingly, the disc member, when so flexed, takes the shape of a frustum of a cone as illustrated. The cone shape thus attained is maintained by the member quite strongly so that the geometrical shape as shown in Fig. 3 is maintained during the pouring operation. In Fig. 4, the disc or washer is applied to the neck 10 of a container in the form of a tin can 11, which has the usual rectangular shape.

A modified form of the invention is shown in Fig. 5. In this form the member is initially given a dished or coned shape, the body being illustrated at 15, the outer peripheral edge at 16, the inner peripheral edge at 17, defining a central opening 18. Such a member may be formed by a suitable molding operation and if desired, the edges may be slightly beaded as illustrated at 16 and 17 to strengthen the structure. When this form of device is applied to a container, the angle of the cone shape is made more abrupt as the material is stretched for application to the neck of a container.

In the practical use of the device, one such device may be attached to a container of merchandised material. For example, a can, such as one similar to the container shown in Fig. 4, may be filled with material at the factory and one of the apertured discs of the present invention may be detachably secured to the can so that the pouring device is obtained by the user upon the purchase of a can of the substance involved. Such substance may be any one of those mentioned above or paint, lacquer, varnish, or the like. This dispenses with the necessity of providing a built-in metal pouring spout and the device may be thrown away when the container is empty. On the other hand, several of such devices may be on hand ready for use in the household or in shops or stores or service stations where it is necessary, from time to time, to pour liquid from one container into another. After a pouring operation, the disc may be easily removed by merely pulling it off the neck or spout and wiping it clean so that it is ready for a subsequent use.

I claim:

1. In combination with a liquid container having a pouring neck, a shield for attachment to the neck of a container to protect the surface of the container from liquid being poured therefrom comprising, a disc of elastic material having substantially circular form and having a substantially circular central opening, said opening having a diameter smaller than the outside dimension of said pouring neck, whereby to apply said shield by stretching the elastic material thereof so that the neck fits within said opening, said disc being relatively thin and having substantially uniform thickness throughout its entire extent, whereby to project conically away from the surface of the container when in operative position.

2. In combination with a liquid container having a pouring neck, a shield for attachment to the neck of a container to protect the surface of the container from liquid being poured therefrom comprising, a disc of elastic material having substantially circular form and having a substantially circular central opening, said opening having a diameter smaller than the outside dimension of said pouring neck, whereby to apply said shield by stretching the elastic material thereof so that the neck fits within said opening, said disc being relatively thin with regions equidistant from its center having substantially uniform thickness throughout, whereby to project conically away from the surface of the container when in operative position.

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