July 8, 1941. G. M. SANDERS ET AL 2,248,389

ARTICLE DRYING DEVICE

Filed Nov. 14, 1939

Fig. 1.

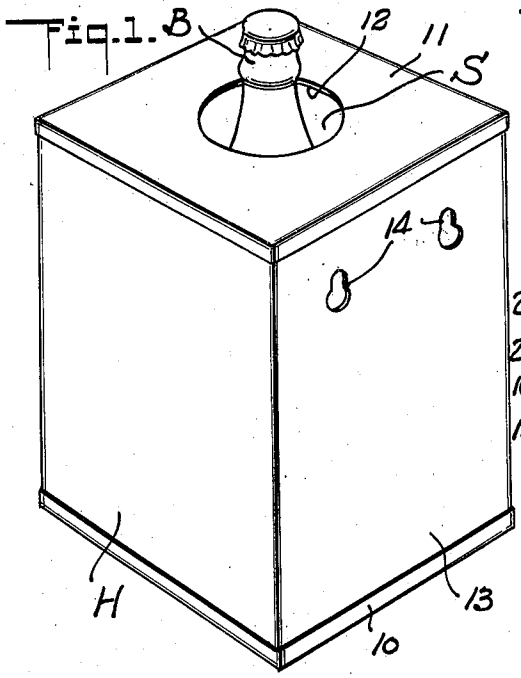


Fig. 4.

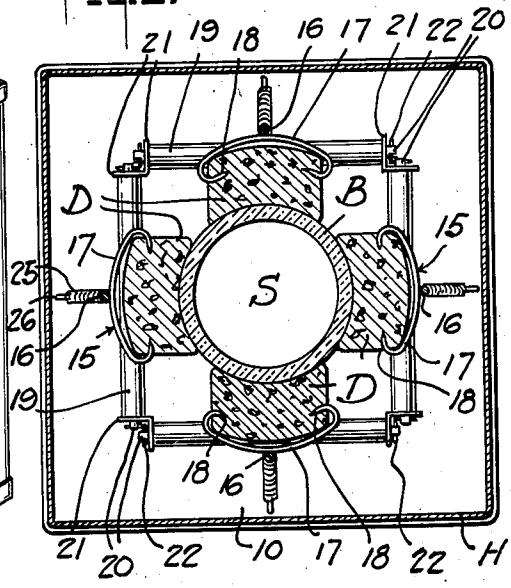


Fig. 2.

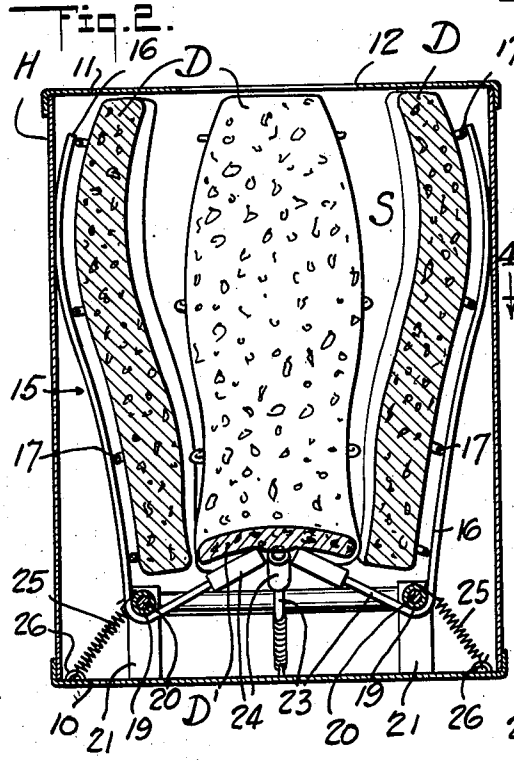
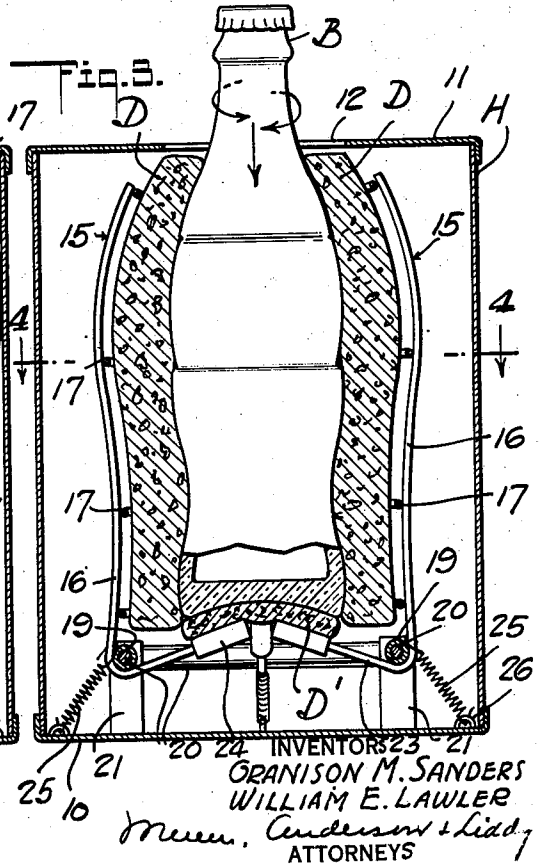


Fig. 3.



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ARTICLE DRYING DEVICE

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3 Claims. (Cl. 34—95)

This invention relates generally to the storing and vending of beverages in containers, such as bottles and cans maintained in a cold state by being submerged in a refrigerator.

It is the usual practice in public places, such as gasoline service stations, roadside stands and other public places, for beverages to be supplied and drunk directly from containers by the customers utilizing self-service from a refrigerator. Although this method is convenient for the public, it has the serious drawback of supplying an unsanitarily wet and dripping container from which drops of water quite frequently soil the clothes. In some instances, towels are provided, on which the container can be wiped with more or less success, but which constitute a further source of insanitation.

An object of the present invention is to provide a drying device for various articles, including bottles and cans, which obviates the aforestated disadvantages and objections by enabling a wet container to be thoroughly dried and cleaned exteriorly with the utmost ease and dispatch so that the user can safely handle the container without contamination and soiling of the clothes from the container, whereby the use of the products will be made more attractive to the public.

Another object of this invention is to provide an article drying device which, in its broadest aspect, is highly efficient in the drying of containers generally, by a simple and quick operation, and is readily adaptable to articles of various shapes and sizes.

With these and other objects in view, the invention resides in the combinations and arrangements of elements as set forth in the following specification and particularly pointed out in the appended claims.

In the accompanying drawing—

Figure 1 is a perspective view of the article drying device;

Figure 2 is a vertical sectional view of the article drying device in article receiving position;

Figure 3 is a view similar to Figure 2, but with an article in the form of a bottle applied to the device for drying;

Figure 4 is a transverse sectional view taken on the line 4—4 of Figure 3.

Referring specifically to the drawing, the invention comprises a moisture retaining housing H which provides an enclosure for a plurality of drying elements D and D'. The housing H is preferably constructed of sheet metal to provide a rectangular enclosure the flanged bottom wall 10 of which is closed and the removable top wall 11 of which is formed with an opening 12 of a diameter or size to freely admit an article or container such as a beverage bottle B. The rear side wall 13 of the housing is provided with suitable openings 14 for co-action with headed pins on any convenient fiixture (not shown) in rigidly supporting the housing so that a person removing a bottle of beverage from an adjacent refrigerator can readily insert the bottle into the housing through the opening 12.

The drying elements D and D' are preferably in the form of moisture absorbing pads of sponge or other suitable absorbent material. The elements D are of elongated form and are adapted to operate upon the sides of the bottle, whereas the single element D' is of substantially disk form and is adapted to operate upon an end (specifically the bottom) of the bottle.

In the present instance, four of the elements D are provided, and each is carried by a holder 15 constructed of wire to provide a longitudinal member 16 and several transverse members 17 welded thereto and having their ends return bent to form hooks 18 which engage the element D and thus secure it to the holder.

Adjacent one end the longitudinal member 16 of each holder 15 is welded to a bearing sleeve 19 medially between the ends thereof. The sleeve 19 is freely mounted on an axle 20 supported in a pair of brackets 21 rising from the bottom wall 10, the axle being confined against displacement from the brackets by cotter pins 22.

An end portion of each member 16 projects from the sleeve to form an arm 23 receiving a rubber sleeve 24. The arms of the four members 16 co-act to support the single drying element D' as the axles 20 are arranged parallel to the four sides of a square figure and the arms project at a right angle from the respective axles toward a common central axis about which the four drying elements D are grouped and define a space S into which a bottle inserted through the opening 12 is received.

Coil springs 25 are connected to the members 16 of the holders 15 and to eyes 26 on the bottom wall 10 so as to urge the holders 15 and hence the drying elements D outwardly or away from each other about their respective fulcrums, the drying element D' being urged upwardly or axially towards the opening 12, all for the purpose of freely admitting a bottle into the space S in the operation of the invention, which is as follows:

A bottle B is assumed to have been removed from the cold water in a refrigerator and is in-

serted in its wet and dripping state through the opening 12 into the space S of the housing H. It will be understood that in a new installation the elements D and D' are first moistened as sponges do not function in a dry state to absorb moisture. Once the device has been placed in use, the elements will retain moisture for a sufficiently long interval without use, to make it unnecessary to again moisten them.

As the arms 23 and the drying element D' supported thereby are disposed in the path of inserting movement of the bottle B into the space S, the bottom of the bottle will strike the element D' so that by continued movement and pressing of the bottle upon the element D', the four elements D will be swung inwardly or toward each other into contact with the sides of the bottle.

In this position of the bottle, the outer portion of its neck projects from the housing H so as to enable such portion of the bottle to be grasped and the bottle rotated or oscillated as it is pressed into the housing, whereby the elements D and D' will have wiping engagement with the sides and bottom of the bottle to effectively absorb the water therefrom so as to leave the bottle with its exterior surfaces in a dry and cleaned state.

As the upper portion of the neck of the bottle is not as a rule submerged in the water of the refrigerator, the entire exterior of the bottle will be dry so that the user can handle the bottle without danger of contamination or of having the clothes soiled by water or moisture from the bottle.

What is claimed is:

1. A device of the class described comprising: a plurality of side drying elements; means mounting said elements for movement relatively towards and away from each other about fixed axes; means urging said elements away from each other to a spaced relationship for insertion of an article between the elements for drying; supporting members laterally projecting from said mounting means into the path of inserting movement of an article between the elements; and an end drying element supported on said members and engageable by an inserted article to move the side drying elements about said axes into contact with the article.

2. A device of the class described comprising: a plurality of moisture absorbing pads; holders supporting said pads; means mounting said holders about fixed axes for relative movement of the pads towards and away from each other; means urging the holders to a position wherein an article to be dried can be inserted between the pads; arms projecting from the mounting means into the path of inserting movement of an article; and a moisture absorbing end pad supported by said arms for engagement by an end of an inserted article.

3. A device of the class described comprising: a moisture retaining housing having an opening through which an article to be dried can be inserted; a plurality of holders having bearing sleeves; moisture absorbing side pads carried by said holders; brackets in the housing; shafts supported by the brackets and on which said sleeves are mounted to rockably support said pads in a position wherein they co-act to provide a space receiving the inserted article; arms projecting from said sleeves into the path of inserting movement of an article; and a moisture absorbing end pad supported by said arms for engagement by an end of an article and co-acting with said arms in actuating the holders to bring the side pads in contact with the sides of the article.

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