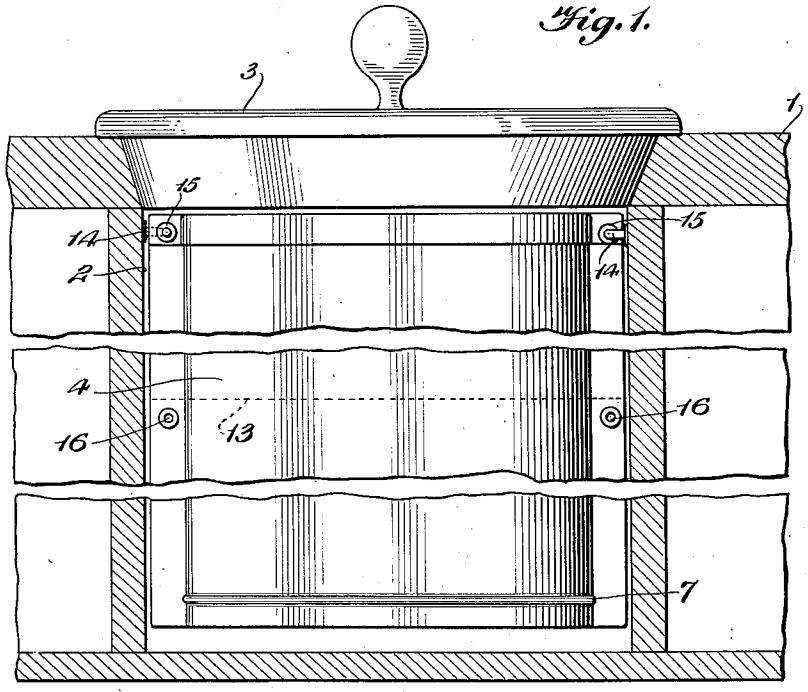
Jan. 27, 1931. C. L. MURPHY 1,790,068

ICE CREAM CONTAINER

Filed April 1, 1929

Fig. 1.



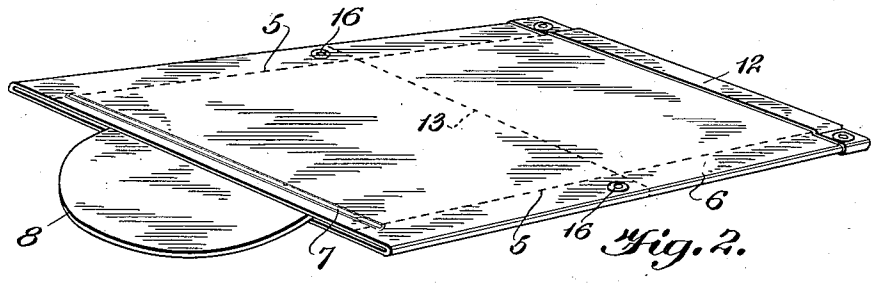


Fig. 2.

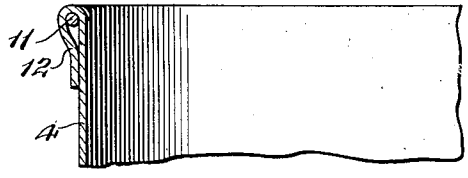
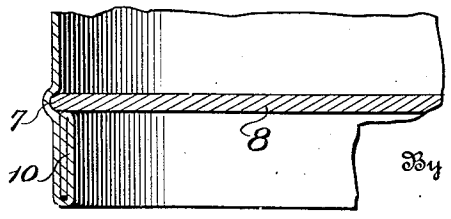


Fig. 3.



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UNITED STATES PATENT OFFICE

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ICE-CREAM CONTAINER

Application filed April 1, 1929. Serial No. 351,790.

This invention relates to ice cream containers and especially to containers of the type having a capacity of from two to ten gallons and intended for dispensing purposes in connection with soda fountains and the like.

Some of the disadvantages of metal containers for ice cream may be mentioned as follows: Such containers are of a depth which renders access to the contents extremely difficult after a major portion of the ice cream has been dispensed. Furthermore, when such containers are employed in connection with mechanical refrigerators now in general use, the cream at the bottom of the containers becomes too hard to be scooped up by the ordinary dippers—this for the reason that the bottom of the container is in direct contact with the wall of the refrigerating apparatus. And again, such must be made of considerably less diameter than the compartment in which they are placed, so as to prevent the same from adhering to the wall of the compartment; this not only permits a "shimmying" of the container when the ice cream dipper is being used, but also requires more refrigerant in maintaining the contents firm by reason of the large air space between the outer wall of the container and the wall of the compartment.

Because of the foregoing disadvantages of metal containers for ice cream, as well as other objections which it is believed are well known to those skilled in the art, I have devised the present invention to be hereinafter described.

One of the primary objects of this invention resides in the provision of an ice cream container made of paper or similar material which is sufficiently inexpensive to admit of its being discarded after use, and which is capable of having its upper zone removed in order that the lower section may be raised and supported in raised position so as to bring the contents of the lower portion of the container to a position more easily accessible to the soda fountain clerk.

Another object of the invention consists in providing means by which a container may be more readily deposited in the compartment provided in the soda fountain, as well as means to prevent "shimmying" of the container when in use.

A further object of the invention resides in the provision of a container which may be shipped and stored in collapsed condition thereby conserving space, and which may be readily set up in cylindrical form without the use of skilled labor; the container when so set up having all of the attributes of a rigid container.

Other objects and advantages of the invention will be apparent from the following description when taken in connection with the accompanying drawing; in which

Figure 1 is a vertical sectional view through a portion of a soda fountain, showing one form of the novel ice cream container in position therein.

Figure 2 is a perspective view of the container in collapsed condition ready for shipment to be set up for use; and

Figure 3 is a fragmentary sectional view through the container showing in detail the means for securing and supporting the separable bottom of the container.

Referring to the drawing in more detail the numeral 1 indicates generally the ice cream storage cabinet of a conventional soda fountain, provided with compartments such as indicated at 2 for receiving and maintaining in frozen condition cans of ice cream, usually of five gallon size. Numeral 3 designates the usual wood or fiber lid for closing the compartment against the entrance of air when not in use.

Mounted within the compartment 2 and designated by numeral 4 is my improved ice cream container which may be formed of suitably treated paper, cardboard or the like.

This container, in the form shown, includes a body portion which, while normally in collapsed condition, as shown in Figure 2, for storage or shipment, is adapted to be set up into cylindrical form as shown in Figures 1 and 3, similar to the ordinary metal container for ice cream.

This body portion of the container in the form shown is provided with longitudinal lines of stitching 5 for locking adjacent portions of the side wall together so as to provide diametrically opposed fins 6 extending from the top to the bottom of the container. Obviously other types of fastening means may be employed for producing the fins 6 if found desirable.

The fins 6 are of particular importance in that they prevent "shimmying" or rocking of the container when the soda dispenser is dipping ice cream therefrom, i. e., the fins substantially span the space between the container 4 and the wall of the compartment in which the container is mounted. This space is considerably less when the present container is used than is the case where metal containers are employed, since metal containers are liable to freeze to the wall of the compartment and present considerable difficulty in removing. Therefore, by the use of the present containers formed of paper or the like, the space may be considerably reduced thereby saving considerable expense as regards refrigeration since the container is nearer to the source of refrigeration with a consequent reduction of dead air space. An additional advantage of the fins 6 resides in the fact that they serve to reinforce the cylindrical portion of the container, and while only two of these fins are disclosed in the illustrated embodiment of the invention it is to be distinctly understood that the number may be increased as desired.

The lower portion of the body of the container is provided with an inwardly opening groove 7 which receives and interlocks with a disc-shaped bottom member 8 also of properly treated cardboard or the like. This disc, as shown more particularly in Figure 3, is of somewhat greater diameter than the internal diameter of the container and thus is snugly received in the groove 7 and assists in maintaining the body of the container in cylindrical form when set up for use. To form a support for the bottom 8 in addition to the groove 7 I provide an inturned portion 9 which may consist of one or a plurality of folds 10 and which are of such dimentions as to engage the bottom 8 of the container when positioned in the groove. It will thus be seen that the bottom 8 is securely and firmly locked and supported in its operative position with respect to the body portion of the container. Moreover, the inturned portion or portions 10 provide a reinforcement for the bottom of the container and admit of its being supported on the bottom of the compartment 2, if desired, as will be referred to hereinafter.

The upper end of the container body 4 is preferably provided with an annular strip of wire or the like 11 which is seated in a pocket formed by turning down the upper edge of the container as indicated by numeral 12. This metal strip is of ductile material and may be readily collapsed when the container is flattened out as shown in Figure 2. When expanded into set up position, however, the metal strip provides sufficient rigidity to maintain the upper end of the container in cylindrical form against the tendency of the container to return to flattened form by reason of the resiliency of the cardboard or similar material of which the body portion is formed. It will thus be seen that the body of the container is held in its set-up condition at both ends, the lower end being held distended by the bottom 8 and the upper end by the metal ring 11.

The container 4 is intended to be severed at a point substantially midway between its upper and lower ends after half of the contents have been dispensed, and the lower portion is then to be suspended at the top of the compartment 2. To this end the container is preferably provided with a weakened score line 13 which encircles the container and provides for ready detachment of the portion of the container thereabove. It is to be understood, however, that a weakened line is not absolutely essential since a mere indication of the point of severance may serve the purpose.

When the container is first placed in the compartment it is preferably suspended from hooks 14 as shown in Figure 1; although it may be supported on the bottom wall of the compartment if desired. For this purpose the fins 6 are provided with openings or eyelets 15 which may be engaged over the hooks 14. These eyelets in addition to serving the function just mentioned also provide for the engagement of hooks or handles used by truck drivers or others for lowering the containers into the compartments and removing them therefrom.

By suspending the containers in the manner indicated the bottom is spaced from the lower wall of the compartment and the ice cream in the bottom of the container while maintained in stiff condition is not frozen so hard as to be unworkable as is often the case in metal containers which are supported on the bottom of the refrigerating compartment and therefore in more direct contact with their refrigerant. Moreover, this suspending the container from above is of material assistance in preventing a wobbling or shimmying action of the container when the material is being dipped from it by the

usual scraping action of the ice cream cups or dispensers.

After the contents have been partly removed from the container the latter may be raised from the compartment and the upper end of the container removed by means of a knife or other instrument by cutting along the line 13. For the purpose of then supporting the container, I provide holes or eyelets 16 formed in the fins 6 just below the line of severance 13. In this way the ice cream is brought nearer the top of the compartment and in a position more accessible to the soda fountain clerk thus materially aiding in the dispensing operations. This manner of suspending the lower half of the container also has, of course, the advantage of preventing wobbling, etc., of the container as heretofore described. After the contents have been removed from the lower half of the container the latter will, of course, be discarded, thus avoiding the necessity of storage space pending the return of the wholesale dealer.

The function and operation of the several features of the invention have been fully described in connection with the description of the structural details and further description of the operation is believed to be unnecessary.

From the foregoing it will be apparent to those skilled in the art that I have devised a simple and inexpensive construction of ice cream container for soda fountains and the like, which has all of the advantages of the expensive metal containers and which, due to its cheapness, may be discarded after use. It will also be apparent that due to the closer proximity of the container to the wall of the refrigerating compartment less refrigerant is necessary to maintain the ice cream in saleable condition; that the container is strong and durable; that it is so constituted as to be originally shipped in collapsed form; is readily set up in cylindrical form; is designed to prevent wobbling or the like when in use; and provides means for rendering more accesible the ice cream in the lower part of the container.

In accordance with the patent statutes I have described what I now believe to be the preferred form of construction, but it is obvious that many changes may be made in the structural details without in any way departing from the spirit of the invention and it is therefore desired that the accompanying drawing be considered as merely illustrative of the invention rather than in a limiting sense, and that all such changes be included within the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. A collapsible ice cream container including a normally collapsed body portion adapted to be set up into cylindrical form, said body portion provided with an interior groove adjacent one end thereof, said end being folded inwardly to provide a support, and a rigid bottom member of circular form adapted to be seated on said inturned portion with its periphery positioned in said groove.

2. A collapsible ice cream container including a normally collapsed body portion adapted to be set up into cylindrical form, a separable bottom member for said body portion, and a flexible strip of wire encircling the upper end of said body portion and adapted to maintain the same in either set up or collapsed condition.

3. An ice cream container including a cylindrical body portion of a single strip of cardboard or the like, means on the body portion for suspending the same, said body portion provided with a cutting line encircling the same about midway between its ends.

4. An ice cream container including a cylindrical body portion of a single strip of cardboard or the like, said body portion provided with a weakened line encircling the same substantially midway between its ends, and means for suspending said body portion, said means being disposed above and below the weakened line.

5. An ice cream container including a body portion formed of cardboard or the like, said body portion provided with means adjacent its upper end by which the same may be suspended in the refrigerating compartment of a soda fountain, and similar suspending means located about midway of the length of said body portion, said latter means adapted to support the lower half of the container after the upper half thereof has been detached.

6. An ice cream container including a cylindrical body portion formed of cardboard or the like, and fins formed on the exterior of said body portion and extending substantially throughout the length thereof for cooperation with the walls of a refrigerating compartment.

7. An ice cream container including a cylindrical body portion formed of cardboard or the like, vertically extending fins formed on said body portion, each of said fins provided with a perforation adjacent its upper end.

8. An ice cream container including a cylindrical body portion formed of cardboard or the like, vertically extending fins formed on said body portion, each of said fins provided with a plurality of vertically spaced perforations.

9. An ice cream container including a cylindrical body portion formed of cardboard or the like, vertically extending fins formed on said body portion, each of said fins provided with a perforation adjacent its upper end and a perforation substantially midway between its ends, said body portion

provided with a weakened line encircling the same just above the lower perforations.

10. A collapsible ice cream container including a normally collapsed body portion adapted to be set up into cylindrical form, reinforcing means on one end of said body portion for supporting a bottom for the container, and a rigid bottom member of circular form adapted to be inserted in the interior of the body portion and seated on the bottom supporting means for sustaining the body portion in cylindrical form.

CHARLES L. MURPHY.