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HOLDER FOR ICE CREAM CONTAINERS

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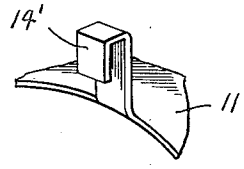


Fig. 2.

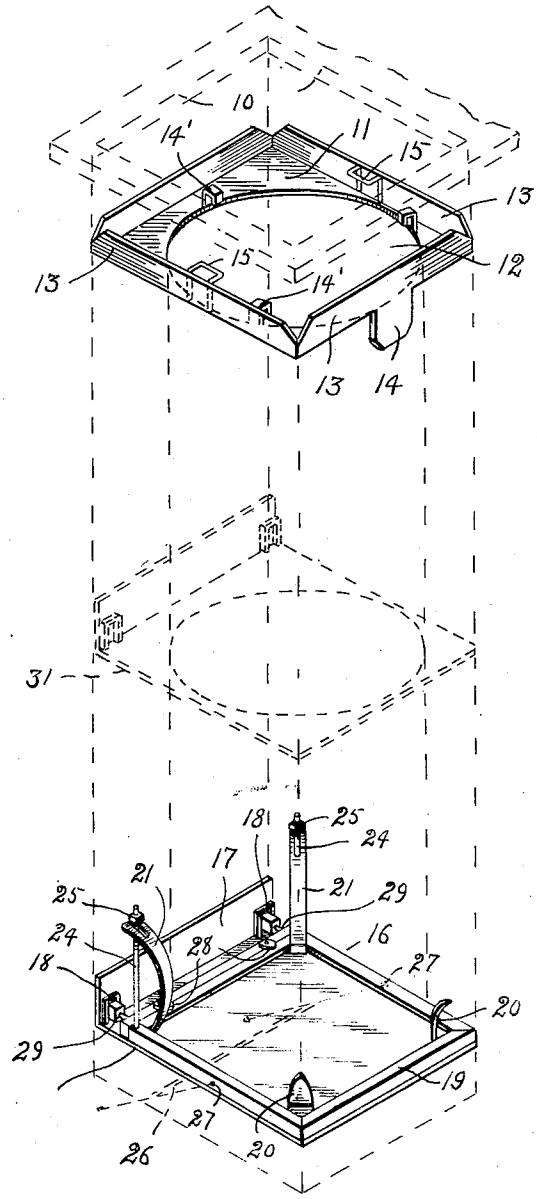


Fig. 1.

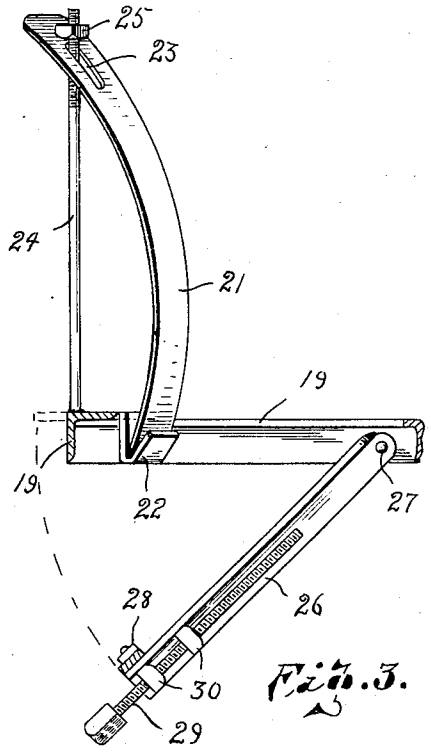


Fig. 3.

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HOLDER FOR ICE CREAM CONTAINERS

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2 Claims. (Cl. 220—85)

This invention relates to a holder for use with ice cream containers which are commonly kept in freezer compartments and more particularly to a holder to prevent an ice cream container from moving relatively to the freezer compartment in which it is disposed so that the ice cream may be readily dipped therefrom without disturbing or moving the container.

Other objects of the invention are: to provide a holder having means to prevent particles of ice cream from dropping into the space between the container and freezer compartment walls: to provide means to prevent the escape of cold air from the space between the container and freezer compartment walls, while ice cream is being dipped from the container: and to provide means to reduce the formation of frost on the compartment walls by preventing warm air circulating in the space between the container and freezer compartment.

Other objects and advantages of the invention will appear in the following description thereof.

Referring now to the accompanying drawing, forming part of this application, and wherein like reference characters indicate like parts:

Figure 1 is a perspective view of the principal elements of the invention arranged in their relative position when in normal use in connection with an ice cream container.

Figure 2 is an enlarged perspective view of one of the supporting catches of the uppermost or cover plate of the holder assembly.

Figure 3 is an enlarged elevation and section of one forward corner of the adjustable clamping element of the holder.

Referring now more particularly to the drawing, the numeral 10 designates, in dotted lines, a conventional freezer compartment which, as illustrated, is substantially square in cross section. This freezer compartment 10 is provided with an open upper end adapted to be closed by means of a suitable cover, not shown, and which is removably mounted thereon. The compartment 10 is adapted to contain one or more ice cream containers, which, as indicated, are cylindrical in cross section. The parts previously described are of conventional construction and form no part of the present invention but have been shown and described merely to better illustrate the application of the holder.

The improved holder includes an upper covering element comprising a plate 11 having an opening 12 therein adapted to receive, surround, and be supported upon the upper end of the container. The plate 11 is substantially square and slightly smaller than the interior dimensions of the compartment above the container into which it is fitted, and is provided with upturned side members 13 which can be bent relatively to the plate and which possesses a certain amount of yieldability. The sides 13 are thus adapted to be bent outwardly sufficiently so that when the plate 11 is inserted into the compartment, the sides 13 will be compressed thereby and will yieldably engage the side walls of the compartment 10. The plate 11 is provided with a depending tongue 14 which extends downwardly from adjacent a portion of the opening 12 and which is adapted to engage against a portion of the outer side of the cylindrical wall of the container or can for guiding the plate so that its opening 12 will be passed over the upper end of the container. A plurality of hanger-like members 14' extend upwardly from the plate 11 around and adjacent the opening 12 and are provided with inturned hook shaped upper ends which are arranged to engage over the rim of the container for supporting the plate 11 in the compartment 10. The plate 11 is also provided with a plurality of upstanding handles 15 which are adapted to be grasped for removing the plate from the compartment 10 or for applying it thereto.

The lowermost member of the holder also has a portion which likewise includes a plate 16 which is adapted to rest on the bottom of the compartment 10 and which is provided with an upturned wall 17 along one edge thereof which wall can be bent relatively to the plate 16 for yieldably engaging a side wall of the compartment 10, similar to one of the side members 13. The wall 17, on its inner side, is provided with spaced inwardly opening socket portions 18. An open, rectangular frame 19 is removably supported on the plate 16 and is adapted to receive the lower end of the container. Corresponding guides 20 are attached to the corners of the frame 19 which are remote to the wall or side 17. The guides 20 are of the leaf type and are each fastened at an end in a corner of the frame 19 and extend inwardly thereof and are curved upwardly and outwardly, adjacent their free ends. Leaf type springs 21 are also supported by the frame 19 in the other two or front corners thereof. The leaf springs 21 are supported at their lowermost ends as at 22 by the frame 19 and extend inwardly and upwardly relatively to the frame and have their opposite free ends forming a continuation of the curvature thereof

and projecting outwardly relatively to the frame and extending slightly outwardly beyond the corners to which said springs 21 are fastened, as seen in Figure 3. The free ends of the springs 21 are provided with longitudinal slots 23 through which extend bolts 24. The bolts 24 are secured in the corners of the frame 19 to which the springs 21 are connected, and project upwardly therefrom and carry nuts on their upper, threaded ends. Said nuts 25 are adapted to be tightened for tensioning the springs 21 and for causing said springs to move inwardly of the frame opening. The springs 20 and 21 are adapted to frictionally engage the cylindrical wall of the ice cream container or can for positioning the lower end of the can relatively to the frame 19 for frictionally engaging the can so that it cannot be rotated within the compartment 10. This frictional engagement can obviously be varied by tightening or loosening the nuts 25 and the frame 19 is capable of engaging and holding cans or containers of different sizes by thus adjusting the springs 21.

An auxiliary semi-frame member 26 is pivotally attached as at 27 to the opposite side members of the frame 19, which are at right angles to the wall or side 17. Suitable holding members or buttons 28 are carried upon the cross member of the free end of the semi-frame 26 to engage with the upper face of the front portion of the frame 19, for holding same in its uppermost position parallel with the frame 19. Adjustable extension bolts 29 are installed within the side members of the semi-frame 26 as clearly shown in Figure 3 so that this portion of the holder may be retracted or extended to fit the varying sizes of compartments into which the holder may be fitted, and it is apparent that this adjustment may be made after the lowermost member of the holder has been placed on the bottom of the compartment by advancing the bolts 29 and wherein it is thus held firmly by the buttons 28 being properly adjusted to overlap the frame 19.

In further explanation of this installation attention is directed to the fact that the extension bolts 29 are preferably screw threadedly mounted into two spaced nuts indicated at 30, which are fixed within the side members of the semi-frame 26 so as to form a stable support for said bolts, and when the bolts have been approximately correctly adjusted to fit the specific compartment, and prior to final installation of the frame 19, the semi-frame 26 may be dropped slightly or jackknifed as shown in Figure 3 of the drawing, with the bolt head in position within the sockets 18, at which time the frame 19 may be forced downwardly until the buttons 28 may be turned to overlap the frame 19, or other known means accomplish this purpose. Now, after this installation and the springs 21 are adjusted to frictionally engage the sides of a container of given diameter, said container may then be forcibly installed downwardly upon the frame 19 and there automatically held against objectionable turning. To complete the installation the cover element is then applied to the upper end of the container, resulting in a most satisfactory and sanitary holding of the container against accidental movement or waste of material being served.

In the embodiment of the invention as disclosed, a large size relatively tall container is illustrated. Frequently small containers, of half the length of the large size ones are used. In such cases, an empty or full container can be supported on the bottom of the compartment 10 and the part shown in the bottom of the compartment, in Figure 1, can then be mounted on and supported by the top of the bottom container, as suggested in dotted lines at 31, and a second container positioned on top thereof and connected thereto and supported thereby in the same manner as shown in Figure 1.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. A holder for ice cream containers comprising a plate adapted to be disposed in a freezer compartment and on which the bottom of an ice cream container is adapted to rest, said plate being provided with an upstanding wall having spaced inwardly opening sockets, an open frame mounted on said plate and in which the lower end of the container is adapted to be disposed, said frame being provided with leaf springs at the corners thereof for frictionally engaging the side wall of the container for preventing it from turning relatively to the compartment, a U-shaped member pivotally connected to opposite sides of said frame and disposed on the outer side of a portion thereof, latch means for releasably holding the U-shaped member in substantially the same plane as the frame, follower screws carried by the U-shaped member, and said follower screws being adapted to engage said sockets for yieldably holding the upstanding side of the plate against a side wall of the compartment and the side of the frame, remote thereto, against the opposite side walls of the compartment.

2. A device as in claim 1, comprising means for adjustably positioning certain of said springs relatively to the ice cream container.

ARCHIE J. McPHAIL.