May 17, 1932. W. F. VANDERWALL 1,859,119

THERMOBOX

Filed May 13, 1930

Fig. 1.

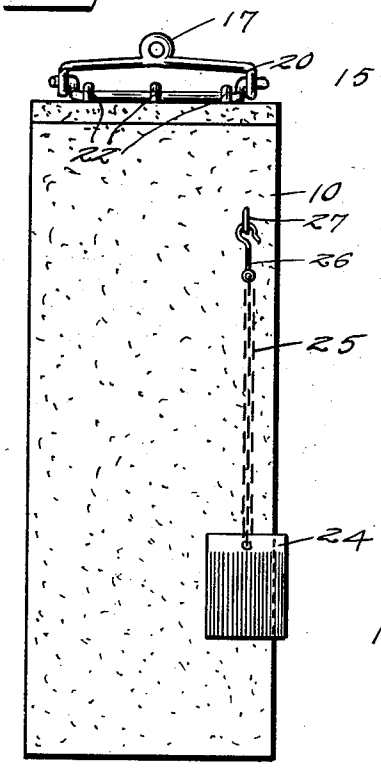


Fig. 2.

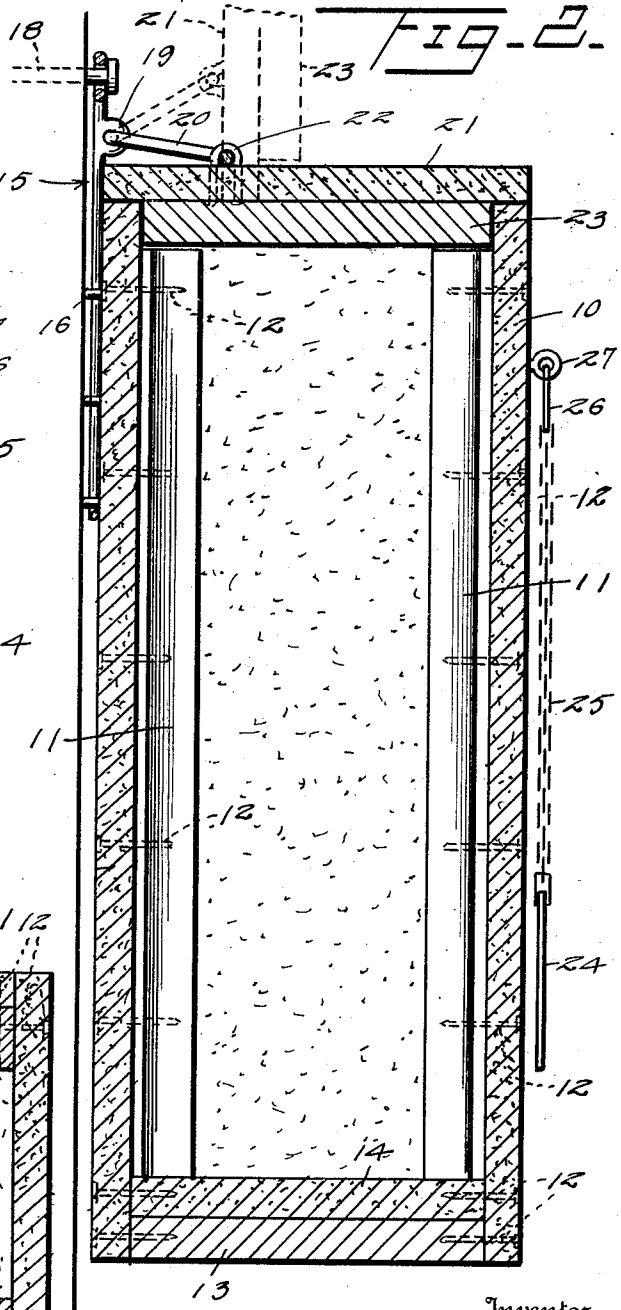
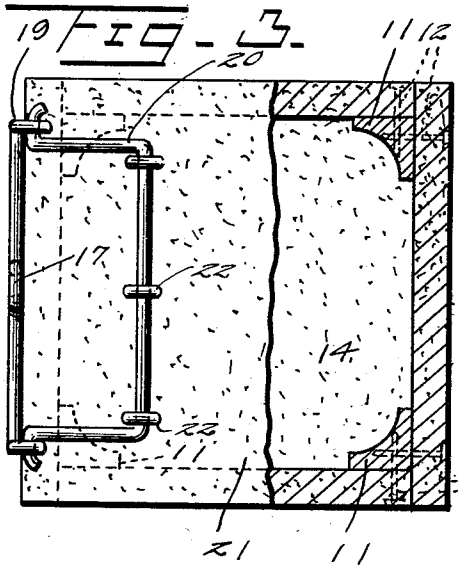


Fig. 3.



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UNITED STATES PATENT OFFICE

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THERMOBOX

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The present invention relates to containers and more particularly to a thermo container which is adapted to receive a bottle of liquid.

An object of this invention is to provide a container which is adapted to receive a bottle of liquid and preferably milk or other dairy product and to maintain a substantially even temperature within the container so that the dairy product will not freeze during the winter time or become sour during the summer.

Another object of this invention is to provide a container of this character with an order indicator by means of which the distributor may know at a glance the exact quantity of milk or other dairy products desired.

A further object of this invention is to provide a container of this character which may be readily and cheaply manufactured and which is so constructed as to be able to withstand weather conditions or changes without affecting the contents thereof.

The above and various other objects and advantages of this invention will in part be described in and in part be understood from the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawings wherein:—

Figure 1 is a detail front elevation of a device constructed according to the preferred embodiment of this invention;

Figure 2 is a longitudinal section taken substantially through the center thereof; and

Figure 3 is a top plan view partly in section of the device.

Referring to the drawings wherein like numerals of reference designate corresponding parts throughout the several view, the numeral 10 designates a container constructed according to the preferred embodiment of this invention, the container 10 being preferably constructed of non-heat conducting material and is preferably elongated and open at one end thereof. The container 10 is provided with reinforcing members 11 which are positioned on the interior corners of the box or container and are securely held in position by nails or other securing members 12.

A bottom 13 is secured to the lower end portion of the container and the bottom 13 may be constructed of wood or other material than the body of the container 10 and an inner or false bottom 14 positioned against the upper face of the outer bottom member 13, the inner bottom 14 being of the same material as the outer walls of the container 10.

The thermo box 10 is adapted to be secured to any desired supporting member such as a wall, post or the like and in order to facilitate the securing of the box 10 to the desired supporting member the box 10 is provided with a bracket member generally designated as 15 which is secured by means of staples 16 or the like to the rear wall of the container 10.

The bracket 15 is provided at the upper portion thereof with a loop or eye 17 for receiving a screw or nail member 18 so that the container 10 may be securely fastened to the desired supporting member. The bracket 15 is preferably of substantially U shaped construction having the open ends thereof positioned downwardly along the rear face of the container 10 and at a point spaced upwardly from the top of the box 10 the bracket member 15 is provided with a pair of loops or eye members 19 for rockably receiving a U shaped hinge member 20.

The hinge member 20 is hingedly secured to a top or lid 21 at the upper face of the lid by means of staples or other securing members 22 and the hinge bar 20 is secured to the lid 21 at a point spaced outwardly from the inner or rear edge portion thereof so that when the lid 21 is opened it will be able to stand upright or in substantially vertical position upon the upper edge of the box 10. The inner face of the lid 21 is provided with an inner reinforcing member 23 which may be constructed of other material than the lid 21 and is preferably constructed of wood or the like and is adapted to extend downwardly into the body of the container 10, being of such size that the marginal edge portions of the member 23 will engage against the inner face portions of the box 10 adjacent the upper end thereof.

It is a well known fact that during the winter or cold months when a dairyman is

delivering milk or other dairy products the dairy products will frequently freeze before the purchaser is able to take them into a warmer temperature. Where a thermo box similar to the type herein disclosed has been provided, the bottle of milk, for instance, may be placed in the interior of the box 10 and the lid closed whereupon the temperature within the box will remain substantially the same for a considerable period of time or at least for a sufficient length of time that the purchaser will be able to remove the milk from the box before it has frozen.

In like manner, during the summer months where milk is delivered at an exceedingly early hour in the morning, the temperature of the atmosphere is frequently such that the quality of the milk is affected and the milk will become sour in an exceedingly short length of time if it has not already become sour before the purchaser has been able to remove it to an icebox or the like. During the summer months, the milk which is normally delivered in a relatively chilled condition will, when placed in the container herein disclosed, maintain the chilled condition there for a sufficient length of time such that when it is removed from the container by the purchaser the quality thereof will not be affected.

In order that the distributor of the dairy products may be apprised of the quality and quantity of the products desired by the purchaser, I have provided an order indicator in the form of a tab 24 which is secured to a flexible member 25 in the form of a chain or the like which is provided at the upper end portion thereof with a hook 26, the hook 26 engaging an eye 27 which is mounted on one of the outer walls of the box 10. The tab or indicator 24 may be provided with suitable indicia or the like so that the distributor may readily know the kind and quantity of products desired.

In the use of this device, the container 10 is preferably mounted on the exterior of a lid or the like and at a point convenient both to the purchaser and the distributor of the dairy products. The purchaser may hang the desired tab 24 on the wall of the container 10 so as to designate the quantity and quality of products desired and particularly during the winter months the lid 21 is preferably closed so that the interior of the container will not be of a temperature below freezing.

When a distributor places the bottle of milk or other product in the container 10 the lid 21 is closed after the product has been inserted therein and the temperature of the atmosphere within the container 10 will not be materially affected by the temperature of the atmosphere exteriorly of the container until a considerable period of time has elapsed and before this period has elapsed the purchaser of the product will have removed the article from the container 10 so that it will be delivered to the purchaser at substantially the same temperature at which the distributor placed the article therein.

While the container herein disclosed has been constructed especially for the receipt of a single bottle or the like, I do not wish to be limited to this construction as the container may be built or constructed in various sizes so as to receive any desired number of bottles or other articles of this kind and while the reinforcing members 11 have been disclosed as positioned on the interior of the container so as to reinforce the corners, the reinforcing members may be positioned on the exterior of the receptacle and be constructed in the form of an angle iron or the like and, if desired, the rear reinforcing members may be extended upwardly above the top of the container and provided with suitable apertures for receiving screws or other securing members for securing the container to the desired supporting structure. Furthermore, the hinge for the lid which has been disclosed as being formed with the supporting member 15 may be a hinge of the conventional construction and positioned on one of the side walls of the container instead of on the rear wall as herein disclosed.

It will, of course, be understood that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of the invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claim.

What is claimed is:—

In a thermo container of the character described including an elongated box having an open end, a bracket secured to said box and having a looped upper end portion whereby to permit securing thereof on a supporting member, a closure member for the open end of said box, a U shaped hinge member secured to said closure member at a point spaced outwardly from the inner end portion thereof, said hinge member also swingingly engaging said bracket.

In testimony whereof I hereunto affix my signature.

WILBUR F. VANDERWALL.