May 3, 1927. 1,627,344

A. C. SCOTT

CONTAINER FOR SHIPPING GOODS

Filed July 21, 1926 2 Sheets-Sheet 1

Fig. 1.

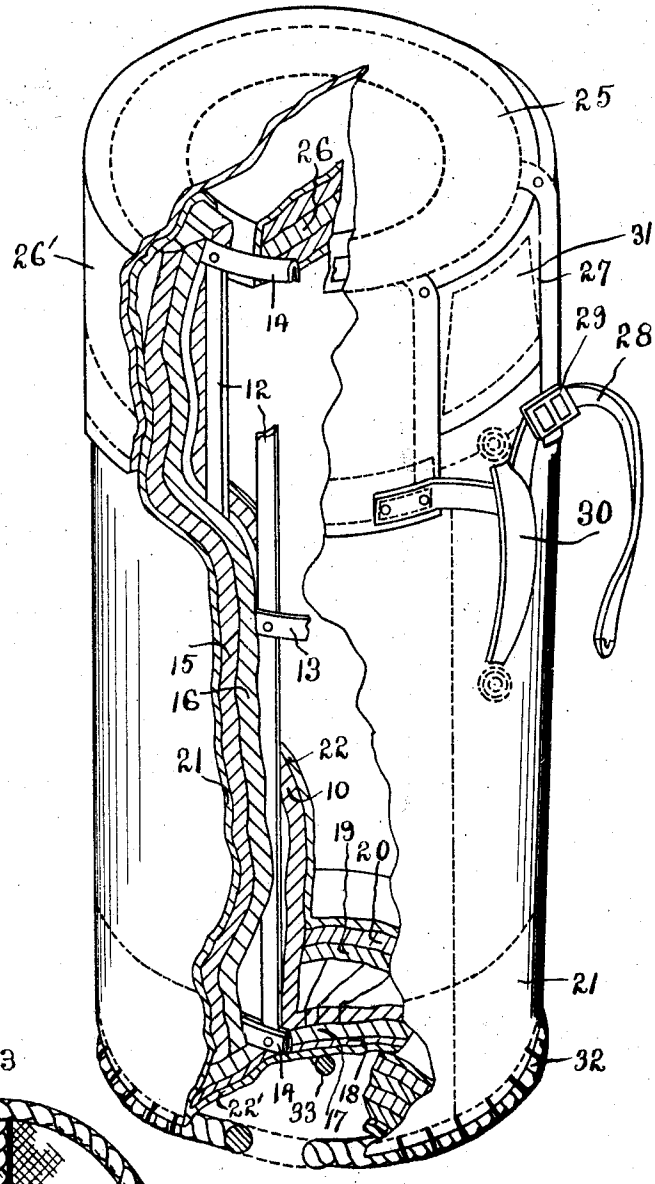
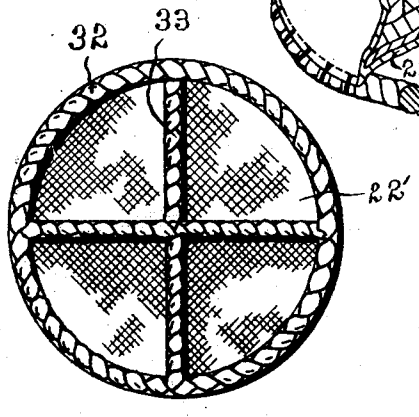


Fig. 2.



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Fig. 4.

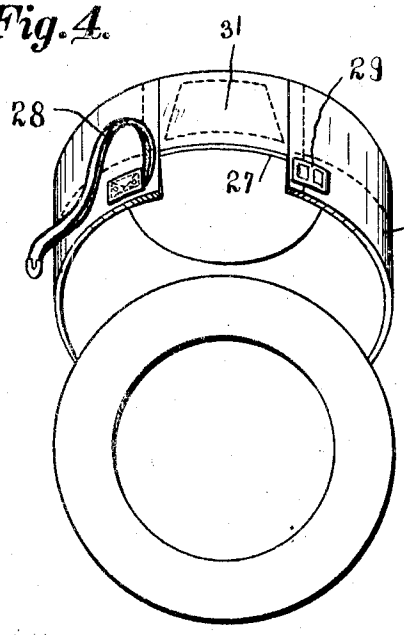


Fig. 3.

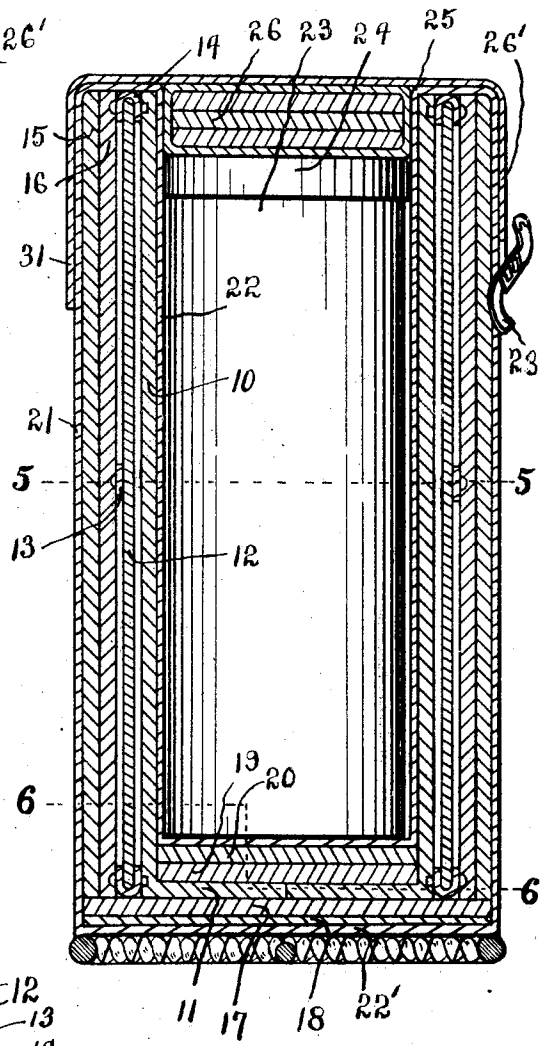


Fig. 5.

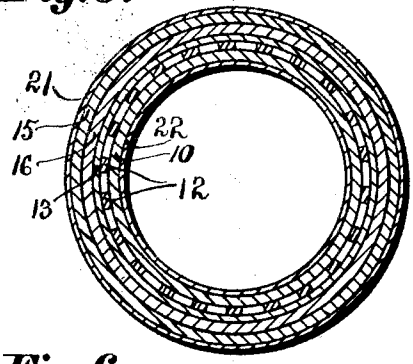
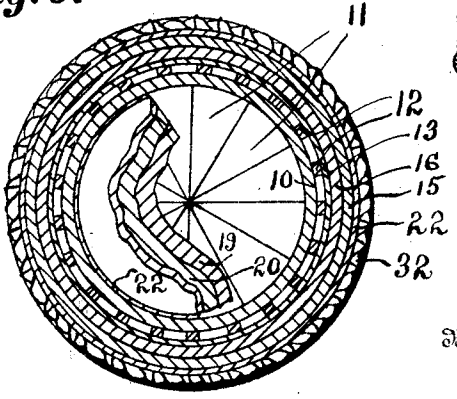


Fig. 6.



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UNITED STATES PATENT OFFICE.

ALLEN C. SCOTT, OF OMAHA, NEBRASKA.

CONTAINER FOR SHIPPING GOODS.

Application filed July 21, 1926. Serial No. 123,888.

The present invention relates to containers for shipping goods, and more particularly to that type of container for sealing goods against thermal changes, such as in shipping ice cream and the like.

An object of the present invention is to provide a container which will seal and protect the contents against temperature changes, so that frozen materials or articles may be safely shipped to remote destinations and may be maintained in practically their original thermal condition for a considerable length of time, such as for fourteen hours.

Another object of the invention is to provide a container which is constructed particularly for use in shipping large quantities of ice cream without packing the same in a refrigerant, so that ice and salt water need not be used and the container itself be smaller in proportions and of lighter weight than the tubs and other devices heretofore used for packing ice cream and the like, and the liability of seepage of water, salt and the like into the interior compartment is removed.

A further object of the invention is to provide a heat insulating container of this type which is adapted for use with the flexible cover and hinge described in my prior Patent No. 1,572,367, granted February 9, 1926, so that the cover and the container may be tightly fitted together to not only seal the contents of the container against temperature changes, but to also provide means for rigidly holding the inner receptacle in position during shipment.

A still further object of the invention is to provide a construction of container of this type, which is relatively light in weight and which is rigid and capable of withstanding the rough handling to which these devices are subjected, and a container which will admit of the easy sliding of the usual heavy cylindrical can of ice cream into and out of the container and to maintain the can in tight fitting relation within the container when in place.

The invention also aims to provide a buffer or support for the bottom of the container which will space the container above a loading platform or the like and prevent heat transmission to the interior of the container.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a perspective view of a container constructed according to the present invention and having the cap of my above referred to patent applied thereto, the container being broken away and in section to show the interior construction.

Figure 2 is a bottom plan view of the container showing the heat insulating support and protector mounted thereon.

Figure 3 is a vertical section taken through the container with the cap thereon.

Figure 4 is a top plan view of the container with the cap detached therefrom and shown in perspective for purposes of illustration.

Figure 5 is a transverse section through the intermediate portion of the container taken on the line 5—5 of Figure 3, and

Figure 6 is a transverse section taken on the line 6—6 of Figure 3 through the lower and bottom portions of the container.

Referring more particularly to the drawings, the container comprises a body wall 10 of felt or the like heat insulating and cushioning material of suitable thickness and extending from top to bottom of the container, and at its lower end being cut and bent inwardly to provide a number of closely fitting segments forming a bottom 11. These bottom sections may be secured together by sewing, or any other suitable matter to provide an integral bottom and side wall construction for the main or body part of the container.

A circular row of vertically disposed slats 12 of wood or the like are disposed about the body wall 10 and extend from top to bottom of the container, and are held together in suitably spaced relation by rings or straps 13 of canvas or the like, which are riveted or otherwise suitably secured to the slats and hold the same in cylindrical formation.

The upper and lower ends of the slats are provided with cushioning or protecting rings 14 of canvas or the like, which are overturned upon the ends of the slats and riveted or otherwise secured thereto for fur-

ther reinforcing the slat structure and to prevent the cutting of the ends of the slats through the adjacent parts of the container. These spaced slats and the rings 13 and 14, which are both preferably of canvas, provide dead air spaces between and at opposite sides of the slats 12 to further assist in the heat non-conducting action of the container.

Surrounding the slat structure are two plies or thicknesses of felt 15 and 16 which extend throughout the length of the slat structure and which provide the outer portion of the wall of the container. The bottom of the container is provided with a pair of discs 17 and 18 of felt or the like which are of a diameter equal to the outer diameter of the wall of the container and upon which rests the bottom 11 and the layers 15 and 16 with the slats 12 which are disposed between the layer 16 and the body wall 10. The bottom of the container is further reinforced against transmission of heat by a pair of relatively small discs 19 and 20, which are snugly fitted within the main wall 10 of the container and against the integral bottom 11. The bottom 11 is thus reinforced and obviates the necessity of a joint between the side wall and the bottom as the sections 11 are merely turned inwardly from the main wall section 10. The entire container is housed within an outer covering 21 of canvas or other suitable material which holds the parts together and which offers considerable resistance to wear. This outer covering 21 has a bottom section 22 which extends over the lower disc 18 and upwardly about the edge thereof and the edge of the disc 17 and which is stitched, or otherwise secured to the felt layers comprising the body portion of the container to hold the canvas covering or casing in place.

The canvas casing 21 extends freely over the upper edges of the layers which comprise the side wall of the container and is formed into a cylindrical shaped bag 22 snugly fitting the inner wall of the container, but which is not secured thereto. The object of this construction is that the bag 22 may be drawn upwardly out of the container and cleansed or treated with a disinfectant.

In Figure 3 there is shown an ice cream can 23 fitting in the container, the can provided with the usual top 24, and the present invention provides a cap 25 of the construction shown in my prior Patent No. 1,572,367, above referred to, and which has a combined packing and heat insulating filler 26 on the inner side of the cap which fits snugly into the upper end of the bag 22 and against the top 24 of the ice cream can for holding the top firmly on the can, and to prevent the can from shifting in the container.

The cap 25 is provided with a flexible skirt 26′ which surrounds the upper end of the container, and is provided with an interrupted portion 27 at one side to admit of the drawing in or contraction of the lower edge of the skirt 26′ to bind the same about the container. The skirt 26′ is provided with a strap 28 at one side and near its lower edge adapted to engage across the interrupted portion 27 and be adjustably secured to a buckle 29. In the present instance the container body is provided upon its exterior with a handle 30 of loop form which is riveted or otherwise suitably secured to the exterior of the container, and which has its upper end in position to engage into the interrupted portion 27 of the cap when the latter is in place.

The strap 28 is of sufficient length, in the present case, to engage downwardly through the looped handle 30, so as to more securely hold the cover 25 on the top of the container. The cap 25 is provided with a flexible hinge 31, of fabric or the like which is secured to the container body but which permits of the swinging of the cap 25 into and out of position when the strap 28 is released.

For the purpose of further insulating the bottom of the container against the transmission of heat upwardly from a platform or the like which has been subjected to the intense heat of the sun, and also for the purpose of absorbing shock incident to the handling of the container, the bottom of the container is provided with a marginal ring 32 of rope or the like, which is stitched or otherwise suitably secured to the canvas 22, and which is reinforced by crossed and interwoven bars 33 also of rope or the like serving to strengthen the ring 32 and also the bottom of the container. This cushioning and heat insulating means on the bottom of the container forms a part thereof and is secured so as at all times to be in position to protect the container, particularly when it is dropped suddenly upon a loading platform, in a freight car or the like.

It is thus observed that the present invention provides a container which has a relatively soft shell and a device which is light in weight but suitably reinforced with a slat structure.

In order to open the container it is only necessary to release the strap 28 and swing the cap 25 backwardly into open position, as shown in my prior Patent No. 1,572,367. The ice cream can 23, or other device adapted to fit in the container, is snugly engaged within the container and the canvas bag 22 fits about the can 23 and binds against the inner felt wall 10, so that the can 23 is yieldingly held in place and is also protected from jar and vibration incident to

the handling and conveying of the container.

The bottom is practically seamless as the felt section 11 is merely turned inwardly from the wall section 10 and the seams or crevices between the bottom sections 11 are overlapped and closed by the discs 19 and 20 on their upper side and by the discs 17 and 18 at their lower side.

I do not wish to be restricted to the size, form and proportions of the various parts, and obviously changes could be made in the construction herein described without departing from the spirit of the invention, it being only necessary that such changes fall within the scope of the appended claims.

What is claimed is:—

1. A shipping container comprising a cylindrical body including layers of soft heat and non-conducting material, a slat reinforcement comprising spaced slats and flexible connecting rings therefor interposed between said layers to stiffen the same and provide dead air spaces between the layers, an enclosing covering secured across the bottom and over the sides of the container and provided with a loose bag portion adapted to fit in the cavity of the container, and a cap carried upon the upper end of the container for closing the same.

2. A shipping container comprising a plurality of layers of felt arranged in cylindrical form, one of said felt layers having an inturned integral bottom adapted to close the lower end of the container, heat non-conducting layers secured against the opposite sides of said bottom for protecting the same and increasing the heat non-conducting character of the bottom, and a bag carried upon the upper end of the container and extending downwardly into the same for supporting articles to be shipped, said bag adapted to be drawn upwardly out of the container for cleansing, and a cap carried by the container for closing the upper end of the same.

3. A shipping container comprising a heat non-conducting body portion, a bottom closing the lower end of said body portion and including integral sections turned inwardly from the body portion to eliminate seams between the bottom and body portion, and an annulus of rope construction secured upon the bottom of the body portion and provided with interwoven cross bars for reinforcing the same and supporting the integral section of said bottom.

4. A shipping container comprising a plurality of cylindrically and concentrically disposed walls, a plurality of spaced slats interposed between said walls longitudinally of the container for stiffening the sides of the container and leaving the inner and outer walls thereof smooth and uninterrupted, a bottom for the container having layers integral with and turned inwardly from the side wall layers, and a removable cap fitting upon the upper end of the container.

5. A shipping container, comprising a plurality of cylindrically and concentrically disposed felt layers, spaced reinforcing slats disposed lengthwise of the container and between the felt layers to dispose the felt layers at the inner and outer sides of the slats and provide uninterrupted inner and outer surfaces for the container, and means for holding the slats from shifting between the layers.

6. A shipping container comprising a felt body portion, a stiffening element disposed in said body portion and comprising a plurality of spaced apart slats arranged lengthwise of the body portion and flexible rings connecting said slats together.

In testimony whereof, I have affixed my signature.

ALLEN C. SCOTT.