No. 697,496. Patented Apr. 15, 1902.

F. C. KLOTZ.

SHIPPING VESSEL FOR ICE CREAM.

(Application filed Jan. 27, 1902.)

(No Model.)

Fig. 1.

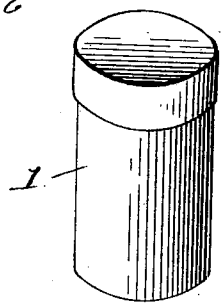


Fig. 2.

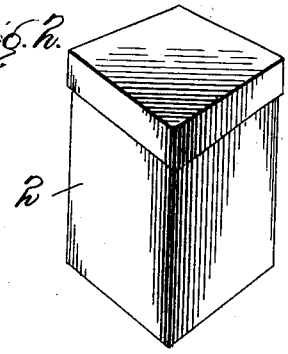


Fig. 3.

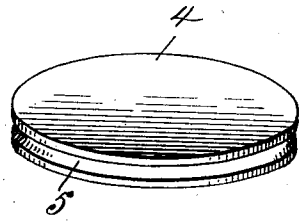


Fig. 4.

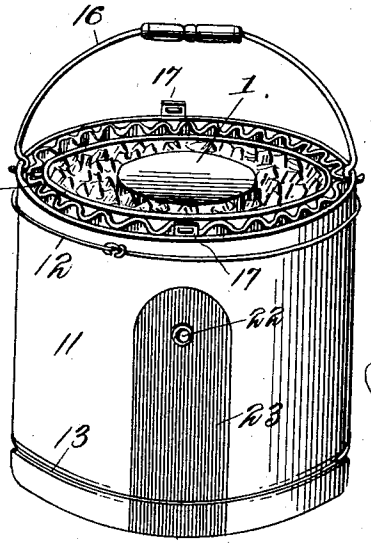
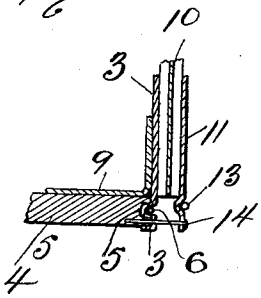


Fig. 6.



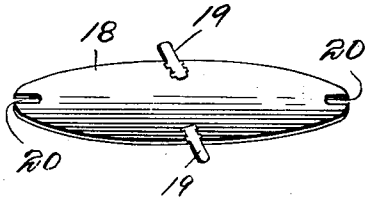
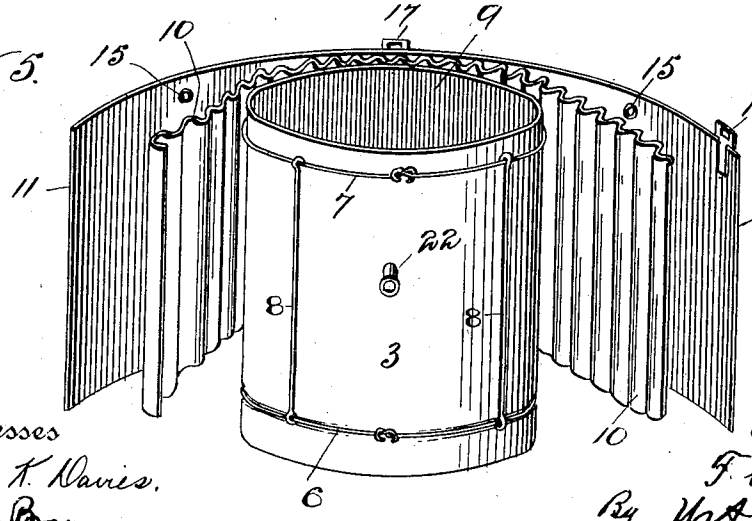


Fig. 5.



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UNITED STATES PATENT OFFICE.

FREDERICK CHARLES KLOTZ, OF LOUISVILLE, KENTUCKY.

SHIPPING VESSEL FOR ICE-CREAM.

SPECIFICATION forming part of Letters Patent No. 697,496, dated April 15, 1902.

Application filed January 27, 1902. Serial No. 91,393. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK CHARLES KLOTZ, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Storing and Shipping Vessels for Ice-Cream, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to storing and shipping vessels for ice-cream and similar frozen material.

The object of the invention is to produce a vessel or package in which ices or frozen material may be stored and shipped, the vessel or package being lighter in weight than is usual and so cheap in construction that the same can be given away with the goods and the expense of reshipment avoided—that is, the average cost of these vessels of my invention is not more than the cost of handling or shipment of ice-cream freezers of ordinary construction. As these vessels are to be used but once and are required to endure but a few hours, or, at most, generally not more than a day of storage of wet material, they need not be of heavy material, and the waterproofing need not be of the thorough character required when liquids are to be stored for long periods of time.

Figure 1 is a perspective view of an ice-cream tube or box, and Fig. 2 is a similar view of a box of different form. Fig. 3 is a perspective of the bottom of the ice-receptacle. Fig. 4 is a perspective view of the complete package and its cover. Fig. 5 is a perspective view of the ice-receptacle with its non-conducting cover partly detached and spread out to show construction. Fig. 6 is a broken detail section of the corner of the ice-pail.

The numerals 1 and 2 denote cream tubes or boxes. These are of paper or pasteboard saturated or coated with paraffin or similar waterproofing material. The ice-cream or water-ice is packed within, and if molded into "bricks," as is common, the cream may be packed in tissue paper or paraffin-paper. The box or tube 1 is inclosed in receiver or ice-pail 3. This receiver has a wooden bottom 4 of the form of the completed receptacle and having a groove 5 in its edge. The receiver or ice-pail has its sides composed of papier-mâché, strawboard, or like thin porous material 3. This tube 3 is wound about the bottom 4 and is crimped into the groove 5 and held by a wire 6, wound around the outside of the pail in the crimp thereof. Preferably the sides 3 of the bucket may be in form of a "rolled-up" tube constructed of coiled sheets, as is well known in this art. If made of pasteboard, the edges are overlapped and cemented in any usual manner.

A wire 7 surrounds the upper portion of the ice receiver or pail, and in the larger sizes the wire hoops 6 and 7 may be connected by vertical wires 8.

The inside of the ice pail or receiver is coated with tar, asphalt, or other waterproof coating or varnish 9. This coating will prevent the escape of water which may be formed by the melting of the ice in the pail.

Around the ice pail or receiver there is a corrugated sheet 10 of pasteboard, veneer, or other light material, and outside this there is a covering 11 of pasteboard, strawboard, veneer, or other light material. The corrugated filling 10 and the covering 11 are held to the ice-pail by wire hoops 12 13. The bottom wire 12 lies in a corrugation in the cover 11. In the larger receptacles nails 14 may be driven through the outer cover into the wooden bottom 4 to prevent separation of the parts or sections. The corrugated or fluted sheet 10 thus forms an air-chamber around the ice-receiver. The covering-tube 11 has eyelets or holes 15 or other suitable means for attachment of the bail or handle 16.

The casing or covering 11 has metallic staples, hooks, or similar fastening-detents 17. These are secured to the covering in any convenient way.

The detachable cover 18, which is preferably of strawboard or light veneer, has metallic clips 19 attached by points to its edges. These strips are flexible and can be passed through the loops 17 and turned in, so as to hold the cover in place steadily. The cover should be notched at 20, so as to readily retain its position against the bail 16.

In use the receptacle 1 or 2 is packed with ice-cream or like material and is placed in the receiver, the space between the two being filled with ice or ice and salt. The cover is then applied and secured. The space be-

tween the ice-pail and cover then acts as a non-conductor of heat and a much smaller ice-supply will suffice to retain the cream in frozen condition than if the cover were omitted. Thus in shipping by express there is a gain in the first cost of ice and in the expense of transportation thereof.

A small tube 22 extends from the inside of the pail through the corrugated sheet 10 and outer covering 11. Outside the covering 11 below the outlet of tube 22 a section 23 of the surface of covering 11 is coated with tar, asphalt, paint, or some material which will prevent the liquid from the tube 22 from soaking into the outer covering. The tube 22 drains off the water which would otherwise accumulate in the receiver or ice-pail from the melting of ice and prevents water from rising so high in the receiver that it might enter under the cover of the cream-tube 1 or 2.

From the foregoing it will be understood that my receptacle for storing and shipping cream is made as light as well may be and at small cost. The waterproofing coating 9 may be made of greater than ordinary thickness, if found desirable, to ship for a considerable distance or store for a considerable time. A large receiver may then be used for a small can or box 1 or 2 and the quantity of ice increased.

I am aware that bottle-covers and the like are made with a corrugated sheet interposed between an inner and an outer tube of pasteboard; also, that refrigerators of many kinds are made with air-chambers surrounding an ice-chamber. My invention uses some of these features; but as a whole they are differently applied. The waterproofing of only one surface of an otherwise porous material leaves it a better non-conductor of heat than if it were saturated with waterproofing material, while the cost is much less.

What I claim is—

1. In a vessel for shipping ice-cream, the combination of a pasteboard cream tube or box, a pail or receiver therefor which is composed of strawboard or the like, waterproofed on its interior and having a corrugated sheet outside and a covering over the same connected to the pail, and a drainage-tube passing through the outer casing, corrugated packing, and waterproofed side of the pail.

2. In a vessel for shipping ice-cream, the combination of the inner ice-receptacle of sheet material waterproofed on its inner surface, the outer covering and the interposed corrugated packing, and a drainage-tube passing through the side of the ice-receptacle and its covering, said covering being waterproofed on its outer surface near the terminal of the drainage-tube, substantially as described.

3. The combination, in an ice-cream storage vessel, of the cream-tube, a pasteboard pail having a wooden bottom and waterproofed on its inner face only, an outer tubular covering of pasteboard and an interposed corrugated sheet, and wire hoops confining the pasteboard tubes to position, substantially as described.

4. In an ice-cream shipping and storing vessel, a pail composed of a tube of pasteboard, a wooden bottom, and a covering around the tubular portion consisting of a corrugated non-conducting lining, and a paper covering, cover-detents connected to this tubular covering, and a flat cover having clips which may be passed through said detents.

5. In an ice-cream-storing vessel, a receiver having its sides of strawboard or the like waterproofed on its inner surface only, a corrugated sheet surrounding said sides, a coiled paper covering therefor waterproofed on a part only of its outer surface, and a drainage-tube passing through the waterproofed portion of the outer cover and into the receiver, all combined.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK CHARLES KLOTZ.

Witnesses:
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GEO. W. CUSCADEN.