Nov. 6, 1923. 1,473,226

J. N. GRAVES

ICE CREAM PACKER OR SHIPPING RECEPTACLE

Filed Jan. 31. 1922

Fig. 1.

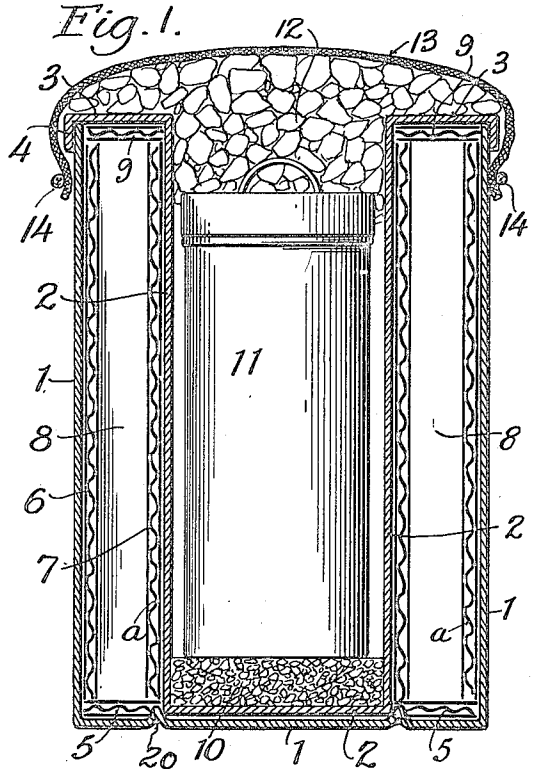


Fig. 3.

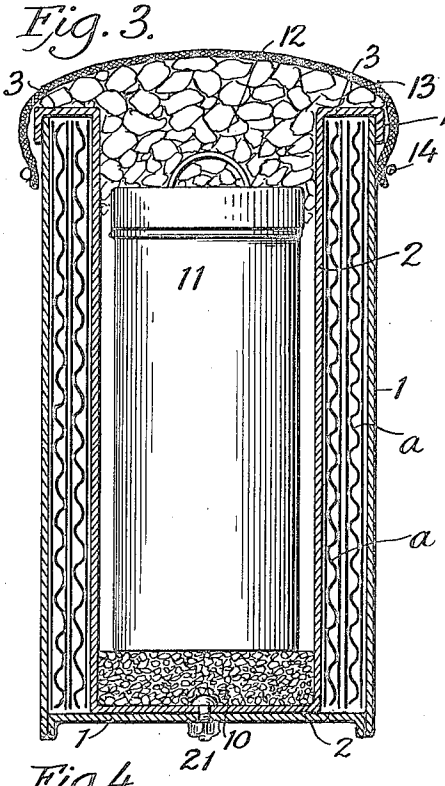


Fig. 2.

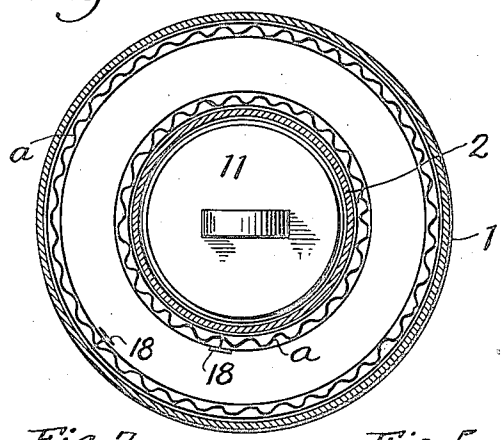


Fig. 4.

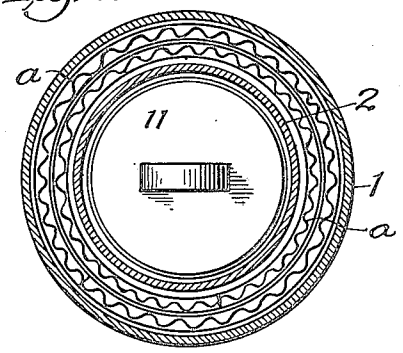


Fig. 7.

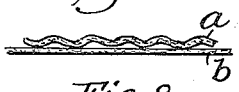


Fig. 8.

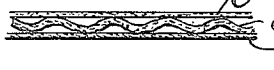


Fig. 5.

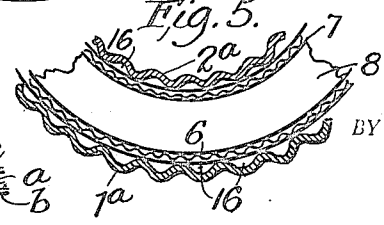
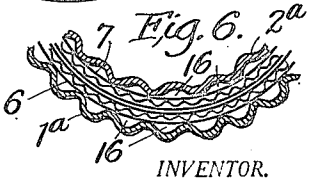


Fig. 6. 2a



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UNITED STATES PATENT OFFICE.

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ICE-CREAM PACKER OR SHIPPING RECEPTACLE.

Application filed January 31, 1922. Serial No. 533,095.

To all whom it may concern:

Be it known that I, JOHN NEWCOMB GRAVES, a citizen of the United States of America, and a resident of Oklahoma, in the county and State of Oklahoma, U. S. A., have invented certain new and useful Improvements in Ice-Cream Packers or Shipping Receptacles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to ice-cream packers or shipping receptacles.

The devices known in the trade as "packers" almost universally consist of wooden tubs into which the can of ice-cream is placed and crushed ice and salt is placed between the can and tub and over the top of the can.

These tubs must be exceptionally thick in order to withstand the handling, and by far the greatest loss is due to employees dropping the heavy cans of cream into them, thereby breaking out the bottoms.

It requires about one hundred pounds of ice to ice a five gallon can of ice cream.

The shipping costs of such heavy packers and the required ice are considerable.

It is the object of my invention to construct a packer of metal that will withstand the rough handling, will require much less ice without impairing the condition of the ice cream during shipment, and that may be easily and cheaply repaired.

Referring to the drawings, in which like parts are similarly designated—

Figure 1 is a vertical section of a packer involving my invention.

Fig. 2 is a cross-section showing the corrugations arranged vertically.

Fig. 3 is a vertical section of a modified construction.

Fig. 4 is a cross-section showing the corrugations of the insulation arranged vertically.

Fig. 5 is a fragmentary cross-section showing corrugated receptacles in a construction similar to Fig. 2.

Fig. 6 is a like view showing corrugated receptacles corresponding to Fig. 4.

Fig. 7 is a cross-section of one form of insulation.

Fig. 8 is a like cross-section of another form of insulation.

As an insulator used for the receptacles of the packer or shipping container I employ a faced corrugated sheet, as *a* Fig. 7, faced on one side with a flat sheet *b*, or, as in Fig. 8, faced on both sides with sheets *b* and *c*.

Such packing and insulating material is made of various substances, and is a well known article of commerce. I prefer, however, to use a corrugated sheet made of paper or cardboard and faced on one or both sides with a flat sheet of paper.

My packer comprises an outer metallic receptacle 1, preferably cylindrical and an inner metallic receptacle 2 whose sides are spaced from the outer receptacle and whose bottom rests either directly on the bottom of the outer receptacle or has a sheet of insulating material interposed. Preferably the bottoms of the two receptacles contact.

The upper end of the inner receptacle 2 has a flange 3 sufficiently wide to cover the intervening space between the parallel walls of the receptacles. This flange has a turned-down rim 4, fitting the outer receptacle.

On the bottom of the outer can I place a sheet 5 of packing board such as I have described, and then insert against the inner wall of the outer receptacle a sheet 6 of like material, and also such a sheet 7 against the outer wall of the inner receptacle, leaving a dead air space 8 between them.

The meeting edges of the corrugated sheets may be secured together by a gummed paper binding strip, as shown at 18 Fig. 2, or fastened together in any other manner.

A sheet 9 of the same packing and insulating material is placed beneath the flange 3.

In the bottom of the inner receptacle I place a cushion 10 of comminuted cork and pitch or tar.

The can, 11, of ice-cream to be shipped is placed in the inner receptacle 2 and fits in with ease. The top of the can 11 lies below the top of receptacle 2, leaving an ice chamber 12. Ice is placed over the top of the can 11 and over flange 3, being held in place by a canvas cover 13 tied to the outer receptacle with a rope 14.

Fig. 3 shows a similar arrangement, but with the space between the inner and outer

receptacles filled with the corrugated packing board, thus doing away with the large dead air space 8, of Fig. 1. In Figures 1 and 3 the corrugations *a* of the card board are arranged horizontally, while in Figures 2 and 4 they are arranged vertically.

The spaces between the corrugated member *a* and the facing sheets *b* and *c* form small individual dead air chambers that are effective in insulating the receptacles.

In Figs. 5 and 6 I have shown the inner and outer receptacles 1^a and 2^a as corrugated and this forms additional air spaces 16 for assistance in the insulation.

The corrugations of the receptacles while being indicated as vertical may be peripheral, according to the type of metallic receptacle that is made at the factory where the receptacles are to be purchased.

The inner receptacle 2 is readily removable from the outer receptacle, the corrugated faced card board sheets are very easily inserted and renewed when the packer becomes damaged, and the metallic receptacles thus can be easily re-shaped, when dented, by simple hand tools.

No soldering is required. The cork and pitch cushion in the bottom of the receptacle protects the bottoms from denting by dropping the heavy cans of ice-cream on them, and will last a long time, being resistant to salt water.

Should the cushion become unduly deformed during use, it is simply necessary to remove the inner receptacle and heat it, if necessary adding more cork and pitch.

I have found that it is sufficient to use only ten or fifteen pounds of ice for twenty-four hours of service with such a packer.

I claim:

1. An ice cream packer comprising an outer metal receptacle, a metal receptacle mounted in and spaced from the outer receptacle forming an annular air chamber between the two receptacles, a flange on the top of the inner receptacle closing said chamber, said flange having a downwardly extending rim fitting the outer receptacle, to maintain the two receptacles in spaced relation, corrugated cardboard lining the sides and ends of the annular chamber, a container mounted in the inner receptacles shorter than the latter thereby forming an ice chamber below the tops of the receptacles, and a flexible cover enclosing the chamber and tops of both receptacles.

2. In an ice-cream packer, the combination with a cylindrical outer corrugated, metallic receptacle, and a lining of corrugated, faced cardboard therefor; of a cylindrical, inner corrugated, metallic receptacle whose bottom rests on the bottom of the outer receptacle and with its sides spaced from the sides of the outer receptacle, an outer covering of faced corrugated cardboard for the latter receptacle, said inner receptacle having a flange at its top covering the space between the receptacles, with a downwardly extending rim at its edge fitting the outer receptacle, and a cushion within the inner receptacle of mixed cork and pitch.

3. An ice-cream packer, the combination with an outer metallic receptacle and an inner metallic receptacle spaced from one another, a bolt passing through the bottoms of the receptacles to hold them centered faced, corrugated, cardboard insulating material in the space between the receptacles, said inner receptacle having a flange at its top covering the space between the receptacles said flange having a rim fiitting the outer receptacle, and an insulating cushion material in the bottom of the inner receptacle covering said bolt.

In testimony that I claim the foregoing as my invention, I have signed my name hereto.

JOHN N. GRAVES.