Feb. 2 , 1926. 1,571,342

C. PAIGE

ICE BOX

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Fig. 1.

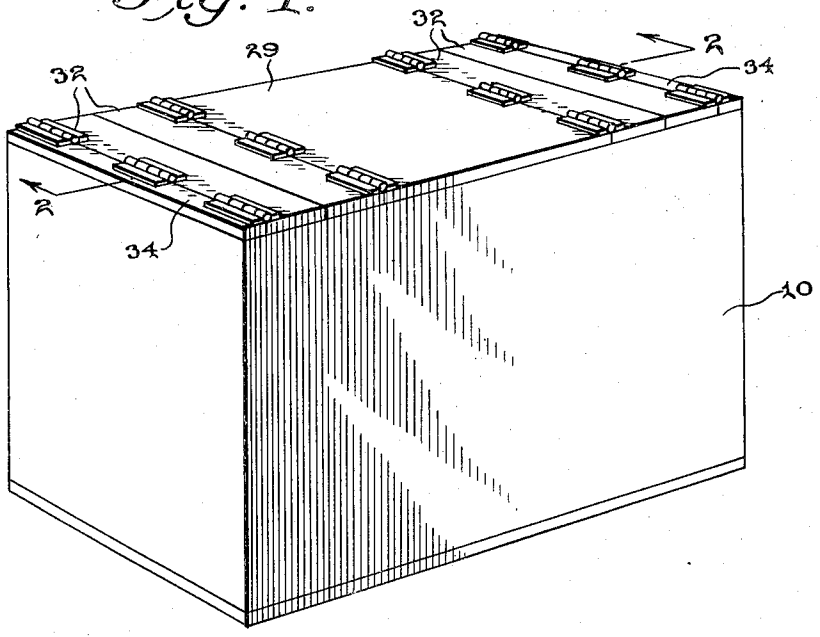
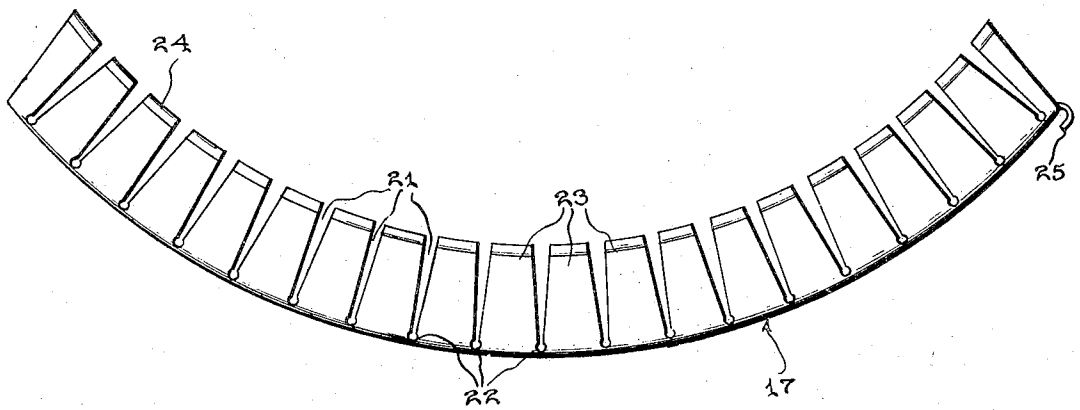


Fig. 4.



WITNESSES

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Fig. 2.

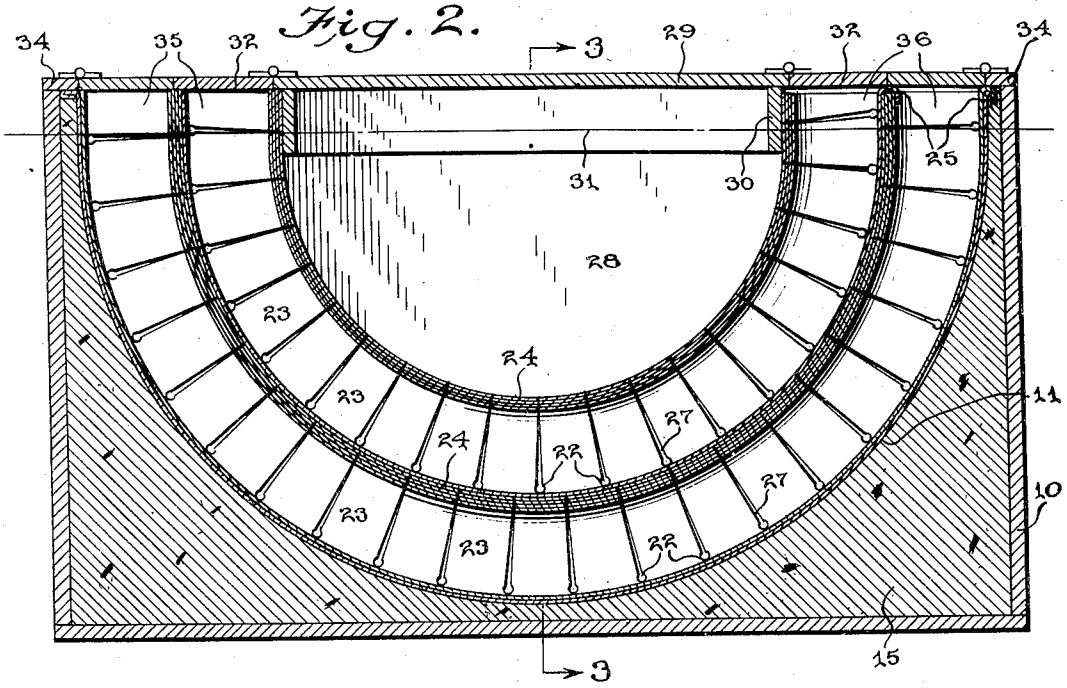
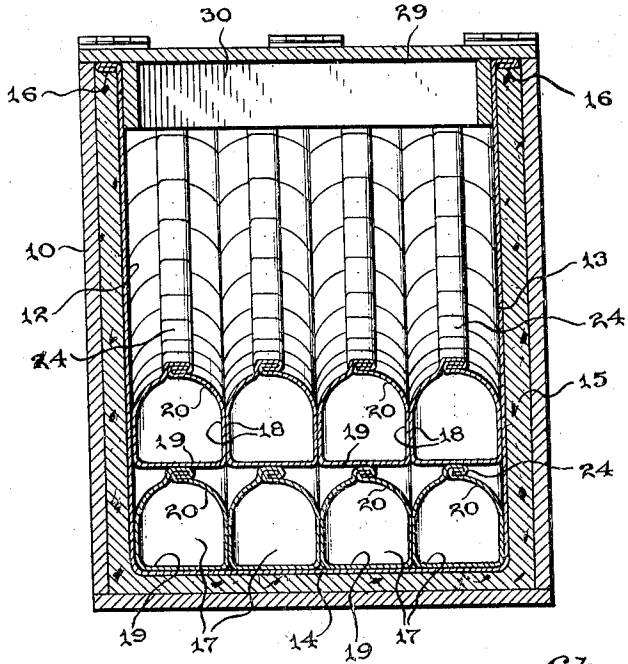


Fig. 3.



WITNESSES

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Patented Feb. 2, 1926. 1,571,342

UNITED STATES PATENT OFFICE.

CHESTER PAIGE, OF NOWATA, OKLAHOMA.

ICE BOX.

Application filed September 19, 1925. Serial No. 57,418.

To all whom it may concern:

Be it known that I, CHESTER PAIGE, a citizen of the United States, and a resident of Nowata, in the county of Nowata and State of Oklahoma, have invented certain new and useful Improvements in Ice Boxes, of which the following is a specification.

This invention relates to ice chests and has for its object the provision of a refrigerator for cooling the contents of sealed bottles and in which the bottles are exposed in tubes directly to water chilled by melting ice.

A further object of the invention is the provision of a refrigerator having flexible metal tubes of semi-circular form through which bottles containing liquid may be forced, the tubes being slotted and immersed in ice-chilled water so that the water may circulate freely around the bottles.

This invention will be best understood from a consideration of the following detailed description, in view of the accompanying drawing forming a part of the specification; nevertheless it is to be understood that the invention is not confined to the disclosure, being susceptible of such changes and modifications which shall define no material departure from the salient features of the invention as expressed in the appended claims.

In the drawings:—

Figure 1 is a view in perspective of an ice chest or refrigerator constructed according to the principles of my invention,

Figure 2 is a longitudinal vertical section of the refrigerator taken along the line 2—2 of Figure 1,

Figure 3 is a transverse vertical section taken along the line 3—3 of Figure 2, and

Figure 4 is a plan view of a flexible tube in expanded relation and forming a receptable for bottles.

Referring more particularly to the drawings 10 designates a rectangular casing having an open upper end and formed of wood or metal and any other suitable material. A semi-circular metal container 11 having two flat walls 12 and 13 and a curved bottom 14 is located in the casing 10 and spaced from the bottom and walls of said casing. The space between the container 11 and the casing 10 is filled with cork 15 or any other suitable insulating material as are well known. The upper ends of the side walls 12 and 13 of the container are provided with lateral flanges 16 engaging the side walls of the container and may be secured to the walls of the casing if desired. These flanges not only space the upper side edges of the container from side walls of the casing but form closures for said space and aid in protecting the cork filling from moisture.

A plurality of outer flexible semi-circular tubes 17 are arranged to neatly fit the semi-circular container 11 and a plurality of inner flexible semi-circular tubes 18 are arranged on top of the tubes 17 and are formed on a shorter radius than tubes 17. The tubes present a flat bottom 19 in cross section and a curved reduced top 20.

The tubes are shown more particularly in Figures 3 and 4 and are formed of a single sheet of metal which is cut along the longitudinal edges to provide V-shaped cut-out portions 21, apertures 22 at the inner ends of the cuts and fingers 23. The fingers are curved toward each other as indicated at 20 and the extreme free ends are bent around each other to form lap joints 24. The lap joints of the outer tubes 17 form seats for the inner tubes 18. At one end, each tube has an integrally formed hook 25. The hooks or tubes 17 engage over an upper edge of the container which the hooks on tubes 18 engage over the lap joints at the ends of the tubes 17 which are also provided with the hooks. The cut out portions 21 permit the fingers 23 to meet along their edges when the tubes are bent to form and placed in the semi-circular container 11. The slots 27 between the edges of the finger and the perforations 22 permit the circulation of the chilled water from a chamber 28 through the tubes.

The chamber 28 is closed by a cover 29 having a depending flange 30 projecting into chamber 28 and below the water level 31 in said chamber and tubes. A cover or door 32 is hinged on each end of the cover 29 and closes the ends of the inner tubes 18. A cover or door 33 is hinged on a short strip of material 34. A strap 34 is secured to each end of the casing and flush with the covers, said covers being co-extensions with the width of the casing.

Ice and water are placed in the chamber 28 to the level indicated at 31. The water not only fills the chamber but the tubes 17 and 18. As the cold water descends it circulates through the tubes and chills the sealed bottles filled with liquids disposed in

the tubes. The bottles are placed in the ends of the tubes as indicated at 35 and said bottles are forced towards the discharge ends 36 of the tubes by forcing bottles against the bottles located at the inlets 35 so that the bottles will form a continuous line from the inlet to the discharge ends of the tubes. The tubes are of a size to permit ready passage of the bottles therethrough. Furthermore sufficient tubes may be employed and labeled for individual bottled beverages that by inserting a bottle in a particular tube, the correct bottled beverage will be forced from the discharge ends of a tube.

What I claim is:—

1. A refrigerator comprising a casing, a container in the casing and insulated from the casing, tubes mounted in the container to receive articles to be cooled, a chamber in the casing adapted to receive a refrigerating medium said tubes being provided with openings to permit the circulation of the cooling medium through the tubes, each of the tubes being formed of a single sheet of metal, having cut out portions along the opposite edges to provide fingers, opposite fingers on the edges of the shell being connected together, said tubes being bent to semi-circular form in the container, the spaces between the fingers forming openings to permit the circulation of the cooling medium.

2. A refrigerator comprising a casing, a container in the casing and insulated from the casing, tubes mounted in the container to receive articles to be cooled, a chamber in the casing adapted to receive a refrigerating medium, said tubes being slotted transversely for a portion of their circumference to provide openings to permit the circulation of the cooling medium through the tubes, the slotting of said tubes providing for flexibility so that the tubes may be bent to semi-circular form, with the ends of the tubes located adjacent the top of the container.

3. A refrigerator comprising a casing, a container in the casing and insulated from the casing, a plurality of tubes located in juxta-position and also in superimposed relation and cooperating with the casing, the tops of the tubes cooperating with the side walls of the container to form a chamber adapted to receive a refrigerating medium, said tubes being provided with spaced cuts running transversely of the tubes, sufficient metal being cut away at the points whereby when the tubes are bent in curved formation for placement in the container the adjacent edges of the portions formed by the cuts will be adapted to be moved in close association for providing openings in the tubes while permitting bending of the tubes.

CHESTER PAIGE.