June 26, 1923. 1,460,304

O. M. WOOLDRIDGE

BOTTLE COOLING DEVICE

Filed April 17, 1922 2 Sheets-Sheet 1

Fig. 1.

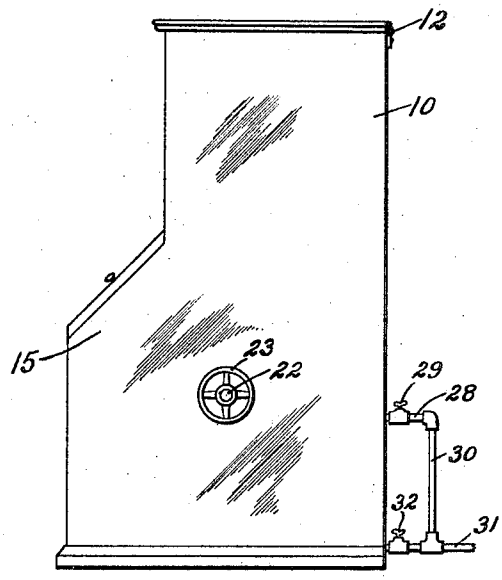


Fig. 2.

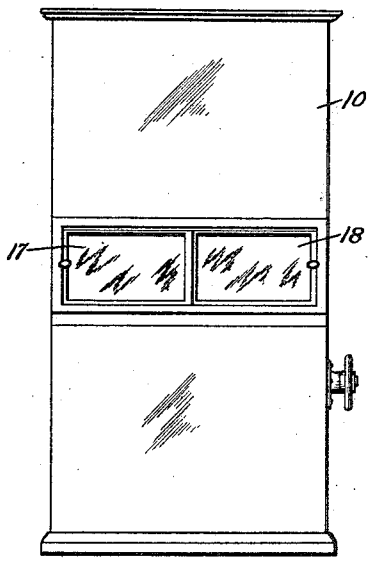
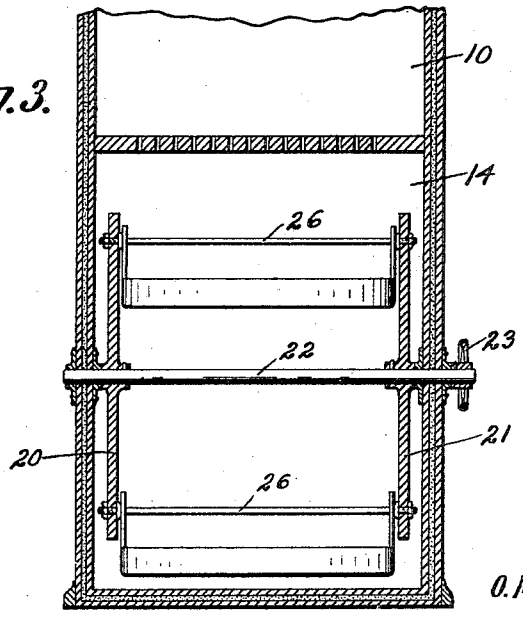


Fig. 3.



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Fig. 4.

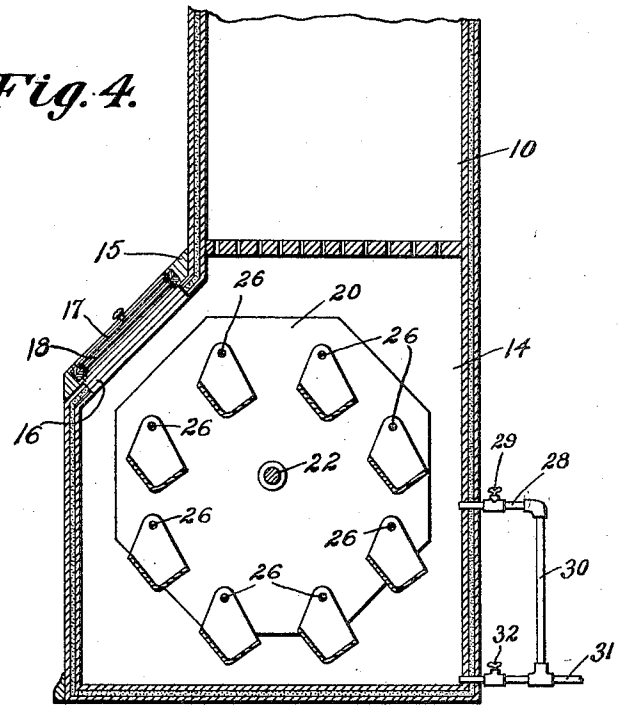
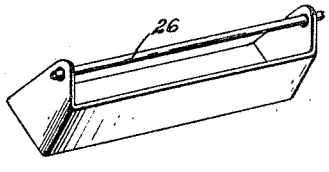


Fig. 5.



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UNITED STATES PATENT OFFICE.

OSCAR M. WOOLDRIDGE, OF EVANSVILLE, INDIANA.

BOTTLE-COOLING DEVICE.

Application filed April 17, 1922. Serial No. 553,457.

To all whom it may concern:

Be it known that I, OSCAR M. WOOLDRIDGE, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented new and useful Improvements in Bottle-Cooling Devices, of which the following is a specification.

This invention relates to a bottle cooling device, and the object is to provide, in connection with an ice chamber, means for rotatably mounting a bottle rack below the ice chambers, and in a tank or chamber provided for the purpose, so that the water resulting from the melting ice will come into contact with the bottles to be cooled, and will collect in the tank, permitting the bottles in the lower portion of the rack to be constantly immersed in a cooling fluid.

A further object is to provide a dispensing device especially adapted for cooling soft drinks in bottles, the bottles being readily accessible, and means being provided in the lower portion of the casing, for permitting of the examination of the labels, as the bottle rack is rotated.

A still further object is to provide a rotating bottle rack which shall include pivotally mounted bottle supporting elements, in the form of trays, maintaining their position by gravity, and being capable of each receiving a considerable number of bottles placed side by side.

With the foregoing and other objects in view the invention consists in the novel construction and arrangement of elements described and claimed, it being understood that modifications may be made within the scope of the claims, without departing from the spirit of the invention.

In the drawings, Figure 1 is a view of the device in side elevation; Figure 2 is a view in front elevation; Figure 3 is a vertical longitudinal section; Figure 4 is a vertical section from another angle; Figure 5 is a detail view of one of the pivoted trays.

In the practical embodiment of the device, I provide a casing or cabinet including an upper portion 10, usually formed with double walls, and constituting an ice box. This receptacle is provided with a hinge or other form of cover, designated 12.

The casing further includes a lower portion providing a chamber or tank 14, in which the bottle rack is mounted and housed. This lower portion 14 is of greater cross section than the upper portion 10, and the forwardly extending portion 15 of the lower part of the casing is only partly closed in a permanent manner, an opening 16 being provided for the insertion and withdrawal of the bottles. This opening is closed under normal conditions by means of doors 17 and 18 slidable with reference to each other, and each consisting of a frame mounting a glass panel, through which the labels of the bottles may be examined.

The rotatable bottle rack includes a plurality of end members 20 and 21 mounted on a shaft 22 having its bearings in the side walls of the lower portion of the casing. The shaft and rack are rotated by means of any suitable element, such as that shown at 23, mounted on one outer end of the shaft.

The rack is of such construction that it is of the least possible diameter, considering the number of bottles to be accommodated. For example, the diameter may be about fifteen inches, eight pivotally mounted trays being provided, the length of the trays being forty-four inches, in one standard size of cooler. A number of bottles are placed side by side in each tray, and since the trays are swingingly mounted on rod or shaft 26, they will always maintain such position that the labels will be visible as the rack is rotated.

Figures 4 and 5 show that the trays are of V-shape in cross section, these views also showing the relation of the point of pivotal suspension to the walls of the trays, permitting the bottles to stand directly on their ends, with all labels visible, while the rack is being rotated.

The lower chamber or tank constitutes a drip receptacle, and the bottles in the lower portion of the rack are directly beneath the ice chamber and therefore in the path of the cooled water resulting from the melting of the ice. The water collects in the tank and many of the bottles will therefore be immersed. The level of the water is determined by the upper pipe connection 28, controlled by valve 29. This connection 28 communicates with pipe 30. Valve 32 controls drain pipe 31, leading from the bottom of the tank into pipe 30.

Having thus described my invention, I claim:

1. A rack for a bottle cooling device, comprising spaced rotatable elements, rods in spaced relation extending between said ele-

ments and connected therewith, the rods being parallel with the axis of rotation, and trays approximately V-shaped in cross section pivotally suspended from the rods.

2. In a device of the class described, a casing including an upper chamber and a lower chamber, a rack rotatably mounted in the lower chamber, said lower chamber being provided with an opening, through which the contents of the rack are accessible, the rack including a plurality of bottle receiving devices of trough-like formation, V-shaped in cross section and each mounted to swing on a horizontal axis during the rotation of the rack, permitting the bottles to maintain a given position with reference to the bottle holding device by which they are received, and permitting the inspection of the labels through said opening of the lower chamber.

In testimony whereof I affix my signature.

OSCAR M. WOOLDRIDGE.