

J. L. WILLIAMS.
WATER COOLER.
APPLICATION FILED DEC. 7, 1914.

Patented Mar. 21, 1916.

1,176,011.

Fig. 1

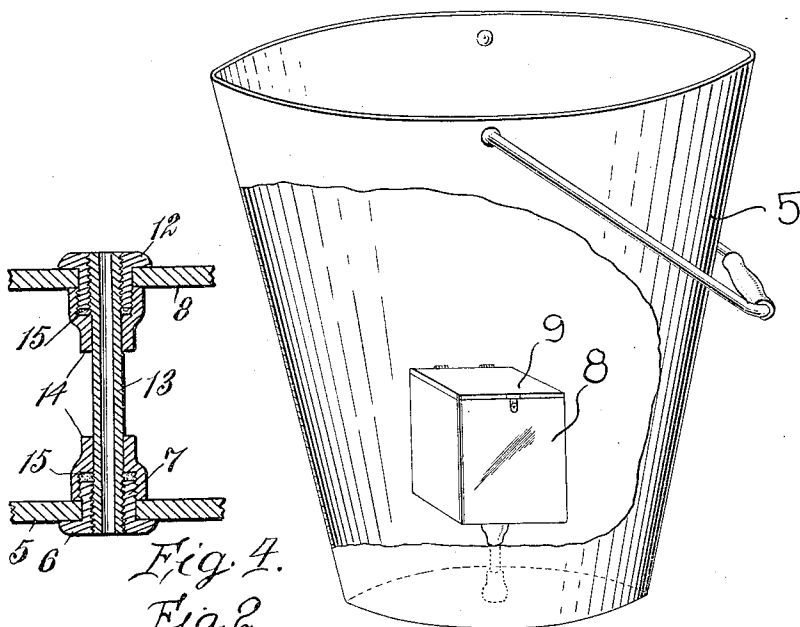


Fig. 4.
Fig. 2

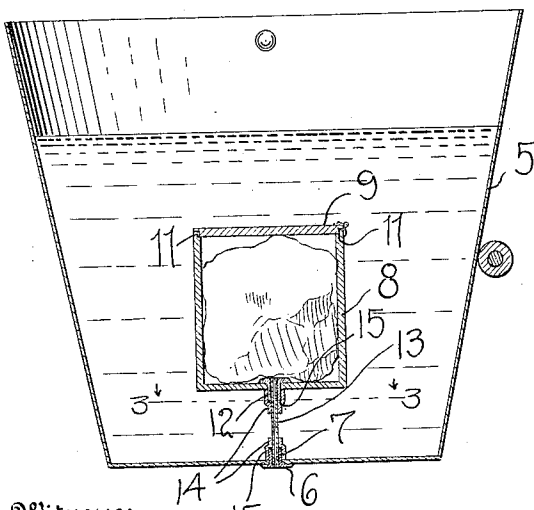
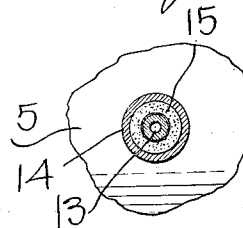


Fig. 3



Inventor

J. L. WILLIAMS

Witnesses

Robert M. Sutphen.
A. L. Hied.

By *Watson E. Coleman*
Attorney

UNITED STATES PATENT OFFICE.

JAMES L. WILLIAMS, OF CROSBYTON, TEXAS, ASSIGNOR OF ONE-FOURTH TO JAMES E. MILLER, OF CROSBYTON, TEXAS.

WATER-COOLER.

1,176,011.

Specification of Letters Patent.

Patented Mar. 21, 1916.

Application filed December 7, 1914. Serial No. 875,907.

To all whom it may concern:

Be it known that I, JAMES L. WILLIAMS, a citizen of the United States, residing at Crosbyton, in the county of Crosby and State of Texas, have invented certain new and useful Improvements in Water-Coolers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved ice container for water coolers and similar receptacles, and has for its primary object to provide means removably mounted within the receptacle to contain the ice and prevent direct contact of the water therewith whereby the water will be cooled and the ice prevented from rapidly melting.

It is an additional object of my invention to provide a device of the above character which may be manufactured at comparatively small cost and the use of which will result in considerable economy in the consumption of the ice.

With the above and other objects in view, my invention consists in the novel features of construction, combination, and arrangement of parts to be hereinafter more fully described, claimed, and illustrated in the accompanying drawings, in which,

Figure 1 is a perspective view, partly broken away, showing my improved ice container arranged within a water receptacle; Fig. 2 is a vertical section; Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2. Fig. 4 is an enlarged detail sectional view showing the means for mounting the container in the receptacle.

Referring in detail to the drawing, 5 designates a bucket or other suitable receptacle, the bottom of which is provided with a central opening. In this opening, a sleeve 6 is suitably secured, and projects upwardly therefrom, as clearly shown in Fig. 2. This sleeve is interiorly threaded as at 7 for a purpose to be later referred to.

The ice receiving chamber or container 8 is constructed of sheet metal, and is preferably of rectangular form. The upper open end of this container is provided with a hinged lid or closure 9 and each of the walls of the container 8 is rabbeted at its upper inner edges to receive the body portion of the lid which is provided with packing strips 11, the marginal edges of the lid engaging upon the upper edges of the con-

tainer wall. The packing strips which are of rubber, felt, or other suitable material effectually exclude water and air from the interior of the container. Any suitable fastening means may be employed to securely hold the lid 9 in its closed position. The bottom wall of the chamber or container 8 is also provided with an opening in which an internally threaded metal sleeve 12 is secured, said sleeve being similar to the sleeve 6 in the bottom of the receptacle 5. In the sleeve 12, one end of a rod 13 is threaded while the other end of said rod is engaged with the threads 7 of the sleeve 6. This rod 13 is provided adjacent to its ends with oppositely disposed sleeves 14 which are concentrically spaced at one of their ends from the rod 13. Within the enlarged portions of the sleeve 14, packing washers 15 are arranged. The ends of the sleeves 6 and 12 are adapted for engagement against these packing washers.

In assembling the ice chamber or container within the receptacle, one end of the rod 13 is first threaded in the sleeve 12 in the bottom wall of said chamber. The chamber is then disposed within the receptacle 5 and the other end of said rod threaded into the sleeve 6 in the bottom wall of the receptacle by turning the chamber 8, as will be readily understood. The ice is now placed within said chamber and the lid 9 thereof securely closed. The water or other liquid to be cooled is then poured into the receptacle until the chamber 8 is entirely covered thereby. The walls of the receptacle 8 soon become of substantially the same temperature as the ice contained in said chamber, and as the water is in contact with the chamber walls, it is manifest that it also will soon become reduced in temperature to a low degree. Such temperature of the water, however, will never be as low as would be the case if the water came in direct contact with the ice.

The drinking of ice cold water of the character last referred to is often attended with considerable unpleasantness, and by preventing contact of the water with the ice, this objection is eliminated, while at the same time, the water is cooled to a temperature sufficiently low to produce a pleasant and refreshing beverage.

The primary object of my invention, however, is to economize in the consumption of

the ice, and it will be apparent that this result will be dependent upon the device constructed and arranged in the manner above described.

The ice chamber or container may be made of any desired size so as to contain a predetermined quantity of ice. This container may be very easily and quickly arranged in position within the cooler or receptacle or removed therefrom in order to facilitate the thorough cleansing of the container. If desired, the rod 13 may be in the form of a drain pipe or tube so that the water from the melting ice may be drained off.

While my invention is very simple in its construction and may obviously be manufactured at low cost, it will also be seen that I have produced a device which is of great practical serviceability and convenience.

While I have above referred to the preferred construction, form, and arrangement of the several parts, it will be understood that the device is susceptible of considerable modification therein, and I, therefore, reserve the privilege of resorting to all such legitimate changes as may be fairly embodied within the spirit and scope of my invention as claimed.

Having thus fully described my invention, what I desire to claim and secure by Letters Patent is:—

The combination with a receptacle, of an ice container adapted to be arranged therein, an interiorly threaded sleeve mounted in the bottom wall of said container, a second interiorly threaded sleeve mounted in the bottom of the receptacle, a vertically disposed rod having its ends removably threaded in the sleeves, and additional sleeves engaged on the rod and having threaded engagement with the first mentioned sleeves, one of said sleeves being adapted to bear against the bottom wall of the container and the remaining sleeve being adapted to bear against the bottom wall of the receptacle.

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

JAMES L. WILLIAMS.

Witnesses:

T. H. OLIVER,
B. M. SANSOM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."