UNITED STATES PATENT OFFICE.

ANDREW H. TYSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

HYGIENIC WATER-COOLER.

953,648.


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To all whom it may concern:

Be it known that I, ANDREW H. TYSON, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Hygienic Water-Coolers, of which the following is a specification.

My invention relates to an improvement in hygienic water coolers, the object being to provide a refrigerating receptacle having a space therein to receive all but the upper end of a bottle of water and sufficiently large to receive a solid chunk of ice.

A further object is to provide an invention of the character described with a lid, which will act as a drain to return any waste water to the refrigerating receptacle.

Still another object is to provide an invention of the character described in which the means for pumping the water from the bottle will all be located outside of the refrigerating receptacle, where it is readily accessible, and the water may be easily pumped into a glass.

With the foregoing objects in view my invention consists in certain novel features of construction and combinations of parts which will hereinafter described and pointed out in the claim.

In the accompanying drawings Figure 1 is a vertical section, and Fig. 2 is a plan view.

A represents the receptacle, which may be cylindrical or of other form, and made of any approved material. The bottle B containing the water is placed upright therein, as shown in the drawings, and preferably to one side or out of the center, thus leaving as large a space as possible for the solid chunk of ice C. While this is not absolutely essential, it is desirable for the reason that a solid cake of ice will last longer and is more essential to cooling the water contained in the bottle than cracked ice, and furthermore, it requires much less time to handle it than it would if the ice had to be cracked and packed around the bottle. Over the top of the receptacle A the cover D is fitted. This may be made of any suitable material, in a single piece or otherwise, it having a depending annular flange 1 which fits the receptacle air-tight and preferably with an upwardly projecting flange 2, which prevents water from splashing or running over the edges. The main portion 3 of the cover or lid slopes all around toward the bottle, as shown in Fig. 1, in order to act as a drain, so that any water splashing or spilling on the cover or lid will drain back into the ice chamber.

A pump of any approved design is inserted through the cork 4 of the bottle, the pump being of the siphon order, consisting of a tube 5 and a rubber bulb 6 for forcing air into the bottle in order to displace the water. A filter 7 may be attached to the above to insure against dust or germs from the air being pumped into the bottle.

A felt cap E is placed over the top of the bottle. This felt cap is more or less loose so that it permits the drip water to soak through. When thus saturated, of course it acts as an evaporative cooling means and is utilized in assisting to maintain the low temperature of the water.

From the foregoing, it will be seen that all parts requiring manipulation are arranged to protrude above the cover or lid of the receptacle, this being much less expensive than other provision could be for this purpose, as for instance, where these parts are inclosed. Also it will be observed that the cover is in the form of a drain, so that any water pumped out of the bottle and not used is returned to the outer receptacle.

Furthermore, it will be observed that as large a space as possible is provided for a large chunk of ice, for the reasons previously recited. To repeat, it will be observed that the pump is located above the level of the water so that any overflow will be caught by the drain and returned to the main supply reservoir. In other words, the drain is located between the outlet of the pump and the level of the ice and water.

It is evident that many slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth, but:

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

A cooler comprising the following four elements, namely an inner and outer receptacle, the outer receptacle adapted to contain the inner receptacle, and also a cooling medium, and the inner receptacle adapted to
receive and hold the liquid to be cooled, a pump for said inner receptacle for removing the contents therefrom, and a removable cover placed on the outer receptacle, said cover having the form of a drain and located between the outer receptacle and the discharge spout of the pump, the inner receptacle being inserted in the outer receptacle by first removing said cover, and then applying the latter to its place on the outer receptacle.

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

ANDREW H. TYSON.

Witnesses:
HERBERT C. EMERY,
VERNON E. HODGES.