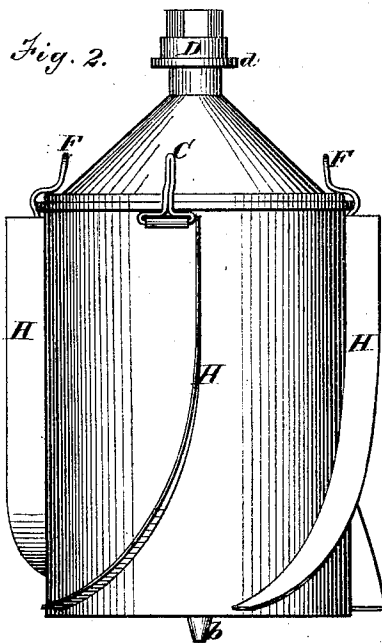
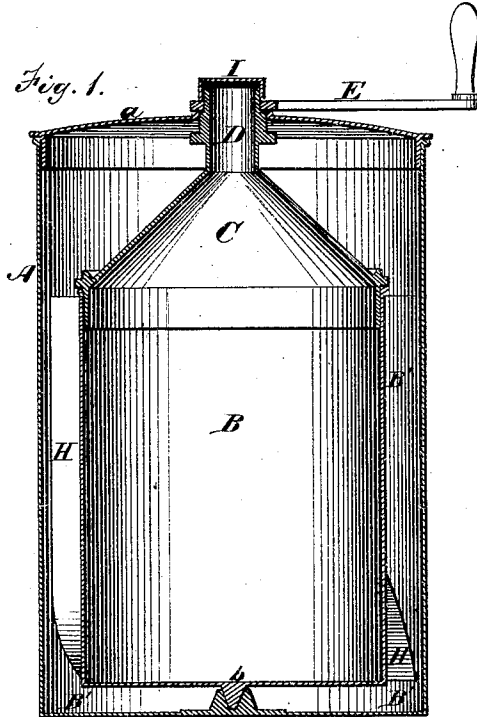


E. L. STROHECKER & A. IVERSON, Jr.

Improvement in Liquid-Coolers.

No. 130,331.

Patented Aug. 6, 1872.



Witnesses.
G. F. Brown.
Dr. J. H. Brown.

Inventors.
E. L. Strohecker.
A. Iverson, Jr.
By their Attys.
Harri Fellworth

UNITED STATES PATENT OFFICE.

ED. L. STROHECKER AND ALFRED IVERSON, JR., OF MACON, GEORGIA.

IMPROVEMENT IN LIQUID-COOLERS.

Specification forming part of Letters Patent No. 130,331, dated August 6, 1872.

To all whom it may concern:

Be it known that we, E. L. STROHECKER and ALFRED IVERSON, Jr., of Macon, in the county of Bibb and State of Georgia, have invented a new and Improved Apparatus or Cooling Liquids and Making Ice; and we do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a sectional elevation of our invention, and Fig. 2 a side elevation of the interior can removed.

Similar letters of reference in the accompanying drawing denote the same parts.

This invention has for its object to provide for public use a simple and convenient apparatus in which wines or other liquids may be expeditiously cooled or water frozen; and to this end it consists of a water-tight can, provided with curved radial flanges on its outer surface, extending from top to bottom, and journaled within another can of such diameter that an annular space between the two cans will thereby be formed, which may be partially filled with any desired liquid, chemical, or compound, the curved flanges of the inner can acting, when the latter is revolved, to throw the liquid chemical upward, and cause a continuous circulation of the same around the revolving can, for the purpose of effectually subjecting the contents of the latter to its freezing properties, as will hereinafter more fully appear.

A represents a cylindrical can or receptacle, provided with a removable cover, *a*, and B a smaller can, located within the receptacle A, and turning freely upon a pivot, *b*, attached to its bottom. The cover C of the can B is conical, and terminates in a mouth-piece or short tube, D, the upper end of which passes through a circular orifice in the cover *a*. The end of the tube D is made hexagonal, or of other equivalent shape, constituting a seat for the correspondingly-shaped socket of the crank E. The cover C is provided with a bead around its lower edge, and fits closely on the top of the can B. To hold the cover in place hasps or catches F are employed, which are hinged to the can B, and have shoulders, which close over the bead of the cover C, as shown in Fig. 2. H H, &c., represent radial flanges on the

periphery of the can B at suitable intervals apart, and extending from top to bottom of the same. These flanges are curved at their lower ends, as shown, and are sufficiently wide to extend nearly across the annular space B' between the can B and the receptacle A.

In operating our apparatus, we pour into the annular space B' a sufficient quantity of some suitable liquid chemical—such as, for example, nitrate of ammonia mixed with water—for the purpose of producing intense cold around the inner can by evaporation or otherwise. If the article to be cooled is a liquid, it may be poured into the can B through the mouth D without removing the covers *a* C. The inner can being then revolved by its crank E, the flanges H agitate and stir the liquid chemicals in the space B', their curved lower portions throwing the same upward, creating a constant circulation, and preventing any precipitation on the bottom of the receptacle A. By this means the liquid in the can B becomes thoroughly cooled in a very short time, and may then be poured out, as it was introduced, through the nozzle D. In making ice, the method of operation is the same, with some change, perhaps, in the quantity of the chemical in the space B'. A small quantity of water is placed in the can, and the latter is then revolved sufficiently long to produce the desired quality of ice, which, after its formation, may be removed without breaking by simply detaching the can from the receptacle A, loosening the catches E, and taking off the cover C. The liquid in the can B is prevented from being thrown through the tube D centrifugally during the operation by a cap, I, which is placed over the top of the same, as shown in Fig. 1, while the escape of any of the liquid in the annular space B' is prevented by a collar, *d*, which projects from the tube D immediately under the orifice in the cover *a*.

This apparatus may be constructed of sheet metal, glass, stone-ware, or other suitable material, and constitutes a simple and convenient device for cooling or freezing liquids, its construction adapting it equally well for either purpose.

Having thus described our invention, what we claim is—

1. The revolving can B, provided with radial flanges H, curved at their lower ends, in

combination with the closed receptacle A, substantially as described, for the purpose specified.

2. The can B, provided with the conical cover C, secured by catches F, and the tube or mouth-piece D, the latter arranged to receive the crank-arm E, and having the collar *d* and

cap I, arranged and operated substantially as and for the purposes specified.

ED. L. STROHECKER.
ALFRED IVERSON, JR.

Witnesses:

WM. A. LOFTON,
H. R. BROWN.