

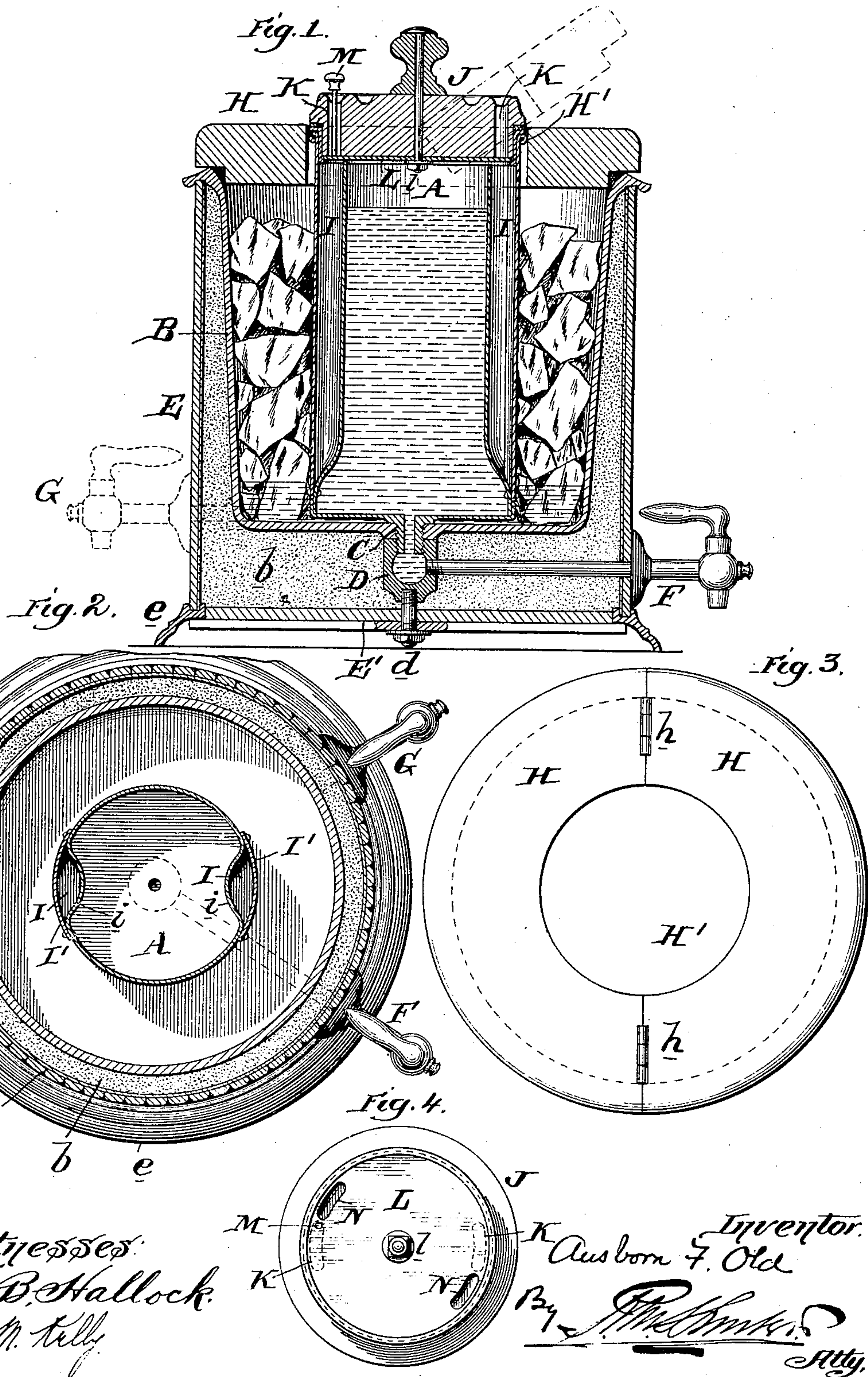
No. 680,271.

Patented Aug. 13, 1901.

A. F. OLD.  
WATER COOLER.

(Application filed Sept. 27, 1900.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## WATER-COOLER.

SPECIFICATION forming part of Letters Patent No. 680,271, dated August 13, 1901.

Application filed September 27, 1900. Serial No. 31,233. (No model.)

*To all whom it may concern:*

Be it known that I, AUSBORN F. OLD, of the city, county, and State of New York, have invented an Improvement in Water-Coolers, of which the following is a specification.

My invention has reference to water-coolers; and it consists of certain improvements set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

The object of my invention is to provide a construction of water-cooler in which the temperature of the water can be modified irrespective of the ice contained in the cooler, so that it may not become too cold to be palatable.

In carrying out my invention I provide a water vessel adjacent to an ice-receptacle and so construct the separating metallic wall between them that it shall present an upright chamber, from which both water and ice are excluded. The upper portion of the cooler is provided with a suitable lid which is furnished with a valve structure, whereby the said chamber may be allowed to become more or less in communication with the atmosphere external to the cooler. In this manner the air in said chamber may have its temperature regulated, and thus in turn regulate the temperature of the cold water within the water vessel.

My invention also embodies specific constructions of the cooler pointed out hereinafter, all of which will be better understood by reference to the drawings, in which—

Figure 1 is a sectional elevation of a water-cooler embodying my invention. Fig. 2 is a sectional plan view of same. Fig. 3 is a plan view of the jointed lid for the ice-receptacle removed, and Fig. 4 is an inverted plan view of the lid of the water vessel.

A is the water vessel and is formed of thin metal, preferably steel, properly galvanized or tinned and provided on the bottom with a screw-threaded neck C, which is screwed through the bottom of the ice-receptacle B. The water vessel A is of much smaller diameter than the ice-receptacle B, but is of greater height, so that no ice can find its way over the top into the water, or vice versa, yet permitting the water in vessel A to be of the

same height as the ice in receptacle B without danger of overflowing. The receptacle B has a flanged top which rests upon the wood frame E, and the lower edge of the said frame fits into the upper part of the annular base-frame e.

E' is a closed bottom for sealing in the sawdust or other non-conducting packing b.

D is a hollow nut which is screwed upon the lower end of the neck C and is provided with a stud d, which passes through the bottom board E', for holding the several parts of the cooler firmly together.

F is the water-spigot and has a long horizontal pipe extending through the side of the cooler and into the hollow nut D. The water passes down from vessel A through the neck C and nut D into the spigot F.

The cover for the ice-receptacle B is made semi-annular and formed of the two parts H H, hinged together at h, so as to leave the central aperture H', which receives the top of the water vessel A, as shown in Fig. 1. This cover is wholly removable, or either half may be raised up for securing access to the ice-receptacle B.

The water which may collect in the receptacle B by the melting of the ice may be drawn off by spigot G. (Indicated in solid lines in Fig. 2 and in dotted lines in Fig. 1.)

The water vessel A is preferably made with smooth interior and has its opposite sides pressed in, as at i, from slightly above the bottom to the top. The space on the outside thus formed is closed in by soldering or suitably fastening curved plates I' to the outside of the vessel, thereby forming the vertical air-chambers I. The extreme upper portions of the pressed-in portions i may be cut away to permit the cover J to be received, as shown in Fig. 1. The cover J fits snugly down into the vessel A, so as to seal its top, and is provided with two apertures K, which come immediately above the chambers I. Fitted to the under side of the cover J is a valve-plate L, pivoted to its central part at l. This valve-plate is provided with two controlling-apertures N, adapted to close or open the apertures K in the lid, and the plate is moved by a handle M, extending through one of the apertures K to the outside, as shown in Fig.



1. By adjusting the valve-plate L the chambers I may be permitted to communicate to any desired amount with the atmosphere, and thus reduce to the desired degree the cooling effect of the ice. It is also evident that the use of the vessels A and B may be reversed, if so desired—that is to say, the ice may be put into the vessel A and the water into the receptacle B—though I much prefer to use them as first described.

I do not limit myself to any specific manner of forming the valve structure, nor to the minor details of the cooler, as all of these may be modified without departing from the spirit of my invention.

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

1. In a water-cooler, the combination of an inner receptacle or central compartment and an outer receptacle forming an annular compartment about the inner receptacle and open at the top one of which compartments is adapted to contain ice and the other water, a lid for the inner receptacle, and a lid for the outer annular compartment made entirely removable and composed of two semi-annular parts hinged together at the top having an overhanging flange resting upon the top edge of the outer receptacle and having a lower part of much smaller diameter than the upper diameter of the outer receptacle and fitting slightly down into the said annular receptacle so that either part may be fully and independently lifted and the other part act as its support.

2. In a water-cooler, the combination of an inner receptacle or central compartment and an outer receptacle forming an annular compartment about the inner receptacle and open at the top and in which the inner receptacle is considerably higher than the outer receptacle, an annular lid for the outer receptacle divided transversely and the parts hinged together on a level approximately on a line with the top of the inner receptacle, an independent lid for the inner receptacle over which the semi-annular parts of the annular lid may be turned without removal, and a spigot opening from the lower part of the inner receptacle.

3. In a water-cooler, the combination of a water vessel, an ice-receptacle, and an intermediate vertical air-chamber partly separating the water vessel and ice-receptacle,

with a spigot opening from the water vessel, and a valved lid for controlling the extent of communication between the air-chamber and the atmosphere.

4. In a water-cooler, the combination of a water vessel, an ice-receptacle, and an intermediate vertical air-chamber partly separating the water vessel and ice-receptacle and in which the air-chamber and ice-receptacle are of less height than the water vessel, with separate lids for the ice-receptacle and water vessel, a spigot opening from the water vessel, and a valve in the water-vessel lid for controlling the extent of communication between the air-chamber and the atmosphere.

5. In a water-cooler, the combination of a water vessel formed on opposite sides with upright air-chambers, a lid for closing the top of the water vessel provided with valve devices for controlling the admission of air to the said air-chambers, a spigot for drawing the water from the lower part of the water vessel, an ice-receptacle surrounding the water vessel, and a non-conducting packing about the ice-receptacle.

6. In a water-cooler, the combination of a water vessel formed on opposite sides with upright air-chambers, a lid for closing the top of the water vessel provided with valve devices for controlling the admission of air to the said air-chambers, a spigot for drawing the water from the lower part of the water vessel, an ice-receptacle surrounding the water vessel, a non-conducting packing about the ice-receptacle, and an annular cover or lid for the ice-receptacle divided transversely and the two parts hinged together at their upper adjacent edges.

7. In a water-cooler, the combination of a water vessel and an ice-receptacle separated by the metallic division-wall, and an intermediate vertical air-chamber separating the water vessel and ice-receptacle over a portion only of their separating-wall and open at the top to the atmosphere for the purpose of tempering the temperature of the water in the water-receptacle.

In testimony of which invention I have hereunto set my hand.

AUSBORN F. OLD.

Witnesses:

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