

(No Model.)

J. W. MEYER & F. H. SHEPHERD.
WATER COOLER.

No. 433,739.

Patented Aug. 5, 1890.

Fig. 1.

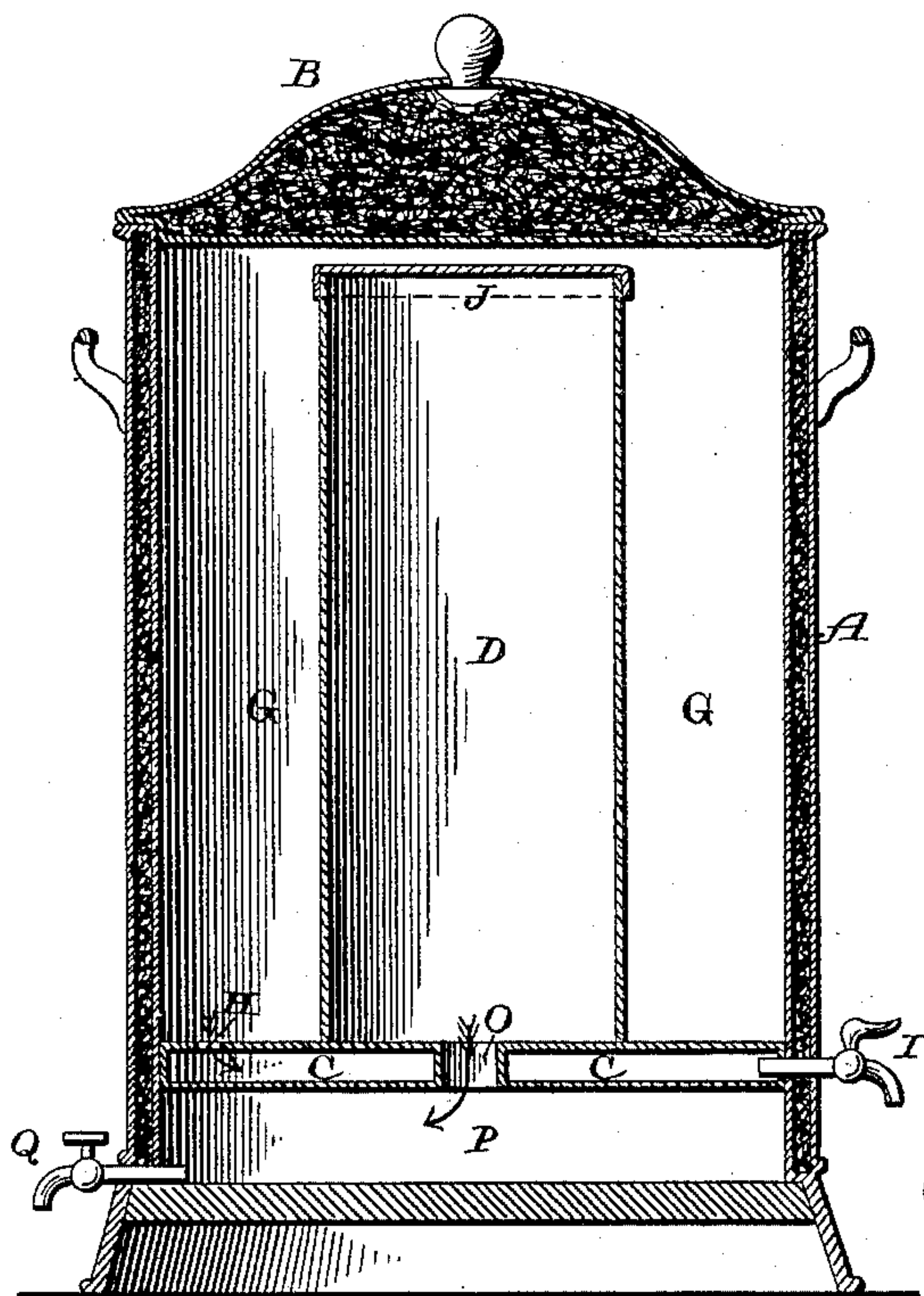


Fig. 2.

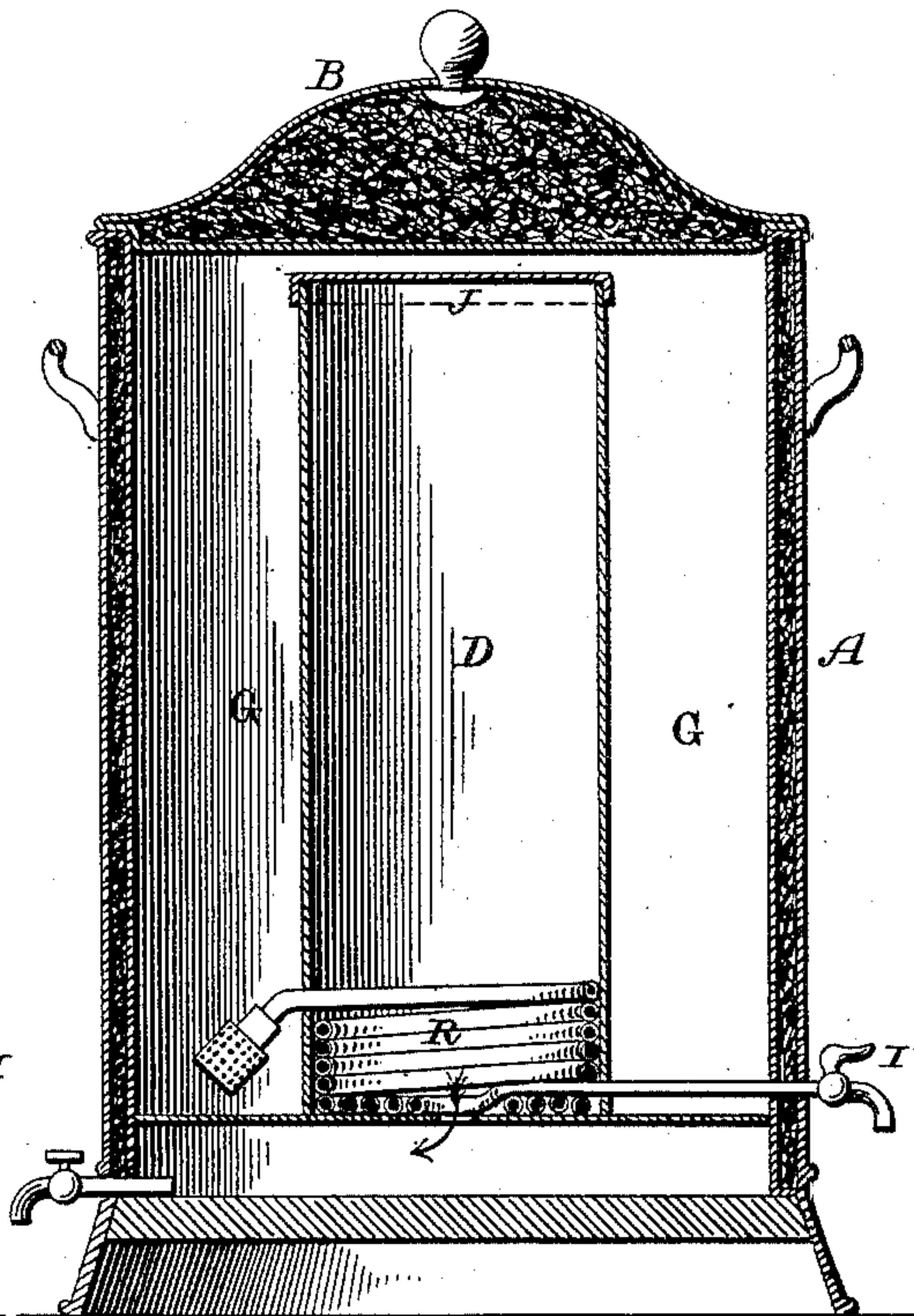
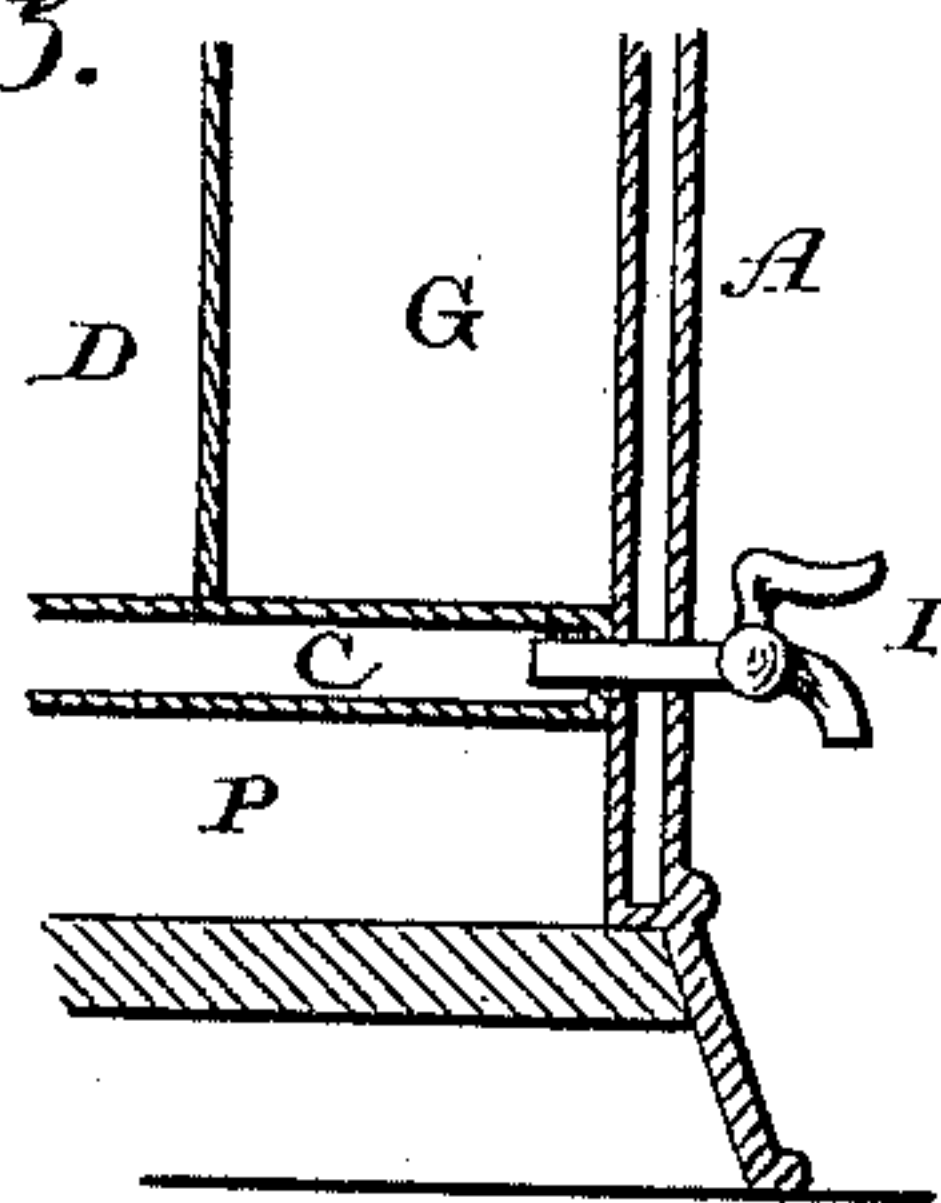


Fig. 3.



Witnesses:

E. P. Ellis,
B. Brockett.

Inventors:

Jno. W. Meyer,
Francis H. Shepherd,
per J. A. Lehmann, atty.

UNITED STATES PATENT OFFICE.

JOHN W. MEYER, OF ROCK ISLAND, ILLINOIS, AND FRANCIS H. SHEPHERD,
OF DAVENPORT, IOWA.

WATER-COOLER.

SPECIFICATION forming part of Letters Patent No. 433,739, dated August 5, 1890.

Application filed April 16, 1890. Serial No. 348,256. (No model.)

To all whom it may concern:

Be it known that we, JOHN W. MEYER, of Rock Island, in the county of Rock Island and State of Illinois, and FRANCIS H. SHEPHERD, of Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Water-Coolers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in water-coolers; and it consists in the arrangement and construction of parts herein-after described.

The object of our invention is to provide a water-cooler in which the water is cooled without coming in direct contact with the ice, and which is provided with one chamber from which the cool drinking-water is drawn and a second chamber to catch the drip-water from the ice, and which is drawn off through a second faucet.

Figures 1 and 2 represent vertical sections of water-coolers which embody our invention, the cooling-chamber being shown in a slightly-different form. Fig. 3 is a detail sectional view of part of the cooler, showing an air-space instead of a packing around the water-chamber.

A represents a water-cooler of any desired shape, size, form, or construction that may be preferred, and which is provided with a non-conducting cover B, made in the usual manner.

Secured inside of the cooler A, near its bottom, is a horizontal shallow chamber C, which extends horizontally across the cooler, and which forms the support for the ice-chamber and the bottom for the water chamber G. This chamber C is made quite shallow, so as to hold but a limited quantity of water, which will be thoroughly cooled by the ice in the chamber D, and which rests directly upon its top. Through the top of this chamber C is made a suitable opening H, through which the water from the water-chamber G passes, and connected to this chamber C, through the side of the cooler A on the opposite side from

the opening H, is an ordinary faucet I, through which the water from the chamber C is drawn for drinking purposes.

The ice-chamber D, which has its bottom formed by the chamber C, is provided with a separate cover J of its own, and in this chamber the ice is placed by itself. Through the center of the cooling-chamber C is made a suitable opening O, through which the drip from the ice passes into the drip-chamber P, and from which it is drawn off through the faucet Q, and which is preferably located on the opposite side of the cooler from the one I, so that there will be no mistake in operating them. If desired, this faucet Q may be made of an entirely different shape from the one I, and only be adapted for draining the chamber P, or the two faucets may be made alike.

The drinking-water is poured into the chamber G and surrounds the ice-chamber D, so as to be thoroughly cooled by the ice without coming in direct contact with it. This drinking-water is also cooled by coming in direct contact with the top of the cooling-chamber C, in which the water is thoroughly cooled by having the ice rest directly upon its top. The drip from the ice passing into the chamber P also serves to cool the chamber C from its under side. As stated above, the chamber C, containing but a limited quantity of water, it becomes thoroughly cooled by the ice, and then the outer portion of this chamber serves to assist in cooling the water in the drinking-chamber G.

In case it is not desired to use the chamber C, which extends entirely across the cooler, a coil of pipe R may be used, and this coil will be placed directly upon the bottom of the ice-chamber D and extend any suitable distance up around its sides, as shown. One end of the coil will extend through the chamber D into the water-chamber G, and this end of the pipe will be provided with a water-inlet and a strainer, through which the water will be made to pass. Where the coil is used, the faucet I', used for drawing off the drinking-water, will be made long enough to pass through the bottom of the water-chamber G and connect directly with the central portion

of the coil, as shown. It is immaterial whether the chamber C or the coil R is used, for the result produced is the same in either case, and that is to draw off perfectly pure drinking-water, no matter what quality of ice is used.

By means of the construction here shown and described it is only necessary to have perfectly pure drinking-water, and then ice gathered from dirty ponds or any other place will be equally as good as the best ice that can be obtained.

The cooler here shown, while it may be provided with a packing in the usual manner, is provided with an air-chamber, which entirely surrounds the water-chamber, for the purpose of keeping the water as cool as possible.

Having thus described our invention, we claim—

1. A water-cooler consisting of an outer casing having a horizontal partition near its bottom having an opening, which partition forms a chamber for the drip below and a chamber for drinking-water above, a vertical cylinder within the casing for the ice, and a water-containing receptacle having communication with the water-chamber, and an outlet outside of the casing, the said receptacle being immediately at the bottom of the said ice-chamber, substantially as described.

2. In a water-cooler, the combination of the

outer and inner casings, which form vertical ice and water chambers, the bottoms of the said chambers being above the bottom of the outer casing, which forms a drip-chamber below the said chambers, a cooling-chamber immediately at the bottom of the ice-chamber, whereby the ice is in contact therewith, the said chamber having an opening into the water-chamber and an outlet outside of the outer casing, and the said ice-chamber provided with an opening, which forms communication between the ice and drip chambers, substantially as shown.

3. In a water-cooler, the combination of the outer and inner casings, which form ice and water chambers, the bottom of the said chambers being above the bottom of the outer casing, the bottom of the ice-chamber having an opening, and a coil of pipe within the ice-chamber having one end extending into the water-chamber and the other to the outside of the outer casing, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN W. MEYER.

FRANCIS H. SHEPHERD.

Witnesses:

GEO. A. HEISEL,

PARKER GALE.