

J. C. Sloan, Water Filter,

N^o 44,979.

Patented Nov. 8 1864.

Fig. 1.

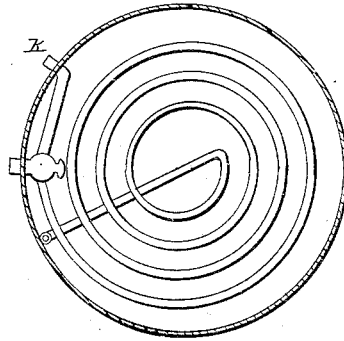


Fig. 2.

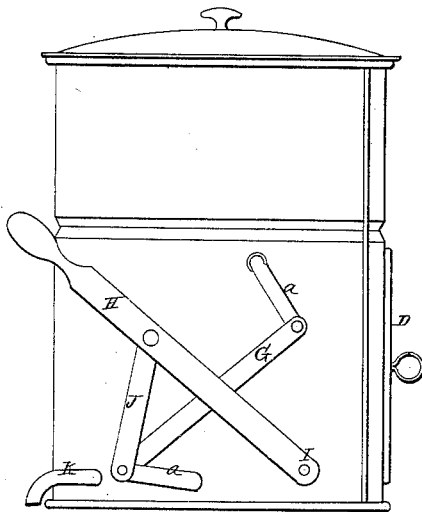
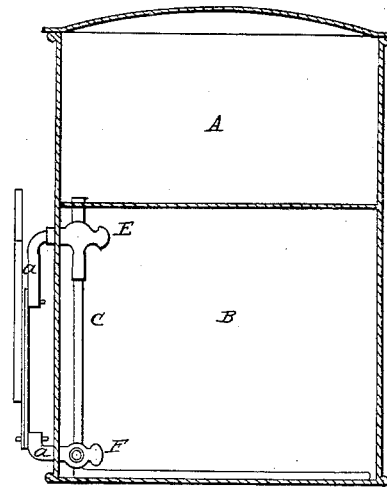


Fig. 3.



Witnesses:

J. E. Shaw

Chas. D. Ditching

Inventor:

James C. Sloan

UNITED STATES PATENT OFFICE.

JAMES C. SLOAN, OF CAMDEN, NEW JERSEY.

IMPROVEMENT IN WATER-COOLERS.

Specification forming part of Letters Patent No. 44,979, dated November 8, 1864.

To all whom it may concern:

Be it known that I, JAMES C. SLOAN, of the city and county of Camden, in the State of New Jersey, have invented a new and useful Improvement in Water-Coolers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, in which—

Figure 1 is a view of the bottom of the cooler inside; Fig. 2, an elevation; Fig. 3, a vertical section.

To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction and mode of operation.

The cooler is divided into two chambers, A and B, Fig. 3, of which the upper chamber, A, contains an unlimited supply of uncooled water. A pipe, C, proceeds from the bottom of the upper chamber, A, and extends down to the bottom of the lower chamber, B, forming a coil on the bottom thereof, such as is shown in Fig. 1.

D, Fig. 2, is the door through which ice is introduced into the lower chamber and laid on the top of the coil of pipe.

An aperture (not shown in the drawings or model) can be made at any convenient point in the bottom of chamber B for the escape of the melted ice.

The pipe C is provided with two cocks, (marked respectively E and F, in Fig. 3.) The plugs or valves of these cocks are lengthened, each plug forming an arm, *a*, which extends outside of the cooler. These arms *a* being united by the lever G, the two cocks are operated simultaneously by the lever H, which is pivoted at I and connected with the united cocks E and F by the lever J.

The coil of pipe may be of dimensions sufficient to hold several gallons of water, or, where the cooler is intended for use in an ordinary family, the pipe need not contain more than from a half gallon to a quart of water.

The object of the described arrangement is to limit the amount of water intended to be refrigerated at any one time by cutting off the supply of uncooled water. The cocks E and F being of the same dimensions, and being opened and closed simultaneously, no more uncooled water is admitted into the pipe C than is equal in amount to the cooled water drawn from it at K, while at the same time the circulation which takes place where an unlimited supply of warm or uncooled water has free access to a reservoir containing cooled water is prevented.

Instead of the coil of pipe described, there may be used a shallow box about an inch or inch and a half deep. It is to be placed on the bottom of the lower chamber, B, and the ice is to be laid on top of the box. There must be an aperture in the bottom of the lower chamber for the escape of the melted ice. The pipe through which the uncooled water is supplied must be attached at one side of the box and the pipe through which the cooled water is to be drawn off must proceed from the opposite side of the box.

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

The combination of the cocks E and F, and levers G, H, and J, with a water-cooler, substantially as described.

JAMES C. SLOAN.

Witnesses:

J. E. SHAW,
CHAS. WELDING.