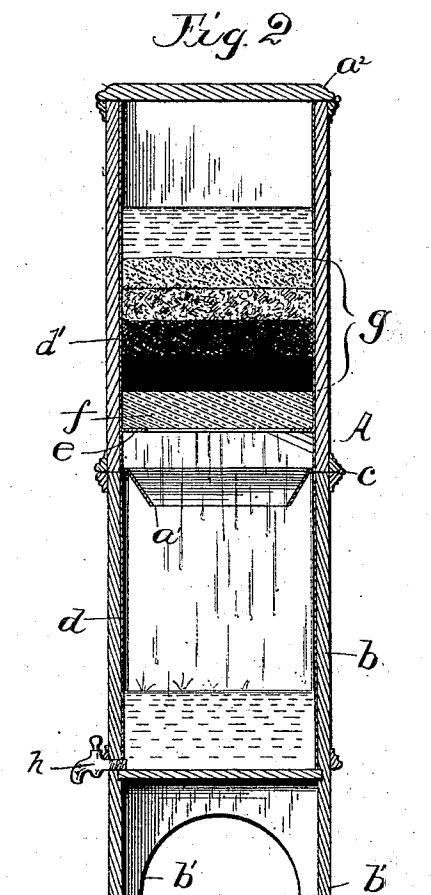
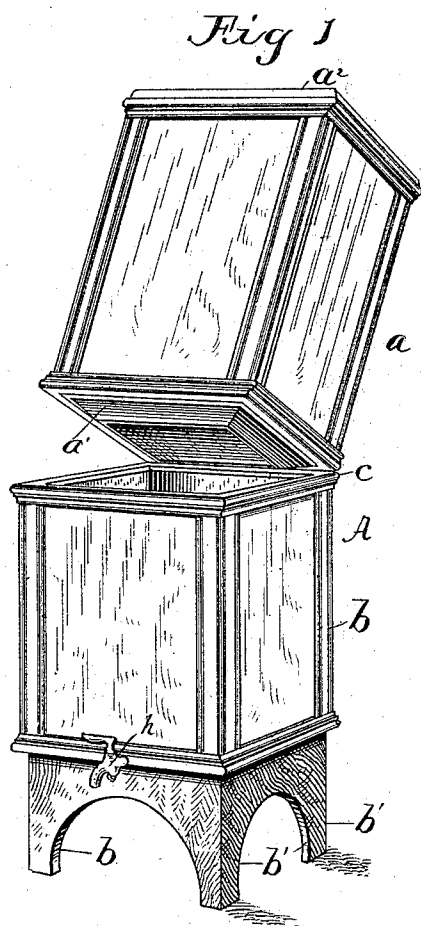


(No Model.)

C. L. SHERWOOD.
FILTER.

No. 537,489.

Patented Apr. 16, 1895.



WITNESSES:

C. E. Burdine,
I. B. Orren.

INVENTOR
Charles L. Sherwood
BY
D. M. [Signature]
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES L. SHERWOOD, OF FARIBAULT, MINNESOTA.

FILTER.

SPECIFICATION forming part of Letters Patent No. 537,489, dated April 16, 1895.

Application filed April 17, 1893. Serial No. 470,738. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. SHERWOOD, a citizen of the United States, residing at Faribault, in the county of Rice and State of Minnesota, have invented certain new and useful Improvements in Filters; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has for its general object to provide a combined water cooler and filter which will admit of access being gained to every part of its interior for cleansing purposes; and one in which the filtering material is so arranged and supported that it may be conveniently removed when foul, and new material placed in position without the employment of skilled labor.

With the foregoing end in view, the invention will be fully understood from the following description and claim, when taken in connection with the annexed drawings, in which—

Figure 1, is a perspective view of my improved filter and cooler, with the upper casing section tilted back, and Fig. 2, is a vertical section of the same with the upper section in its normal position.

Referring by letter to said drawings:—A, indicates the casing of my improved device. This casing A, is made of wood and is preferably of a rectangular form in cross section, and it comprises a lower section *b*, which is mounted upon legs as *b'*, and an upper section *a*, which is hinged to the section *b*, as indicated by *c*, for a purpose presently set forth. The section *b*, of the casing A, is designed to serve as a receptacle for the filtered and cooled water, and it is therefore provided with a zinc lining *d*, in order to render it water-tight and with a faucet as *h*, through which the water may be drawn when desired. The upper section *a*, of the casing is designed to hold the unfiltered water and ice together with the filtering material, and it is provided with a hinged cover as *a'*, and is lined with zinc as indicated by *d'*. This zinc lining extends below the section *a*, and is shaped as better shown in Fig. 2, to form a mouth *a'*,

which normally rests within the upper end of the section *b*, and serves to conduct the cooled and filtered water into the same.

Fixedly secured to the zinc lining *d'*, of the upper section *a*, at a point adjacent to the lower end of said section, is a flange *e*, designed to support a filtering block *f*, of firebrick or other sufficiently stiff and porous material, which block is designed in turn to support a series of layers *g*, of filtering material, such as sand, gravel, and wood and animal charcoal. This filtering material should extend up about the proportional distance illustrated in the section *a*; and in placing it in position, a layer of sand should be interposed between the charcoal and the block *f*, in order to prevent the charcoal from closing the pores of the said block.

I prefer to coat the zinc linings *d*, *d'*, of the lower and upper sections *b*, *a*, with shellac in order that they may be more readily cleansed, but I do not desire to be understood as confining myself to such coating as its use is only preferable.

In using my device as a water cooler and filter, the space above the filtering material *g*, is filled with ice and water, which latter slowly percolates through the filtering material and passes by way of the mouth *a'*, into the section *b*, from whence it may be drawn when desired by means of the cock or faucet *h*.

By reason of the peculiar construction of my improved cooler and filter, the section *a*, may be conveniently swung back from over the section *b*, as shown in Fig. 1. This enables a person to reach within the section *b*, and thoroughly cleanse the same, and it also permits of the mouth *a'*, and the under side of the flange or ledge *e*, and block *f*, being thoroughly cleansed; and when necessary it enables a person to push the block *f*, and the filtering material *g*, out through the upper end of the section *a*, and affords an opening through which a brush may be conveniently introduced and wielded in the said section *a*, to cleanse its lining of all sediment and foul matter.

It will be seen that with all of its advantages, my improved cooler and filter is very simple and compact and that it may be manufactured at such a cost as will place it within the reach of almost every one.

Having described my invention, what I claim is—

The herein described combined water cooler and filter consisting essentially of the lower casing section *b*, adapted to receive the cooled
5 and filtered water, an upper casing section arranged upon the lower section and hinged thereto and having a lining *d'*, terminating at its lower end in a mouth *a'*, and also having
10 a ledge or flange *e*, adjacent to its lower end,

and a filtering block placed upon the flange or ledge *e*, and adapted to support other filtering material, substantially as specified:

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

CHARLES L. SHERWOOD.

Witnesses:

ROBERT MEE,
W. H. RETZLAFF.