B. B. Redfield,

Filter.

No. 100,323. Patented Mar. 1. 1870.

fig: 1

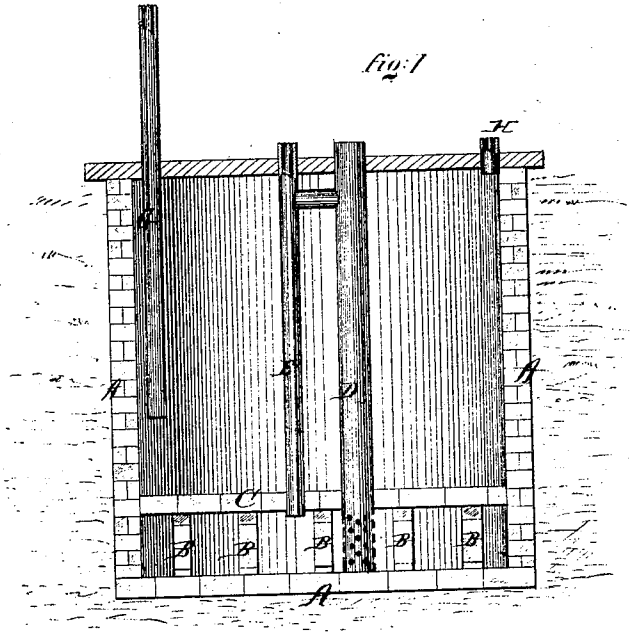
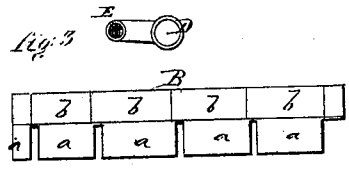


fig: 2

Fig: 3



Witnesses

A. A. Yeatman

C. L. Lovell

Inventor

Benjamin B. Redfield.

per Alexander Mason

Attys.

United States Patent Office.

BENJAMIN B. REDFELD, OF LAPEER, MICHIGAN.

Letters Patent No. 100,323, *dated March* 1, 1870.

IMPROVEMENT IN FILTERS FOR CISTERNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENJAMIN B. REDFIELD, of Lapeer, in the county of Lapeer, and State of Michigan, have invented certain new and useful Improvements in "Filters for Cisterns;" and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a filter for cisterns, and in the manner of ventilating the same.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings which form a part of this specification, and in which—

Figure 1 is a vertical section of the entire filter.

Figure 2 is a horizontal section of the pump-pipe with its ventilating-pipe.

Figure 3 is a side view of one of the brick foundations for the brick floor of the filter.

A represents the cistern, on the bottom of which are placed rows B B of bricks, about eight inches apart.

These rows are made in the following manner:

Bricks *a a* are set edgewise about one inch apart, to leave spaces for the water to pass through.

On the bricks *a a* are laid other bricks *b b*, close together, to form bearings for the brick floor C to rest upon, which floor extends across the entire cistern.

The whole being covered with brick set edgewise, cemented at the edges, forming thee floor C, makes a filter through which the water passes into the small arches below, and the water also readily passes from one to the other through the spaces made at the ends of the lower bricks *a a*, in the bearings.

The pump-pipe D which is perforated at the lower end, may be inserted at any point in these arches, and is provided with another pipe, E, connected with it at a suitable point to draw the water off from the pump-pipe, to prevent freezing.

The pipe E may, however, be dispensed with if so desired.

The ventilation of the cistern is to keep the atmosphere pure that is over the water in the upper part or body of the cistern, and is accomplished by means of two pipes, G and H, which are covered with wire screens at one end. These pipes are inserted at opposite sides through the covering of the cistern.

The long or elevated pipe G causes a draught, which is supplied by the short pipe H, creating a perpetual current of air over the water in the body of the cistern, removing all noxious gases therefrom.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The arrangement upon the floor of the cistern A, of the rows of bricks B B, composed of the bricks *a* and *b*, as described, covered by the interior floor C, through which pass the perforated tube D and pipe E and said cistern being provided with the pipes G and H, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 16th day of September, 1869.

BENJAMIN B. REDFIELD. [L. S.]

Witnesses:

A. W. BURTT,

GEO. W. BROCK.