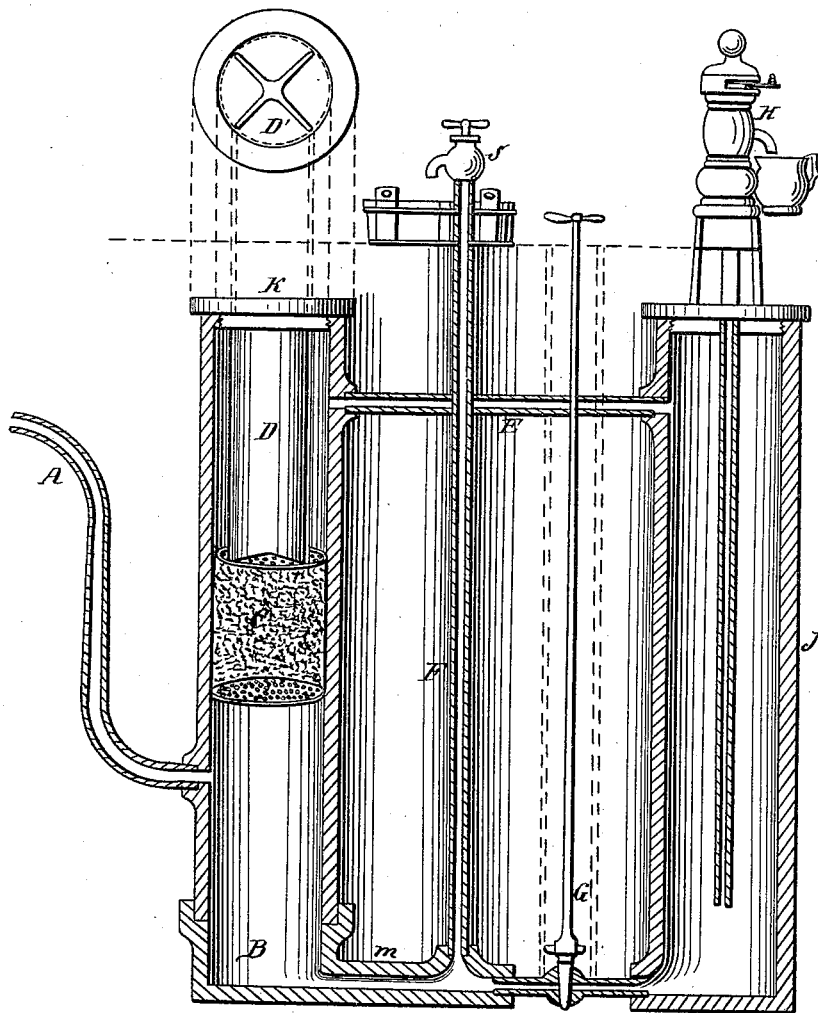


W. P. DICKINSON.

Water Cooler.

No. 51,703.

Patented Dec. 26, 1865.



Witnesses:

E. R. Schmuckey
J. H. Leinbach Jr.

Inventor:

Wm P Dickinson

UNITED STATES PATENT OFFICE.

WM. P. DICKINSON, OF READING, PENNSYLVANIA.

IMPROVEMENT IN FILTERS AND COOLERS.

Specification forming part of Letters Patent No. 51,703, dated December 26, 1865.

To all whom it may concern:

Be it known that I, WILLIAM P. DICKINSON, of the city of Reading, in the county of Berks and State of Pennsylvania, have invented a new and useful Improvement in an Apparatus for Filtering and Cooling Water; 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 accompanying drawing, and to the letters of reference marked thereon, in which—

A is the supply-pipe connecting with the main water-pipe outside, by which the water is conducted into the filtering-chamber. C is a filtering-box filled with washed gravel and covered with a screen and packing-plate, represented in D' with planes perpendicular to the four arms thereof extending to the top of the water-chamber D, of which K is the cap or top plate. E is the conveying-pipe from D into the cooling-chamber J. F is a waste or discharge pipe connecting with the sediment-chamber B. H is the drawing-off pipe. S is the stop-cock of the waste-pipe. The letter *m* marks the place for an extra stop-cock in case the pressure of the water is light.

The nature of the invention consists in the simple method of removing the sediment from the bottom of the apparatus by the peculiar arrangement and combination of the several parts.

The large chambers are made of stoneware

pipe, iron pipe, or any other material to suit the pressure of the water. The two coolers hold about forty gallons of water together, but there may be connected as many coolers as desired. The water is first conducted through the supply-pipe A into the filtering-chamber; thence it passes through the filtering-box C, leaving behind all impurities, which settle to the bottom of chamber B. From C the water comes purified into chamber D, whence it is conducted through the pipe E into the cooler J. During all this time the water undergoes a cooling process, and as it is coolest at the bottom the draw-off pipe H is inserted deep into the cooler and the water drawn from it for use.

By opening the stop-cock at S the force of the water rushing through the water-pipe F will carry with it all sediment in the bottom of chamber B, and if any sediment should accumulate in the bottom of the cooler J the same may be removed by opening the stop-cock at G at the same time with S.

What I claim as my invention is—

The arrangement of the sediment-chamber B, filtering-box C, water-chamber D, pipe E, cooling-chamber J, discharge-pipe F, and cocks S and G, as and for the purpose specified.

W. P. DICKINSON.

Witnesses:

F. R. SCHMUCKER,
Z. H. MAUSER.