

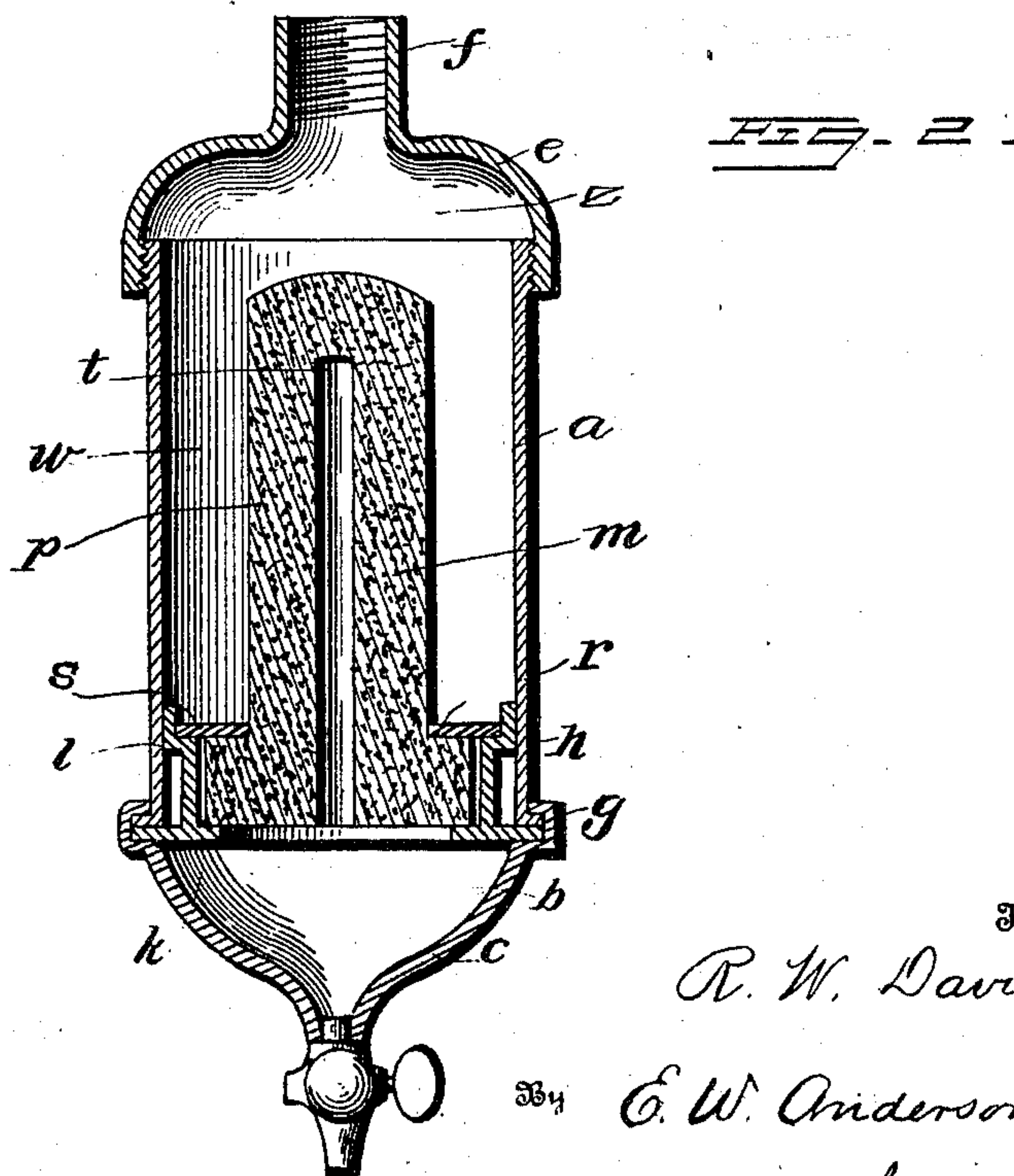
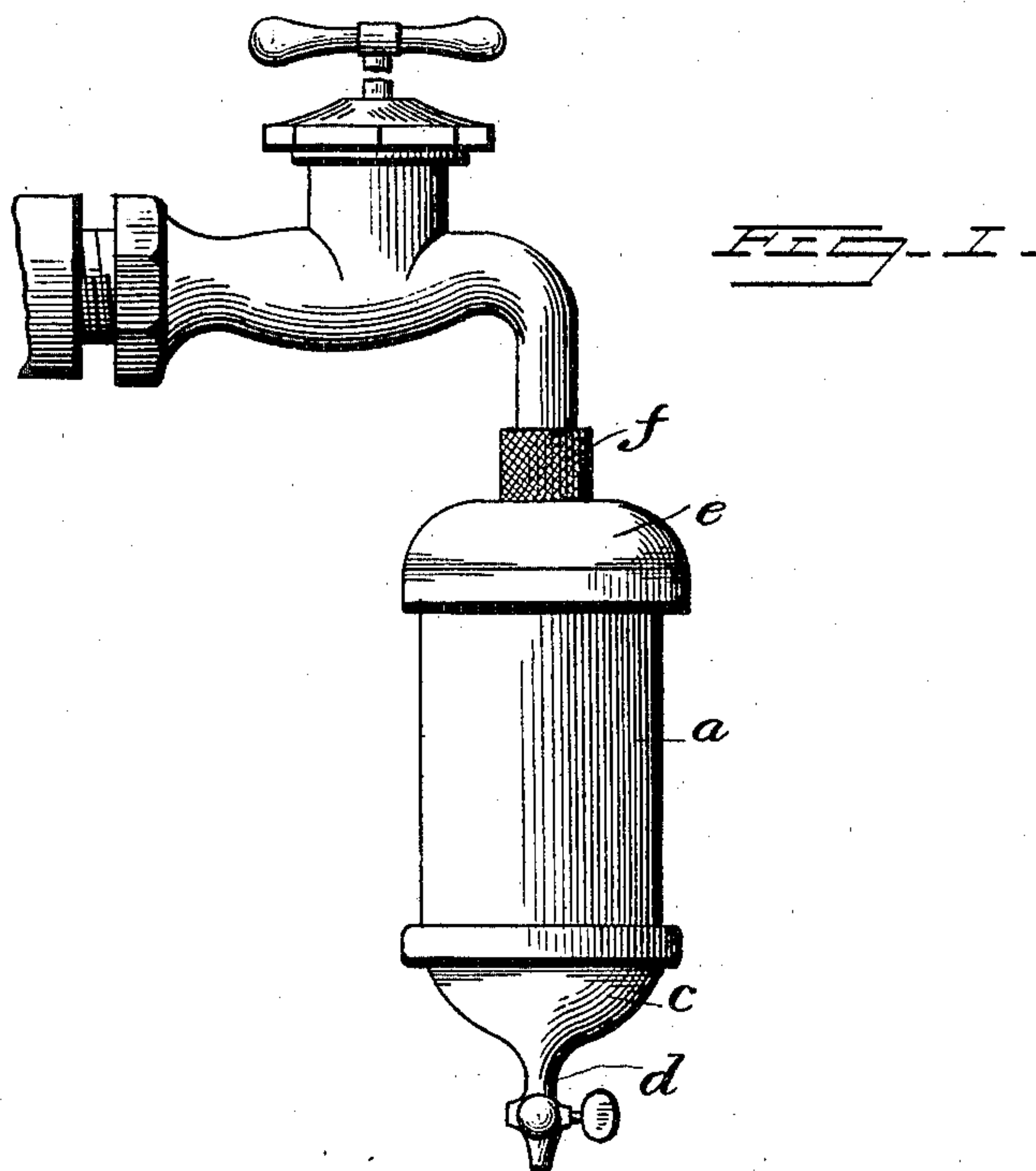
No. 719,309.

PATENTED JAN. 27, 1903.

R. W. DAVIS.  
FILTER.

APPLICATION FILED NOV. 5, 1902.

NO MODEL.



Witnesses

R. A. Boswell.  
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# UNITED STATES PATENT OFFICE.

ROBERT W. DAVIS, OF JACKSON, OHIO.

## FILTER.

SPECIFICATION forming part of Letters Patent No. 719,309, dated January 27, 1903.

Application filed November 5, 1902. Serial No. 130,169. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT W. DAVIS, a citizen of the United States, and a resident of Jackson, in the county of Jackson and State of Ohio, have made a certain new and useful Invention in Filters; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention relates to filters; and it consists in the novel construction and combination of parts, as hereinafter set forth.

In the accompanying drawings, Figure 1 is a side elevation of my invention as applied, and Fig. 2 is a central longitudinal section of the invention.

In the drawings the letter *a* designates the metal casing, usually of cylindrical form, having the bottom chamber *b* in the bottom *c*, which is provided with the outlet-aperture *d*. The top of the filter-casing consists of a cover *e*, which should be secured to the body of the casing with a screw-thread, and is provided with an inlet-nipple *f*, usually threaded, for attachment to a spigot or other outlet from the water-supply. Around the upper portion of the bottom chamber on the inside is provided a holding rib or bearing or reinforcement *g*, having a top *h* and a bottom flange *k*, forming a circular open seat for the base *l* of the clay filter-cylinder *m*, which fits neatly in such seat, resting on the flange *k*. The filter-cylinder is made of porous clay or other solid filtering material and is exteriorly shouldered to form a base *l* and an upright portion *p* of smaller diameter than said base, but rising concentrically therefrom, as shown. This base has a level shoulder-top *r* of annular form, which is flush with the top *h* of the holding-reinforcement *g* when the base rests on the flange or ledge at the bottom of such reinforcement or bearing. The upright portion of the clay filter-cylinder extends nearly to the top of the upper chamber portion *z* of the casing, and a cylindrical

perforation or bore *t* extends from the bottom of the filter-cylinder nearly to the top of the same, in such wise, however, that while this bore is closed at the top by the material of which the filter-cylinder is made it is open at the bottom to discharge into the bottom chamber *b*. An annular gasket *s*, of rubber or other suitable material, having its exterior diameter equal or nearly equal to that of the casing and the diameter of its opening equal to that of the upright portion of the filter-cylinder, is placed around said upright portion down upon the shoulder of its base, on which it rests, as well as upon the top of the bearing *g* of the casing. This gasket bridges the small joint interval between the base and bearing and closes the same in order to prevent leakage from the upper water-chamber *w* into the chamber of the bottom.

Water being allowed to enter the casing at its inlet finds its way through the clay filter-cylinder into the inside perforation or bore thereof, whence it passes into the chamber in the bottom below the base of the filter-cylinder, whence it passes through the outlet into a proper receptacle. Impurities of the water are left on the outer surface of the clay cylinder.

When necessary for cleaning, the clay cylinder can be readily removed from the casing after the cover has been taken off. The clay cylinder is readily cleaned by means of a brush and water.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a filter, the combination with the cylinder-casing, and the interior annular bearing thereof above the bottom chamber, of the exteriorly-shouldered removable clay filter-cylinder fitting said bearing, and the annular gasket, closing the joint between the bearing and shoulder of said filter-cylinder, substantially as specified.

2. A filter, comprising the cylinder-casing, having an upper chamber portion, a bottom chamber portion, and an interior bearing or rib around the upper part of the bottom chamber, a removable clay filter-cylinder



shouldered to form an outwardly-projecting  
base, and extending upward to near the top  
of said casing, and an annular rubber gasket  
fitting upon the shoulder of the base, and the  
5 top of the bearing to close the joint, and sepa-  
rate the upper chamber portion from the lower  
chamber portion, substantially as specified.

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

ROBERT W. DAVIS.

Witnesses:

LESTER DAVIS,  
F. E. BINGMAN.