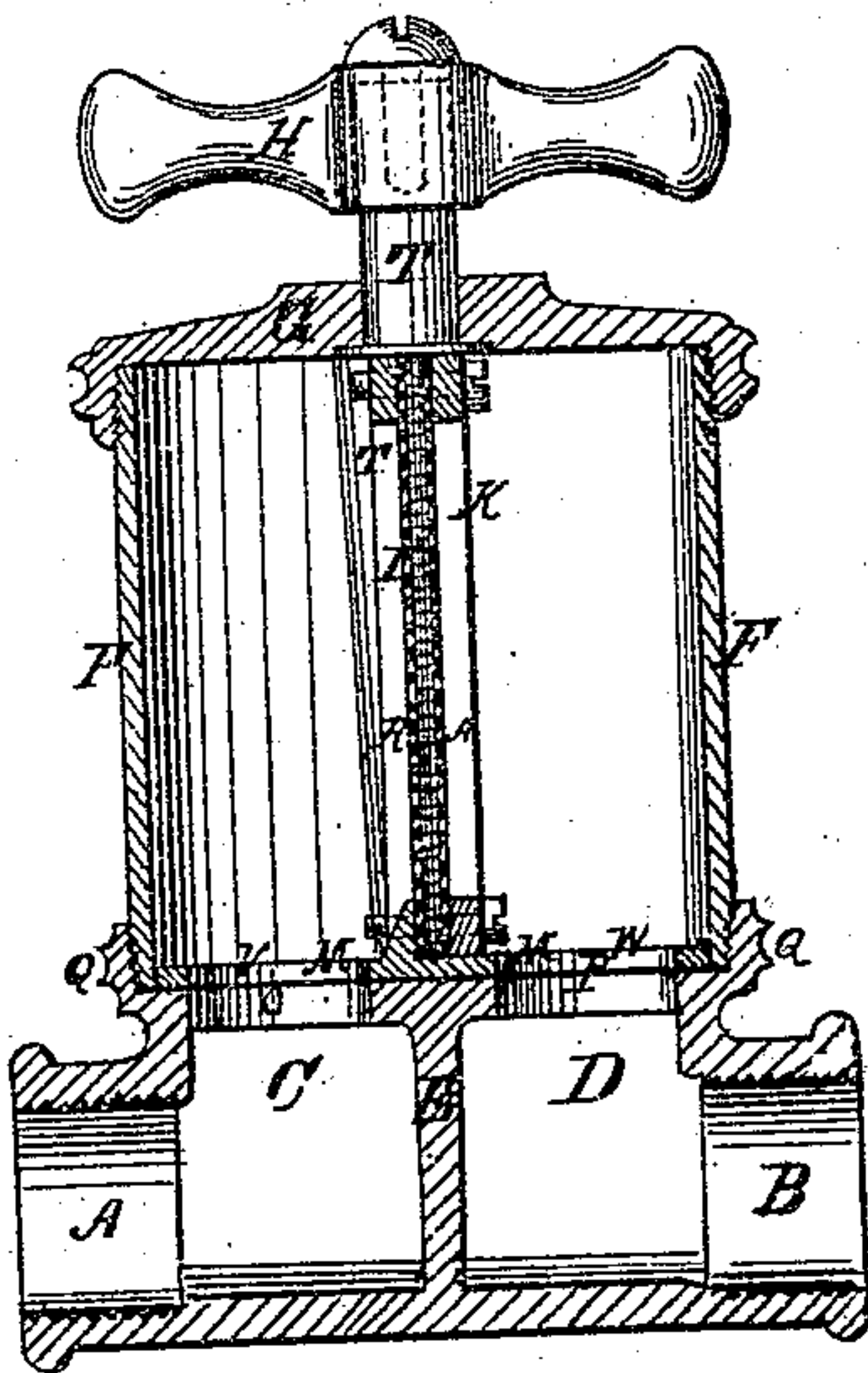


J. FORD.  
FILTER.

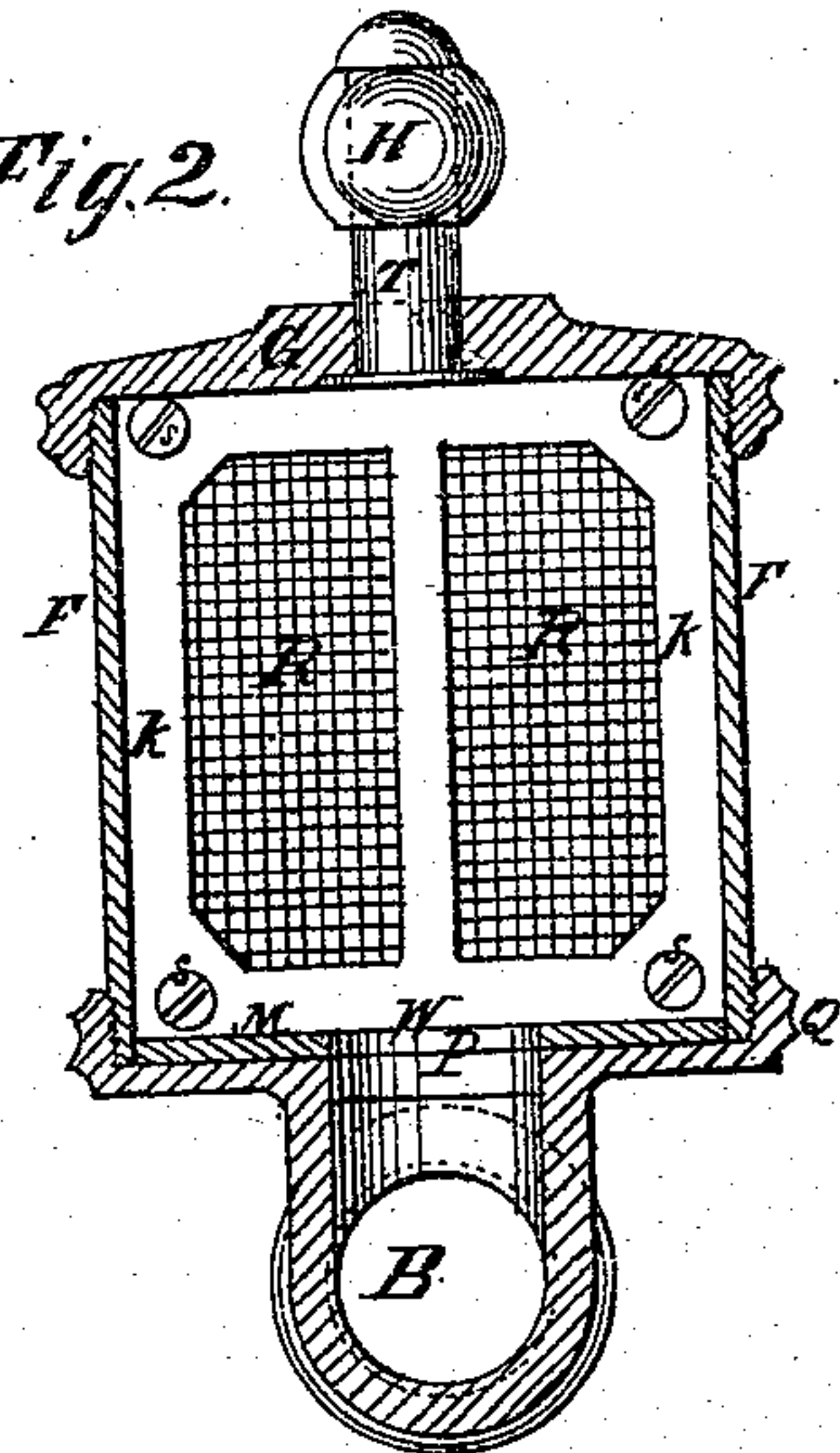
No. 87,250.

Patented Feb. 23, 1869.

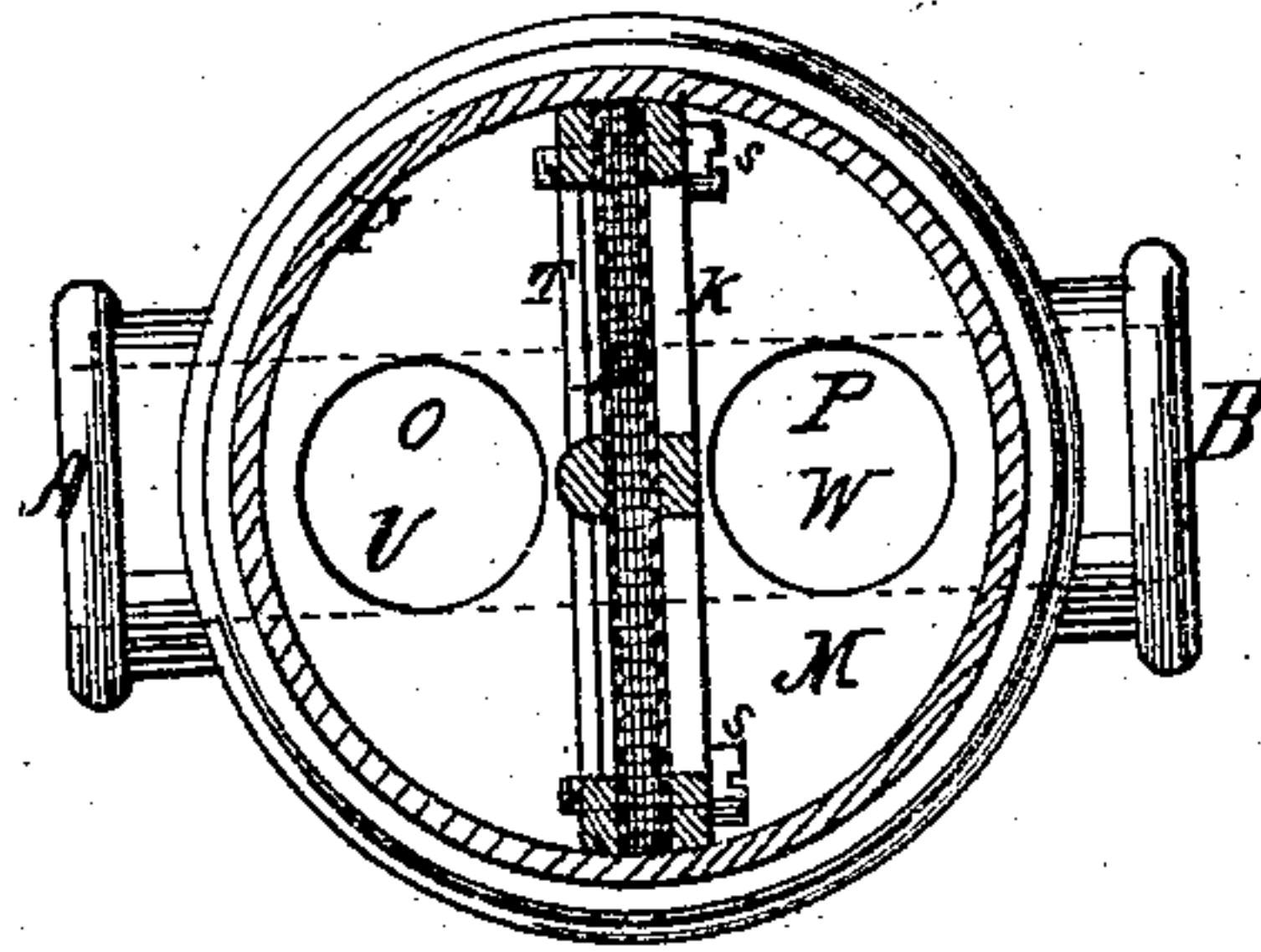
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Inventor:*

*Joseph Ford*



JOSEPH FORD, OF NEWBURG, NEW YORK.

Letters Patent No. 87,250, dated February 23, 1869.

IMPROVEMENT IN FILTERS.

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, JOSEPH FORD, of Newburg, in the county of Orange, and State of New York, have invented a new and improved Filter; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

Figure 1 is a vertical longitudinal section.

Figure 2 is a vertical transverse section.

Figure 3 is a plan of a horizontal section of the apparatus.

A B is a cylindrical pipe, provided at each end with thread, to connect it to other pipes, and on top, with a circular flange, Q, for the reception of another cylinder, F.

The cylinder A B is divided in its centre, by a partition, E, in two parts, C and D, which communicate with the inside of cylinder F by two openings, O and P.

In the cylinder F is inserted another circular plate, M M, connected with a frame, T T, and a stem, T. The plate M, with the openings V and W corresponding with the holes O and P, is fitted easy to the inner sides of cylinder F, with the frame T T, to which is bolted a similar frame, K, by four screws, s s, enclosing between themselves two pieces of brass-wire cloth R R, between which is laid sponge or cloth L, or any other suitable substance in required thickness, for filtering.

A cover, G, is screwed over the other end of cylinder F, closing the cylinder water-tight, and a handle, H, attached to the stem T, finishes the whole apparatus.

Suppose this filter is attached to the water-supply pipe in a house, the water may enter at A, fig. 1, and is going through chamber C, opening O and V in the cylinder F, and after passing through the filter L, where it left all the unclean substances, is going through opening W P, chamber D and B, into the pipe leading it to the place where it will be used.

After the filter is used some time in this position, and it wants cleaning, the whole process of cleaning consists in reversing the filter, or turning the other side of the filter toward the chamber where the water enters; that is, so that the opening W, in the bottom-plate M, comes over the opening O, and the opening V over the hole P.

The water itself, entering at A, will wash out all the unclean substances from the filter, by going through the filter from the other side, and carry them out the pipe, when the water will not be used until the water runs off clean again.

The construction of this filter is very simple, it can easily be taken apart, and the cleaning itself is done by the least possible work, by only reversing the filter by the handle H.

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

The reversible filter L, in combination with the frame T K, bottom-plate M, cylinder F, cover G, handle H, and pipe A B, substantially and for the purpose as specified.

JOSEPH FORD.

Witnesses:

GEO. S. MONELL,  
FRED. J. MARBLE.