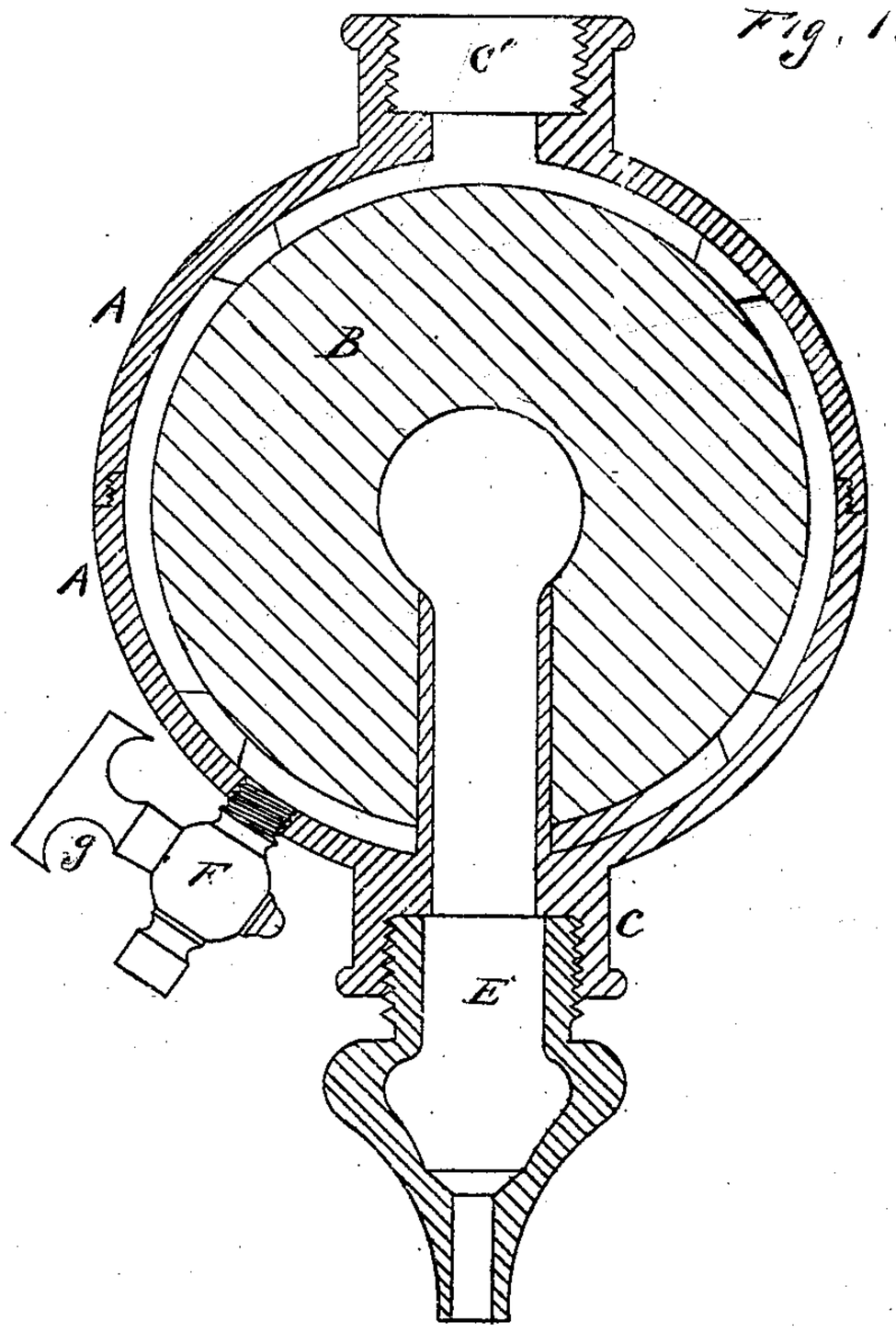
P. HUERNE.

Filters.

No. 135,222. Patented Jan. 28, 1873.

Fig. 1.



Witnesses

S. L. Boone

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UNITED STATES PATENT OFFICE.

PROSPER HUERNE, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN FILTERS.

Specification forming part of Letters Patent No. **135,222**, dated January 28, 1873.

To all whom it may concern:

Be it known that I, PROSPER HUERNE, of San Francisco city and county, State of California, have invented an Improved Filter; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to an improved water-filter to be attached to water-faucets in buildings for the purpose of filtering the water which is used for drinking purposes.

In order to explain my invention so that others will be able to understand its construction and operation, reference is had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a vertical section through the center.

A A represent two hollow semi-globes, made of metal, which can be screwed together so as to form a single hollow sphere, as shown at Fig. 1. Short tubes C C′ project from opposite sides of this sphere, which are provided internally with screw-threads. Inside of this hollow globe I place a filtering-stone, B, shaped according to the shape of the filtering-vessel. This stone is smaller than the inside of the globe, so that a space will be left between its exterior and the interior of the vessel. A hole passes from the tube C at one end of the vessel into and to the center of the stone B, and the stone is fixed in place by a lining from the tube, which passes a short distance into the hole thus made. A spout or hollow plug, E, is then screwed into the tube C to serve as an outlet for the filtered water. F is a cleaning faucet or tube, which communicates with the space between the stone and interior of the vessel, and which can be closed by a cock, *g*. Either of the short tubes C or C′ can be secured to the faucet.

When the tube C is attached to the water faucet or pipe the plug E is screwed into the tube C′ opposite, so that the pressure of the water is exerted on the inside of the stone, and water is forced through it in all directions into the space between the stone and vessel, from whence it flows out through the plug E. But when the short tube C is secured to the water faucet or pipe the pressure forces the water through the stone to the center, whence it is drawn off through the plug which has been transfered to C′.

Thus it will be seen that, by turning the vessel end for end, the direction of the pressure is changed, and the stone cleansed when it becomes dirty.

By leaving the cock *g* of the cleaning-faucet open a slight flow of water will be kept up, which will carry away a great portion of the sediment which would otherwise settle in the outside space.

An air-cock can also be applied on the end opposite the cleaning-cock, if desired.

By this construction I am able to provide a cheap and substantial water-filter, which will pass a larger quantity of water than any other form of filtering-vessel, as the superficial area of the round or circular stone provides a larger filtering-surface than any other form.

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

The reversible hollow globe or oblong filtering-vessel A A, with its short tubes C C′ and cleaning-faucet E, in combination with the round or circular filtering-stone B, having a hole passing to its center and communicating with one of the tubes C C′, substantially as and for the purpose above described.

In witness whereof I hereunto set my hand and seal.

PROSPER HUERNE. [L. S.]

Witnesses:

J. L. BOONE,

C. M. RICHARDSON.