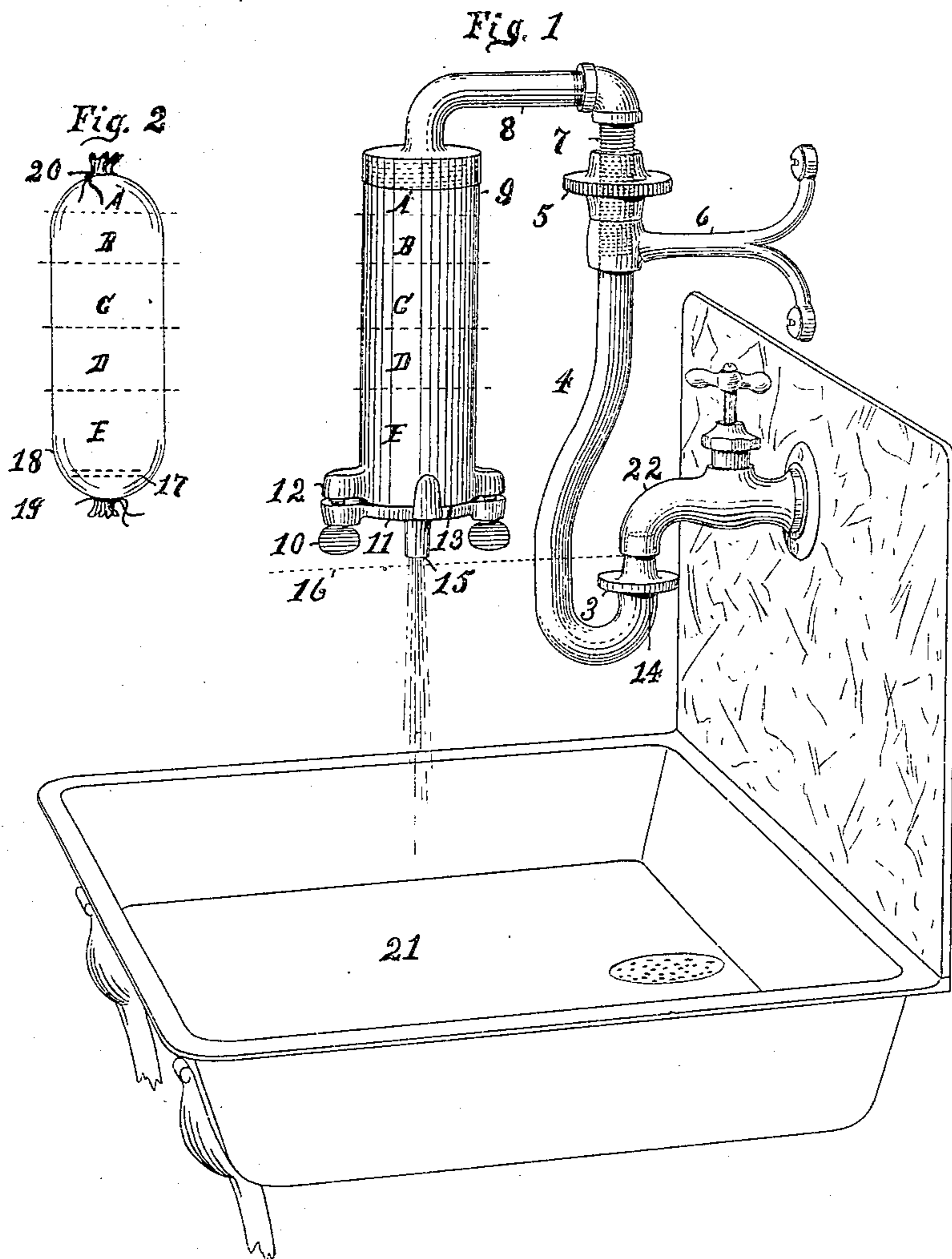


No. 814,261.

PATENTED MAR. 6, 1906.

R. G. BARRIE.
WATER FILTER.
APPLICATION FILED OCT. 21, 1903.



Robert C. Barrie Inventor

Witnesses
T. F. Coish
L. E. Smith

UNITED STATES PATENT OFFICE.

ROBERT C. BARRIE, OF PHILADELPHIA, PENNSYLVANIA.

WATER-FILTER.

No. 814,261.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed October 21, 1903. Serial No. 177,936.

To all whom it may concern:

Be it known that I, ROBERT C. BARRIE, a citizen of the United States, residing in the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Water-Filters, of which the following is a specification.

My invention relates to water-filters as used for domestic purposes, and aims to supply means of raising the aqueous outlet to the same level of the fountain-spigot; also, to provide ready means of replacing the filter media without cleansing the same. I attain such objects through the design and construction of an appliance as follows, due reference being had to the accompanying drawings, in which—

Figure 1 shows a perspective elevation of the filter and connection arrangement. Fig. 2 is a side elevation of an interchangeable sack of prepared sand-granules.

In the construction and use of my device I provide a cone-shaped rubber nipple 3 to enter the spigot 22 and also the pipe 4, as indicated at 14. This pipe is threaded at 7 to receive the adjusting hand-screw 5, which rests upon a sleeve of the supporting-arm 6, fastened to the wall above the sink 21. By means of an ordinary L and projecting pipe 8 the cylinder 9 is held outwardly and above the outlet, as shown by dotted line 16. One end of this tubular cylinder is screwed to arm 8, the lower end having an end cap 11 with an intervening packing-ring, as at 13. It is also provided with side projecting lugs 12 to receive thumb-screws 10.

As thus far defined, it will be evident that if 6 be secured to the wall and 3 placed within the mouth of spigot and 5 be turned to the left 4 will be drawn upwardly, making water-tight connection with 22, from which water may freely pass through 4 and 8, filling 9, and escape at 15 into a vessel placed beneath 16 or fall to the sink below.

For purification purposes I make a series of duplicate linen sacks, inclosing, first, a square piece of metal sieve 17, then succeeding layers A, B, C, D, and E of graded sand-

granules, the topmost, B, being finely-sifted ashes or sand-dust, upon which is placed a small sponge A to fit against the inner opening of 8, the sponge and sieve ends of the bag being known by different-colored twine.

It will now be evident that one may remove 11, cut off the end 20, push the sack well up into 9, likewise cut end 19, the sieve 17 resting directly over 15, and by replacing the cap 11 and fastening-screws 10 the charging process will be complete and ready for use, by which it will be found that a settling of finer granules into the coarser interstices beneath will form a compact sand body, which will retard the passage of undesirable matter and yet be sufficiently porous to deliver needed quantity of clear sparkling effluent. To recharge the filter, loosen screws 10, remove cap 11, and withdraw the sack and contents, which should be cast aside and replaced by another in like manner, as aforesaid. It is this duplicate sack that obviates the present necessary cleansing processes.

As a third feature of my device, when so desired one may unscrew 5, and thus lower 4 sufficiently to free 3 from 22 and give vent to unfiltered water.

Having thus defined my invention, I hereby point out that which I claim as new, and desire to secure by Letters Patent, which is—

In a water-filter a vertical tube held by a projecting arm and sleeve, being adjustable therein by threaded circular thumb-screw, and carrying a receiving-cylinder attached to the upper end thereof, and provided at its lower extremity with a cone-shaped flexible nipple connection in combination with an inclosed exchangeable sack of deterrent material and a supply-spigot substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT C. BARRIE.

Witnesses:

G. FRITSCH,
K. ROBINSON.