

No. 632,870.

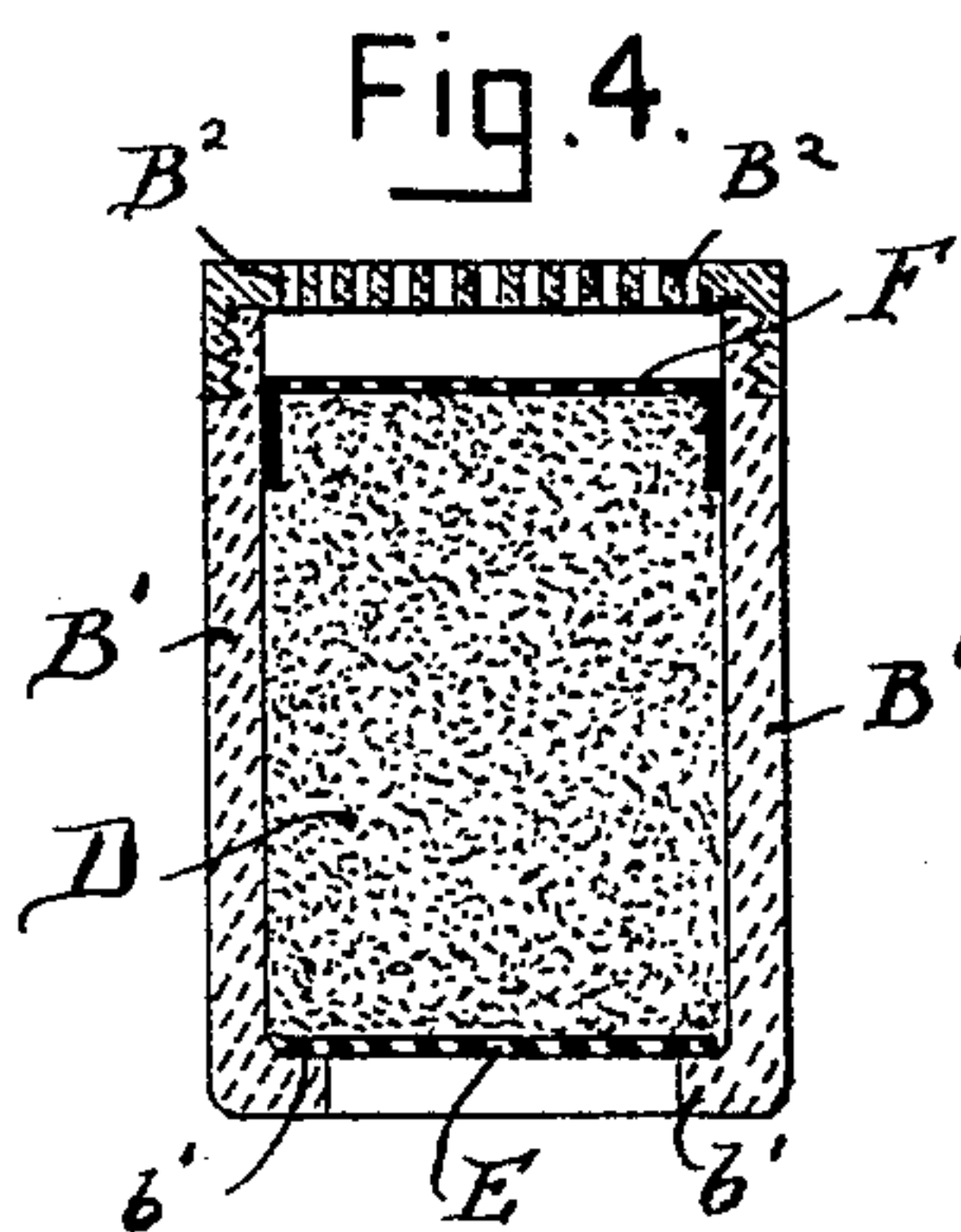
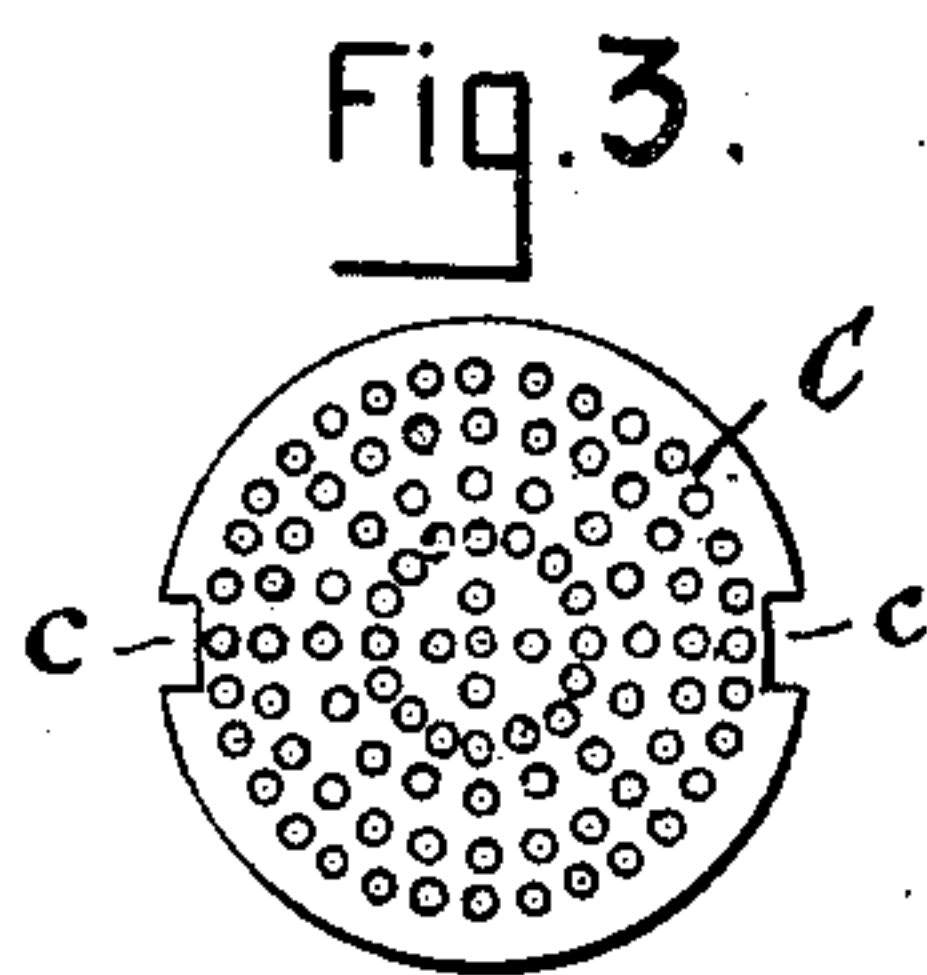
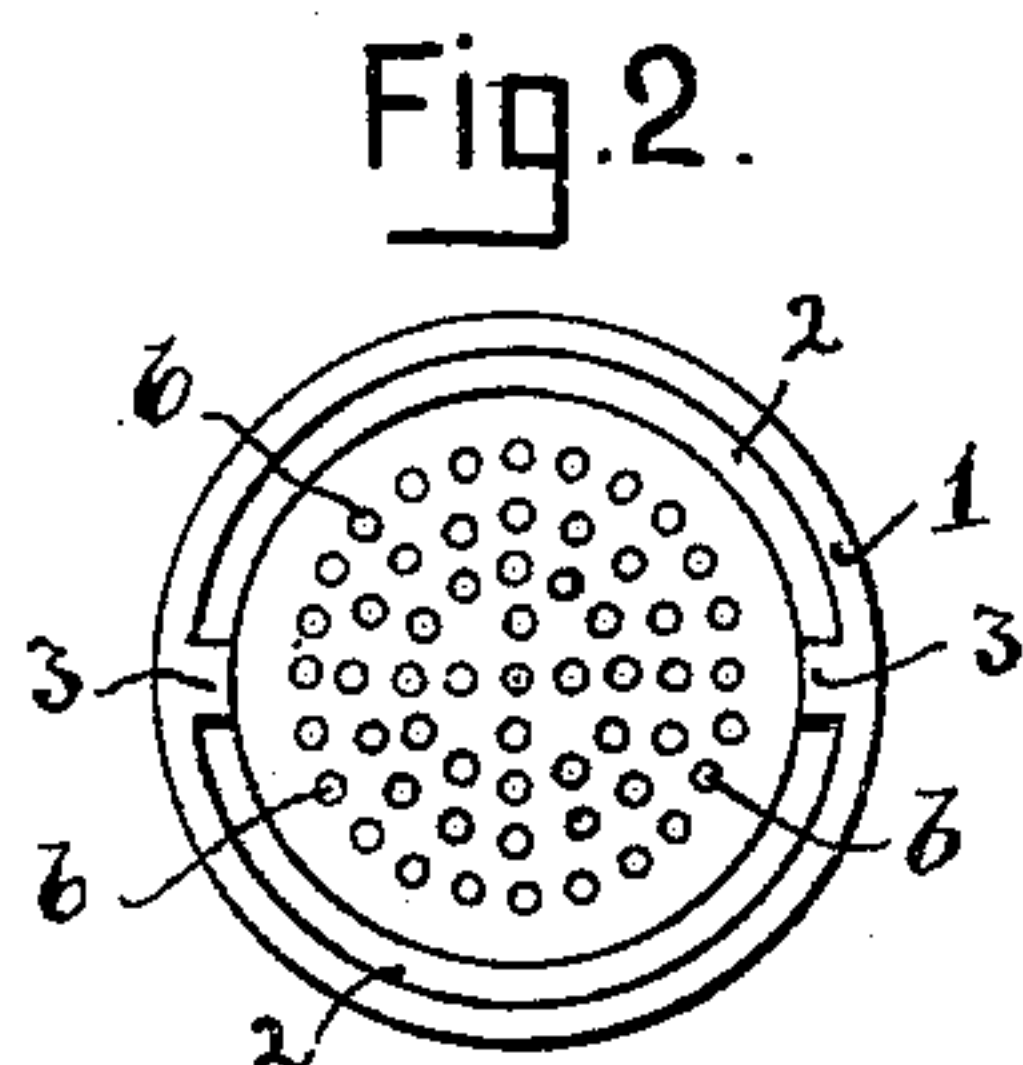
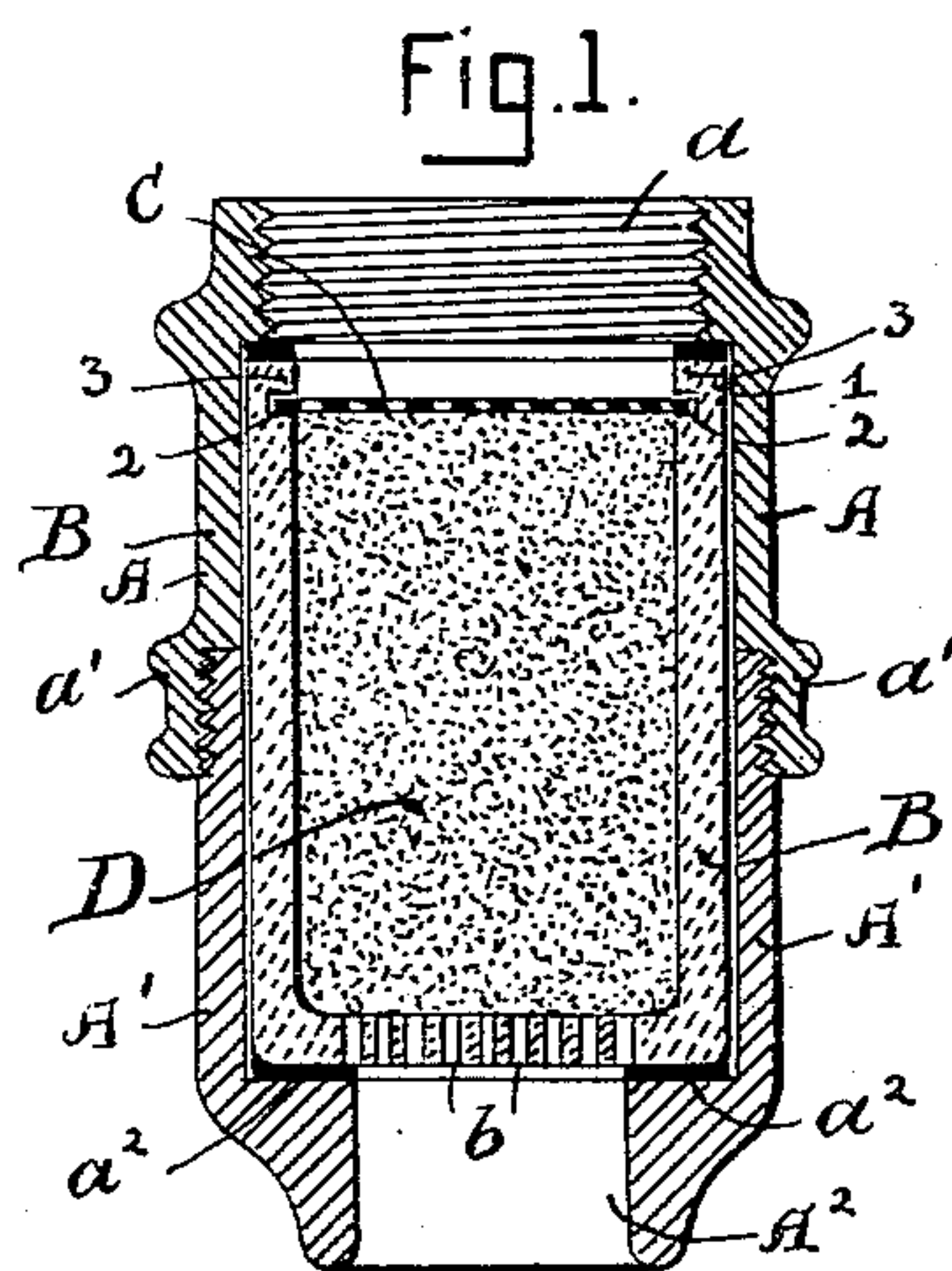
Patented Sept. 12, 1899.

C. L. HOLLAND.

FILTER.

(Application filed Nov. 18, 1898.)

(No Model.)



Witnesses.  
Winifred J. Kerwin  
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# UNITED STATES PATENT OFFICE.

CHARLES L. HOLLAND, OF BOSTON, MASSACHUSETTS.

## FILTER.

SPECIFICATION forming part of Letters Patent No. 632,870, dated September 12, 1899.

Application filed November 19, 1898. Serial No. 696,850. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES L. HOLLAND, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Filters, of which the following is a specification.

My invention relates to that class of filters that are adapted to be applied to a faucet; and the invention consists in the peculiar construction and arrangement of parts, as hereinafter described, and set forth in the claim.

Referring to the accompanying drawings, Figure 1 represents a vertical section through a filter embodying my invention. Fig. 2 is a top view of the cup for containing the filtering medium. Fig. 3 is a view of the perforated disk for fitting onto the top of same. Fig. 4 is a vertical section of a modified form of cup for containing the filtering medium.

The outer case is divided into two parts A A', the upper part A being at its upper end formed with an internal screw-thread  $a$ , adapted to fit onto a faucet, and at its lower end is formed with a projecting ring  $a'$ , screw-threaded on its inner side to receive the upper end of the lower portion A', which has a corresponding screw-thread on its upper end and at its lower end is formed with a nozzle A<sup>2</sup> and a shoulder  $a^2$  to support the cup containing the filtering medium.

B is a cup, of glass, aluminium, or other non-corrosive substance, having its lower end perforated or formed with a number of small holes  $b$ , its upper end having an outer upwardly-projecting rim 1, of less thickness than the body of the cup, so as to form a shoulder 2. Said rim is also formed with an inwardly-projecting lip 3 on each side. (See Fig. 2.)

C is a disk of perforated metal (non-corrosive) formed on each side with notches  $c$ , that fit over the projecting lips 3 of the cup B, the diameter of said disk being equal to the in-

ternal diameter of the outer rim 1, so that when dropped in place it will rest upon the shoulder 2 and when given a partial turn is locked in place by the lips 3.

D is the filtering medium, placed and held in the cup B in the manner described.

In Fig. 4 I have shown a modified form of cup B' for containing the filtering medium. In this case the lower end of the cup has an inwardly-projecting lip  $b'$  and is open in the center, the hole being covered by a perforated plate E, that rests upon the top of the projecting lip  $b'$ , and the top of the cup is formed with a screw-thread on its outer periphery, and a perforated cap or cover B<sup>2</sup> is screwed thereon, and, if desired, a perforated dish-shaped piece F, having spring sides, may be placed on the top of the filtering medium D, so as to leave a space between same and the cap or cover B<sup>2</sup>.

Should the filtering medium become clogged or filled with impurities, said medium can readily and easily be renewed by unscrewing the lower portion A' of the outer case. The glass cup can then be removed, emptied, cleansed, and refilled and again placed in position ready for use.

What I claim is—

A filter consisting of a body divided in its center and having an internal screw-thread at its upper end and a nozzle at its lower end, a cup of non-corrosive material having a perforated bottom and having at its upper end an outer upwardly-projecting rim, projecting lips on same and a perforated disk of metal adapted to fit same, said cup containing a filtering medium as set forth.

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

CHARLES L. HOLLAND.

Witnesses:

CHAS. STEERE,  
EDWIN PLANTA.