

(No Model.)

J. L. BACH.
FILTER.

No. 439,091.

Patented Oct. 28, 1890.

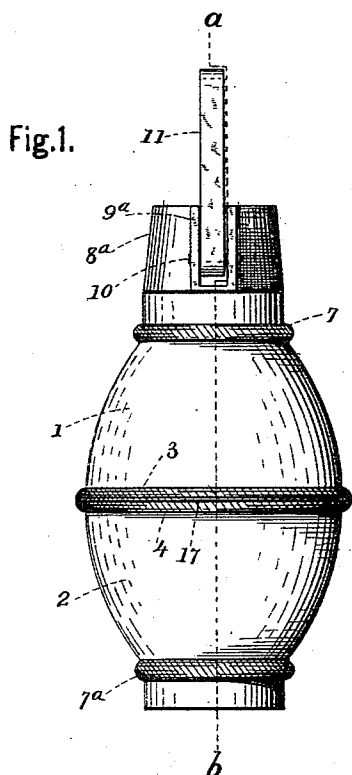
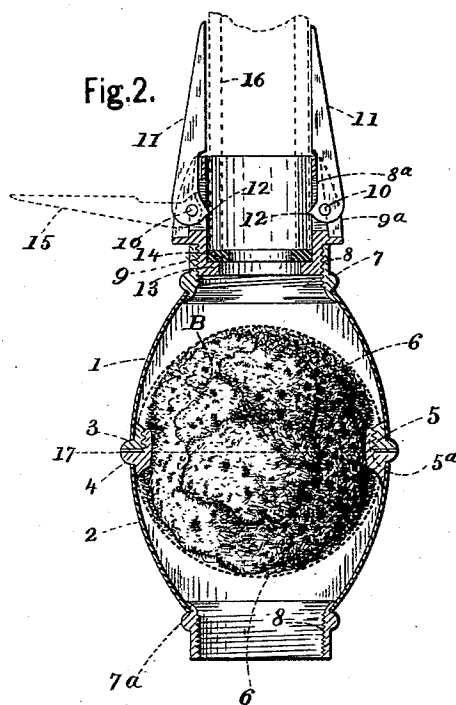
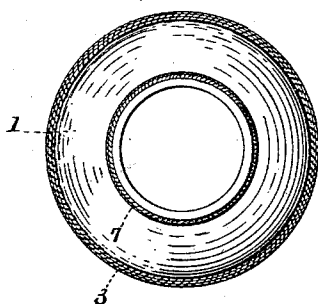


Fig.3.



Witnesses.

J. E. Webster
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UNITED STATES PATENT OFFICE.

JOHN L. BACH, OF BUFFALO, NEW YORK.

FILTER.

SPECIFICATION forming part of Letters Patent No. 439,091, dated October 28, 1890.

Application filed May 28, 1890. Serial No. 353,449. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. BACH, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Filters, of which the following is a specification.

The object of my invention is to produce a reliable reversible filter for hydrant-faucets or for other like purposes, all the parts being easily removable, so as to be readily got at for cleaning or for repairs, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation. Fig. 2 is a section through line *a b*, Fig. 1; and Fig. 3 is a top plan view of the filter, the fastening device at the top being omitted.

I divide my improved filter into two parts 1 and 2, both of which parts are made of thin sheet metal brought into shape by spinning, the part 1 being provided with a ring 3, secured thereto by solder or in a well-known way, a ring 4 being secured to the part 2 in a similar manner. The ring 3 is provided with an interior screw-thread 5, and a corresponding exterior screw-thread 5^a on the ring 4 is adapted to engage with it, so the two halves 1 and 2 are easily removable when required. Within each half is a semispherical sieve or strainer 6 of finely woven wire, the two making a complete sphere within them. The parts 1 and 2 are also provided with rings 7 and 7^a of heavier metal which are secured thereto by solder or the equivalent thereof, each ring 7 and 7^a being provided with an interior screw-thread 8, adapted to screw onto a faucet-nozzle provided with a screw-thread adapted to receive it. When the faucet to which the filter is to be attached is not provided with a screw-thread, then the end piece 8^a is secured to the faucet. This end piece consists of the thimble or body portion 8^a, having an exterior screw-thread 9 and the projecting ribs 9^a, at opposite sides within each of which is an opening, in which is pivoted by pins 10 (see Fig. 2) the two arms 11, having the sharp edge portions 12 on the inside. Within the lower portion of this thimble is an inwardly-projecting flange 13, on which is placed a ring 14 of soft rubber.

In using this device the arms 11 of the end piece 8^a are turned over in the position shown by the dotted lines 15 in Fig. 2, thus throw-

ing the sharp parts 12 back out of the way. It is then slipped over the nozzle of a hydrant-faucet so that the lower end of the nozzle will press against the soft-rubber washer 14. The pivoted arms 11 are then turned up in the position shown, which operation tends to force the nozzle with sufficient force to render it water-tight, as it will be seen that the sharp portions 12 force the thimble 8^a upward, so that the end of the nozzle presses hard against the rubber. This device is made easily removable, so that the filter may be removed at any time and reversed.

When the nozzle of the faucet to which the filter is to be attached is provided with a screw, the portion 8^a may be removed and the filter connected directly to the faucet.

Within the spherical strainer 6 and 6 is placed a sponge B, which is easily done by unscrewing the two portions of the filter, as before mentioned, and when the sponge is inserted the two parts are put together. The object in making the strainer spherical is to extend the strainer-surface as much as possible, so as to use a proportionately finer strainer.

The cleaning of the filter when it gets filled up is generally effected by reversing the filter; but when it has been used too long for that operation to be satisfactory the parts 1 and 2 may be separated, as hereinbefore explained, and the filtering material removed and cleaned or new material substituted.

Sponge is a good filtering material; but, if desired, charcoal or the equivalent thereof may be used, either alone or combined with sponge.

To secure a perfectly-tight joint between the two halves 1 and 2, I place a soft-rubber ring 17 or other packing material.

I claim as my invention—

A filter consisting of two thin portions 1 and 2, having rings 7 and 7^a, rigidly secured thereto at the smaller ends and provided with interior screw-threads, rings 3 and 4, rigidly secured to the larger ends of each portion and provided with screw-threads, so that the two will screw together, and a filter-strainer with filtering material located within them, substantially as described.

JOHN L. BACH.

Witnesses:

JAMES SANGSTER,
HARRIET JOHNSON.