A. MACQUEEN, Jr.
Attachment for Filters.

No. 196,370. Patented Oct. 23, 1877.

Fig. 1.

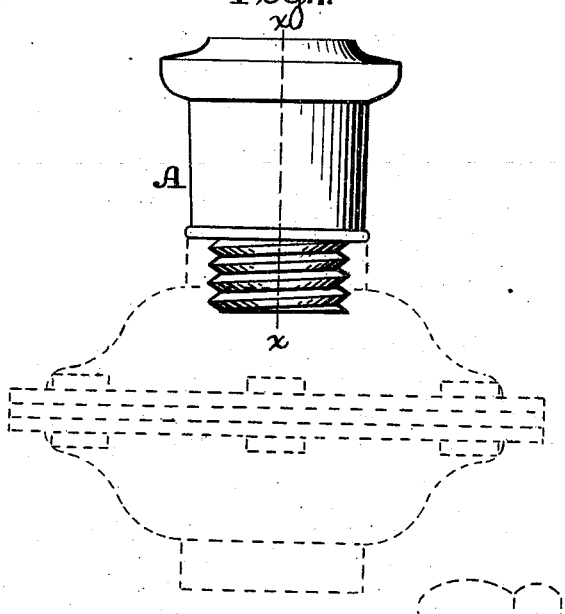


Fig. 2.

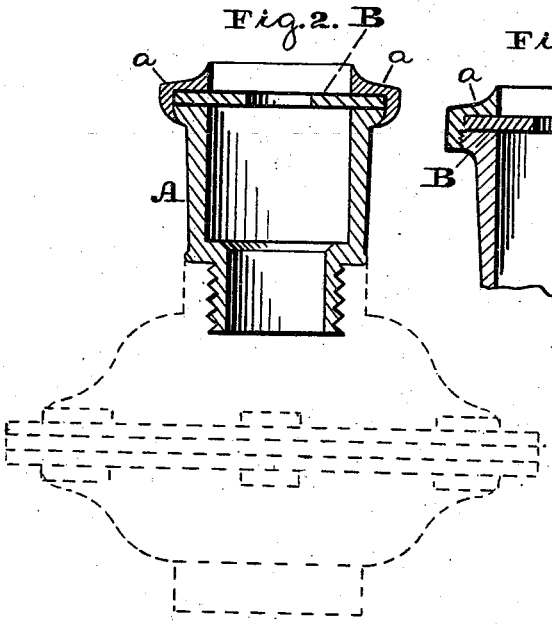


Fig. 3.

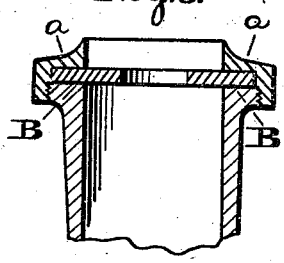


Fig. 4.

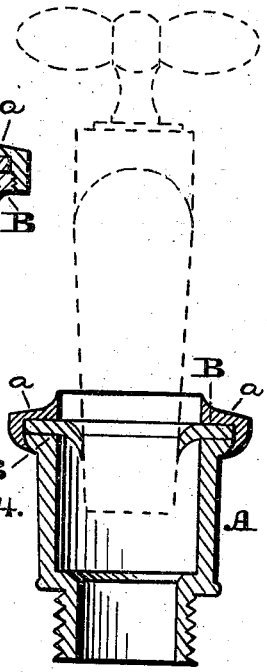


Fig. 5.

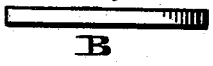


Fig. 6.

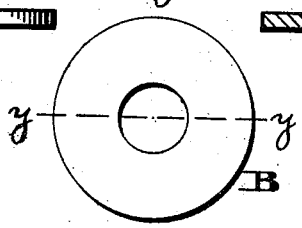
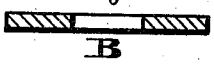


Fig. 7.



Witnesses:
Lewis F. Brous!
A. P. Grant.

Inventor:
Alfred Macqueen Jr.
by John A. Wiedersheim
Attorney.

UNITED STATES PATENT OFFICE.

ALFRED MACQUEEN, JR., OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN ATTACHMENTS FOR FILTERS.

Specification forming part of Letters Patent No. **196,370**, dated October 23, 1877; application filed October 25, 1876.

To all whom it may concern:

Be it known that I, ALFRED MACQUEEN, Jr., of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Attachments for Filters; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of the attachment for filters embodying my invention. Figs. 2, 3, and 4 are vertical sections in line *x x*, Fig. 1. Fig. 5 is a side view of a detached part. Fig. 6 is a plan view thereof. Fig. 7 is a section in line *y y*, Fig. 6.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to means for attaching a filter to a cock or faucet without the employment of screw-threads or alteration of said cock or faucet; and it consists of an elastic annulus secured to the branch pipe of the filter by means of a removable clamping-collar, and projecting into the space thereof, whereby, when the branch is slipped over the supply cock or faucet, the annulus will embrace the latter, and its bite cause the filter to be held securely suspended in position without other fastenings.

Referring to the drawings, A represents the branch or induction pipe of a filter, which latter may be of any desired construction, one form of which is illustrated by dotted lines Figs. 1 and 2. Near the upper part of the branch there is secured an annulus or perforated disk, B, which is formed of soft rubber, and it projects horizontally into the space of the branch, so as to partly occupy said space, as seen in Figs. 2 and 3.

The operation is as follows: The branch, with attached filter, is slipped over the supply cock or faucet, and through the annulus, partly distending the latter, and when the filter is let go, the weight thereof draws the inner circumference of the annulus against the surface of the cock or faucet, so that by the bite of the annulus a tight and tightening joint is produced between the annulus and cock or faucet, (see Fig. 4,) whereby the filter will be securely suspended from the cock or faucet without other fastenings or appliances.

It will be noticed that the faucet is without screw-threads, and special construction for my purpose is not requisite.

In order to hold the annulus securely to the branch, I construct the upper part thereof in the form of a collar, *a*, and fit the annulus between said collar and the branch proper. Then, by means of a threaded joint between the collar and branch, or by spinning the lower edge of the collar over a flange or lugs on the branch, the said collar and branch will be securely connected, and the annulus tightly clamped in place.

Screws may also be passed through the collar and branch for the same purpose.

Owing to the strain on the annulus, it is important to provide a rigid connection between the annulus and branch; otherwise the displacement of the annulus will release the filter and allow it to fall. Hence the annulus is clamped in position, and it is rendered unremovable except by removing the collar *a*.

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

The combination, with a filter, of a suspension branch, consisting of the induction-pipe A, elastic annulus B, and removable clamping-collar *a*, substantially as and for the purpose set forth.

ALFRED MACQUEEN, JR.

Witnesses:
JOHN A. WIEDERSHEIM,
JAS. A. BELL.