(No Model.)

# J. MULLIGAN.

## WATER FILTER.

No. 548,381. Patented Oct. 22, 1895.

Fig 1.

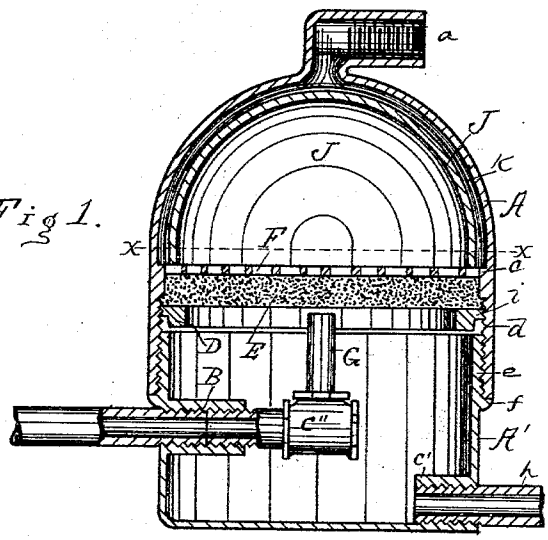
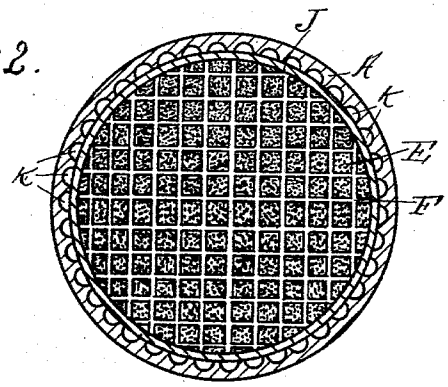



Fig 2.

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# UNITED STATES PATENT OFFICE.

JOHN MULLIGAN, OF DAYTON, OHIO.

## WATER-FILTER.

SPECIFICATION forming part of Letters Patent No. 548,381, dated October 22, 1895.

Application filed April 25, 1895. Serial No. 547,202. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN MULLIGAN, of Dayton, county of Montgomery, State of Ohio, have invented a new and useful Improvement in Water-Filters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in water-filters; and it consists of the novel features hereinafter specified, and pointed out in the claim.

The object of the invention is to provide a simple and efficient filter and one that can be had for a nominal sum.

The annexed drawings illustrate the invention and reference is made thereto.

Figure 1 is a vertical longitudinal section through the middle of the filter. Fig. 2 is a cross-section on the line *x x* of Fig. 1.

In the specification similar letters of reference indicate the same parts.

A designates the upper section of the case, which is dome-shaped and has a nozzle or tubular extension projecting at right angles, as at *a*, to which a pipe may be attached to conduct the filtered water to the faucet. (Not shown.) The lower circular edge of the upper section has a shoulder *c* and internal screw-threads *d*, with which the exterior screw-threads *e* on the lower section A′ engage, and the upper section when so united abuts with a circular shoulder *f* on the outside of the section A′.

B and *c′* designate, respectively, interior nozzles, the former of which receives the supply-pipe, the inner end of which has connected thereto a union *c″*, to which is attached an upwardly-projecting pipe G. The nozzle *c′* receives a pipe *h*, through which the filter may be drained; or unfiltered water may be passed therethrough. About midway in the case I locate a washer D, that abuts with the upper inner edge of the lower section of the case and has a screw-threaded engagement with the upper section at *i*. E designates filtering material—such, for example, as asbestos—that is mounted above this washer and through which the water that enters through the pipe G is filtered.

The interior surface of the upper section A has a series of corrugations *k*, against which an earthenware dome J is placed, through which the water is filtered. The dome J, when in position, leaves a series of longitudinal chambers between it and the case A, that tend to preserve the earthenware.

F designates a perforated metallic plate (or it may be a wire grating) that is placed above the asbestos to maintain the latter in a proper position. The filter may be used without this asbestos and plate F, if desired, and the filtering be done through the earthenware before referred to.

Having described my invention, I claim as new—

The combination with a casing constructed in two sections, the upper section having corrugations on its interior surface, of an earthenware dome inclosed in said upper section forming chambers, a sheet of asbestos, and a metallic plate upon which said earthenware dome rests, a washer engaging with said case upon which the asbestos is supported, substantially as described.

In testimony whereof I have hereunto set my hand this 4th day of April, 1895.

JOHN MULLIGAN.

Witnesses:
R. J. MCCARTY,
LESTER L. ALLEN.