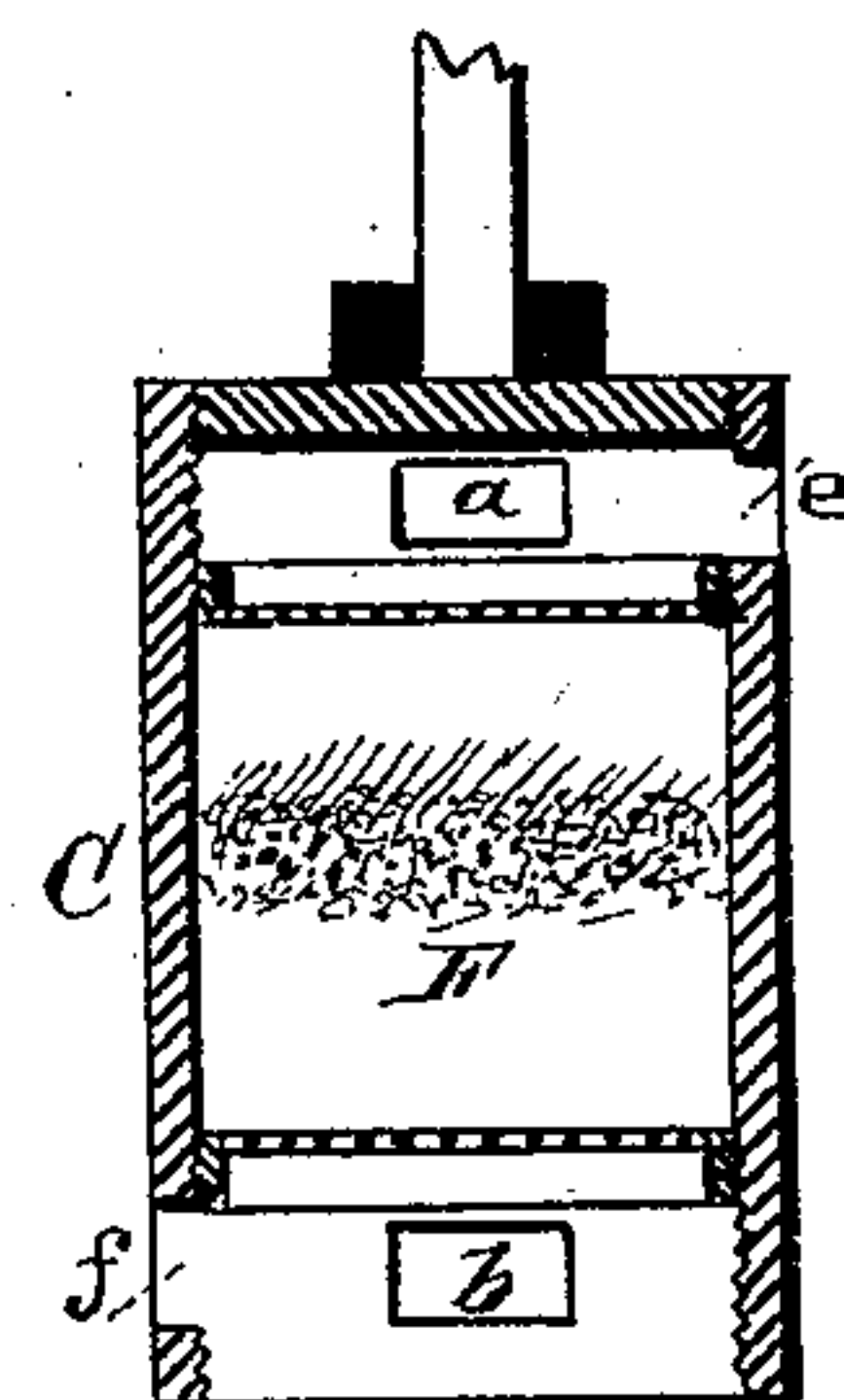
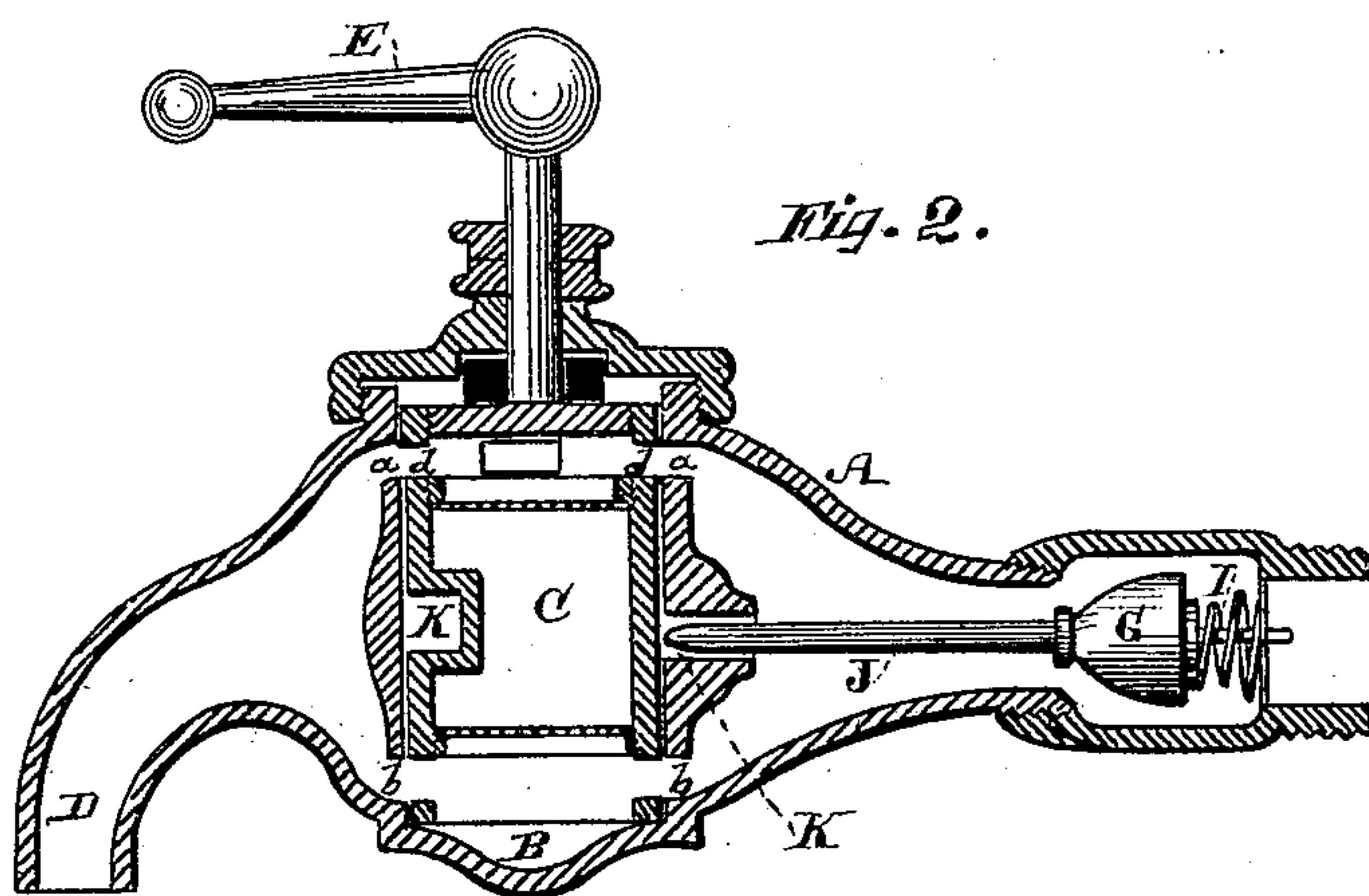
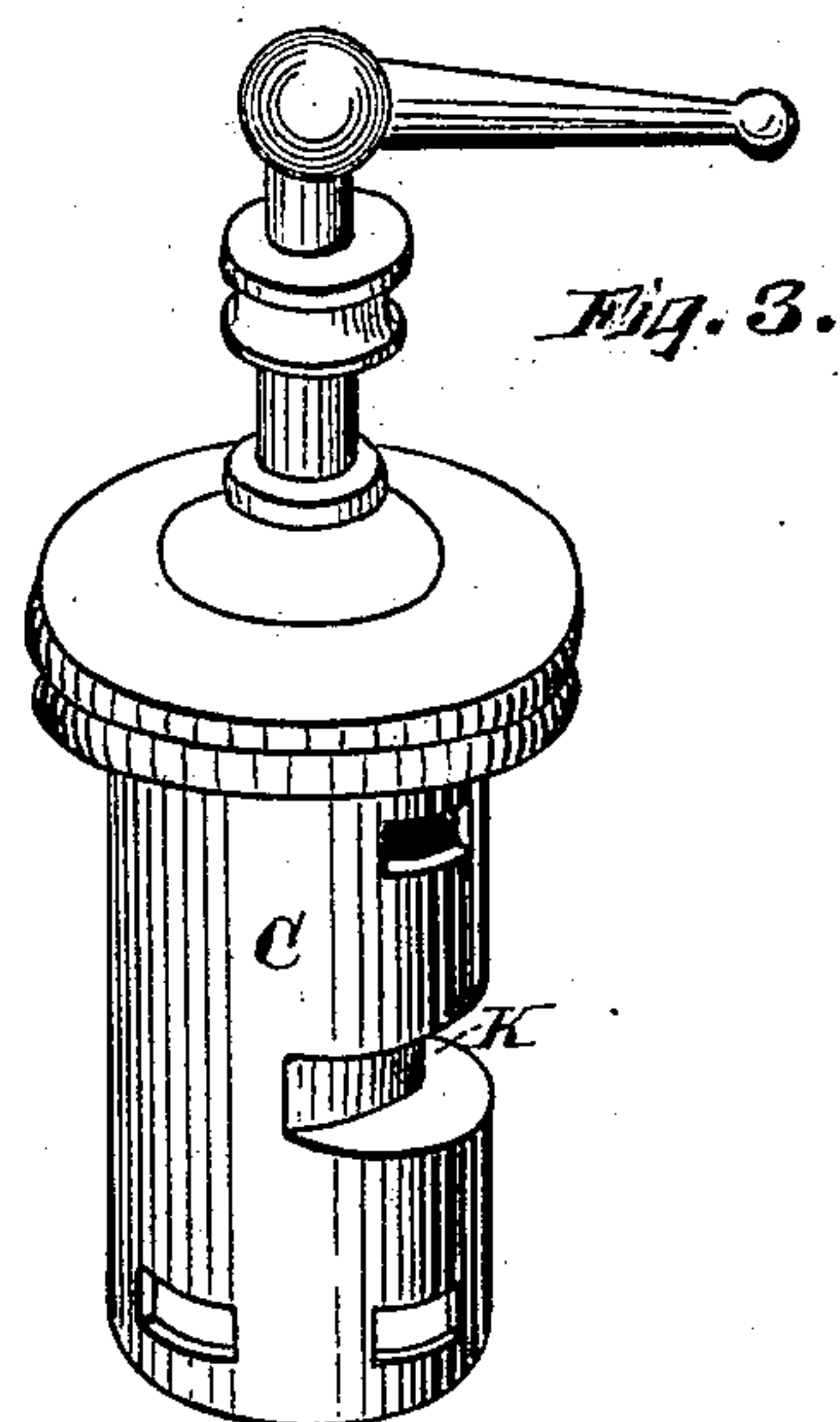
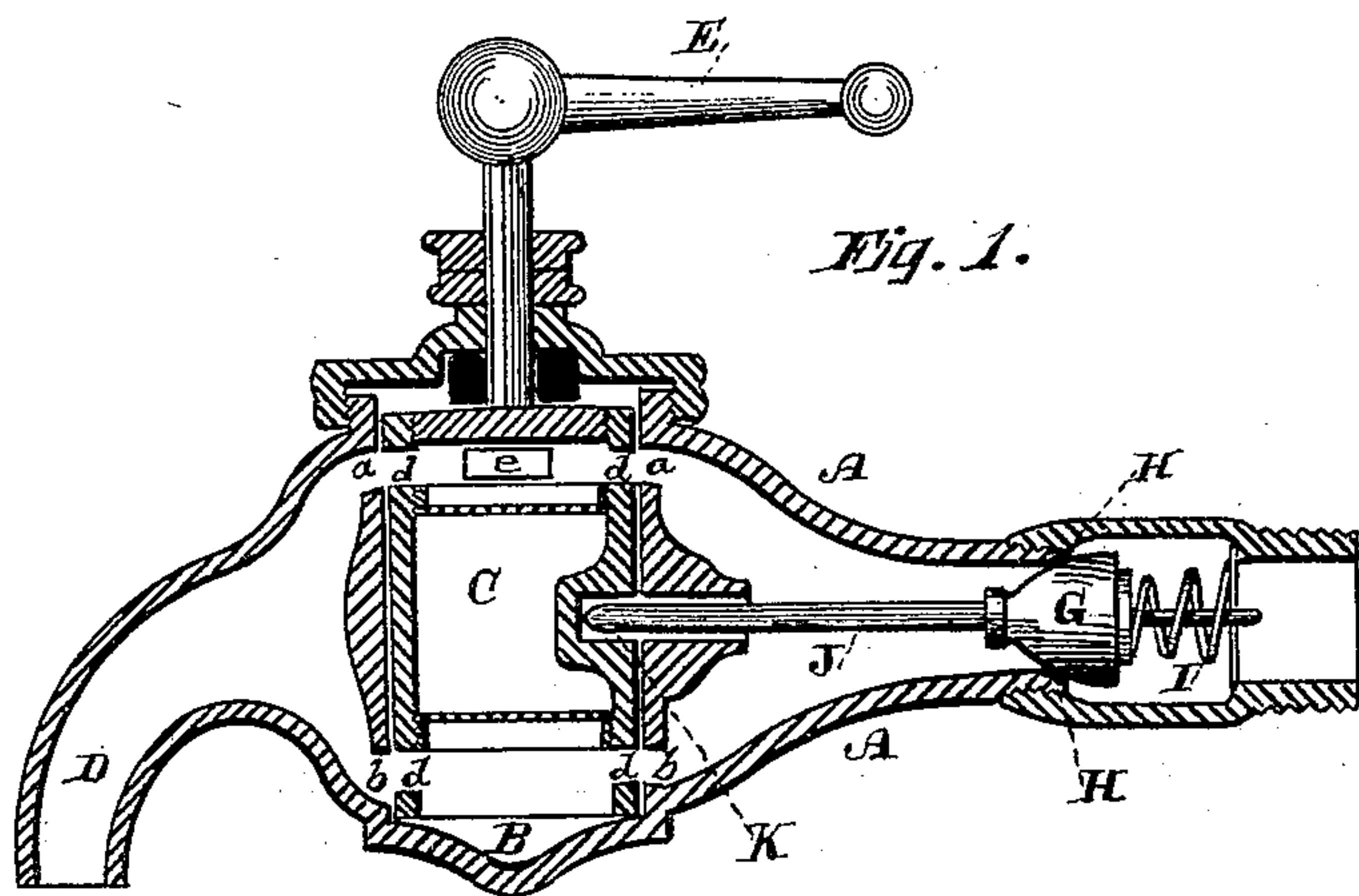


(No Model.)

W. M. SACK.
FILTERING FAUCET.

No. 253,107.

Patented Jan. 31, 1882.



Witnesses
Frank A. Brooks
J. H. Mourse.

Inventor
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Attys

UNITED STATES PATENT OFFICE.

WILLIAM M. SACK, OF OAKLAND, CALIFORNIA, ASSIGNOR OF ONE-HALF TO
EZRA A. MAY, OF SAME PLACE.

FILTERING-FAUCET.

SPECIFICATION forming part of Letters Patent No. 253,107, dated January 31, 1882.

Application filed July 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. SACK, of Oakland, county of Alameda, State of California, have invented an Improvement in Filtering-Faucets; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in that class of faucets which also serve to filter the liquid passing through them, and is an improvement upon a patent issued to me May 10, 1881.

It consists in certain improvements in the construction, all of which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a longitudinal section of my faucet with supplemental valve closed. Fig. 2 is a longitudinal section, showing the valve open. Fig. 3 is a separate perspective view of the faucet-plug. Fig. 4 is a section of the faucet-plug.

A is the body of my faucet, having the vertical cylindrical chamber B, within which the plug C turns. The body of the faucet has two openings, *a* and *b*, leading to the chamber B, and two similar openings upon the opposite side of the chamber lead to the discharge-nozzle D. The faucet-plug C has also two openings, *d*, which pass entirely through it at points opposite the openings *a b*, so that when the handle E stands in a line with the faucet in either direction these passages will be in line and open for the water to pass through freely if no stop be interposed. Two other openings, *e f*, are made in the plug at right angles with the openings *d*, one at the top, and at opposite sides of the plug, as shown in Fig. 4, so that when the handle is turned to one side the water will flow from the upper opening, *a*, into the plug, which is hollow, and will pass down through it and out into the discharge through the lower passage, *b*. When the lever is turned to the opposite side the flow will be into the plug through the lower passage, *b*, and out of it through the upper passage, *a*, thus reversing the flow. Between these passages *a* and *b*, or, rather, between the openings *d* in the plug itself, the filtering material F is placed, occupy-

ing a considerable vertical space, and having the wire-gauze or other substance at each end to keep it in place.

It will be seen that when the water has been run through the faucet and filter in one direction until the filter has become clogged or foul, the handle may be turned directly opposite, so that the water will flow through in a reverse direction and clean it thoroughly.

In order to relieve the plug from the pressure of the water, and to close the faucet entirely, I employ a conical rubber or other suitable valve, G, which fits a seat, H, at the entrance to the chamber or body A of the faucet. This valve is pressed forward by a spiral spring, I, so as to insure its seating, and it has a stem or spindle, J, which extends through a hole in the side of the plug-chamber. The plug itself has one side cut away in a slot, K, so as to make a cam-shaped or eccentric cross-section of the plug at this point, and the stem J rests against the plug at this point. When the plug is turned until the depression or slot K stands opposite the stem the latter will enter it, and this will allow the valve G to close; but when the faucet is turned so that the handle is at the opposite side or at right angles the stem and valve G will be forced back until the latter is opened and the water can flow freely through the openings *a b* without the interposition of the filter. This valve is also kept open when the handle is turned to either side to open the filter, as the groove or slot K only extends far enough in each direction to allow the valve to close at the proper point.

By this construction I provide a faucet through which water will pass freely, or which may be turned to filter it in either direction at will.

The stem or spindle L of the plug passes up through a screw-cap, M, which fits the upper end of the chamber B, and is packed in any suitable manner, as shown.

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

The faucet-body A, having the openings *a b*, and the plug C, having the filter F, and the

openings *d*, *e*, and *f*, as shown, and having
the channel or groove K upon its exterior sur-
face, in combination with the valve G, having
the stem or spindle J, extending in and rest-
5 ing against the plug in line with the groove
K, substantially as and for the purpose herein
described.

In witness whereof I have hereunto set my
hand.

WM. M. SACK.

Witnesses:

FRANK A. BROOKS,
S. H. NOURSE.