

No. 745,827.

PATENTED DEC. 1, 1903.

E. B. HACK.
VALVE.

APPLICATION FILED JAN. 19, 1903.

NO MODEL.

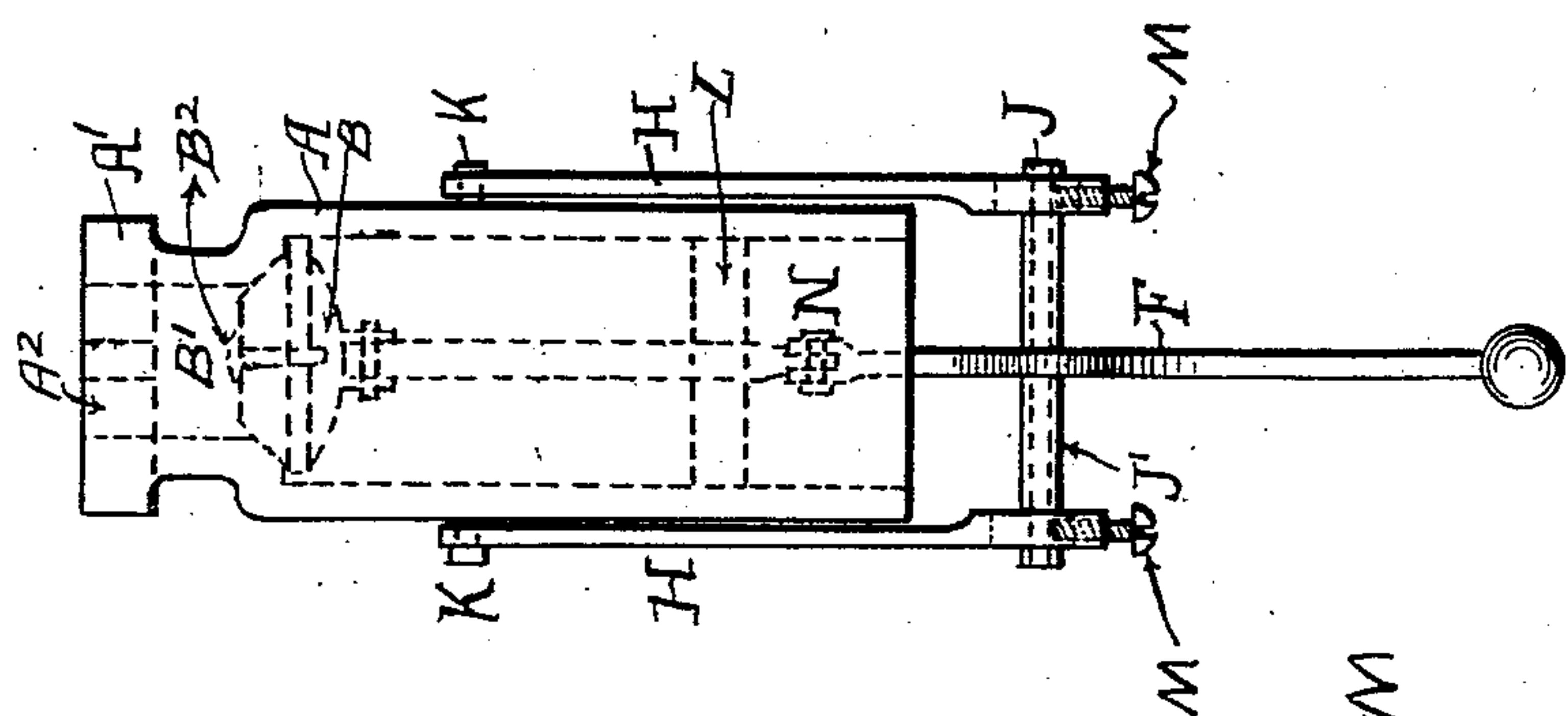


FIG 2

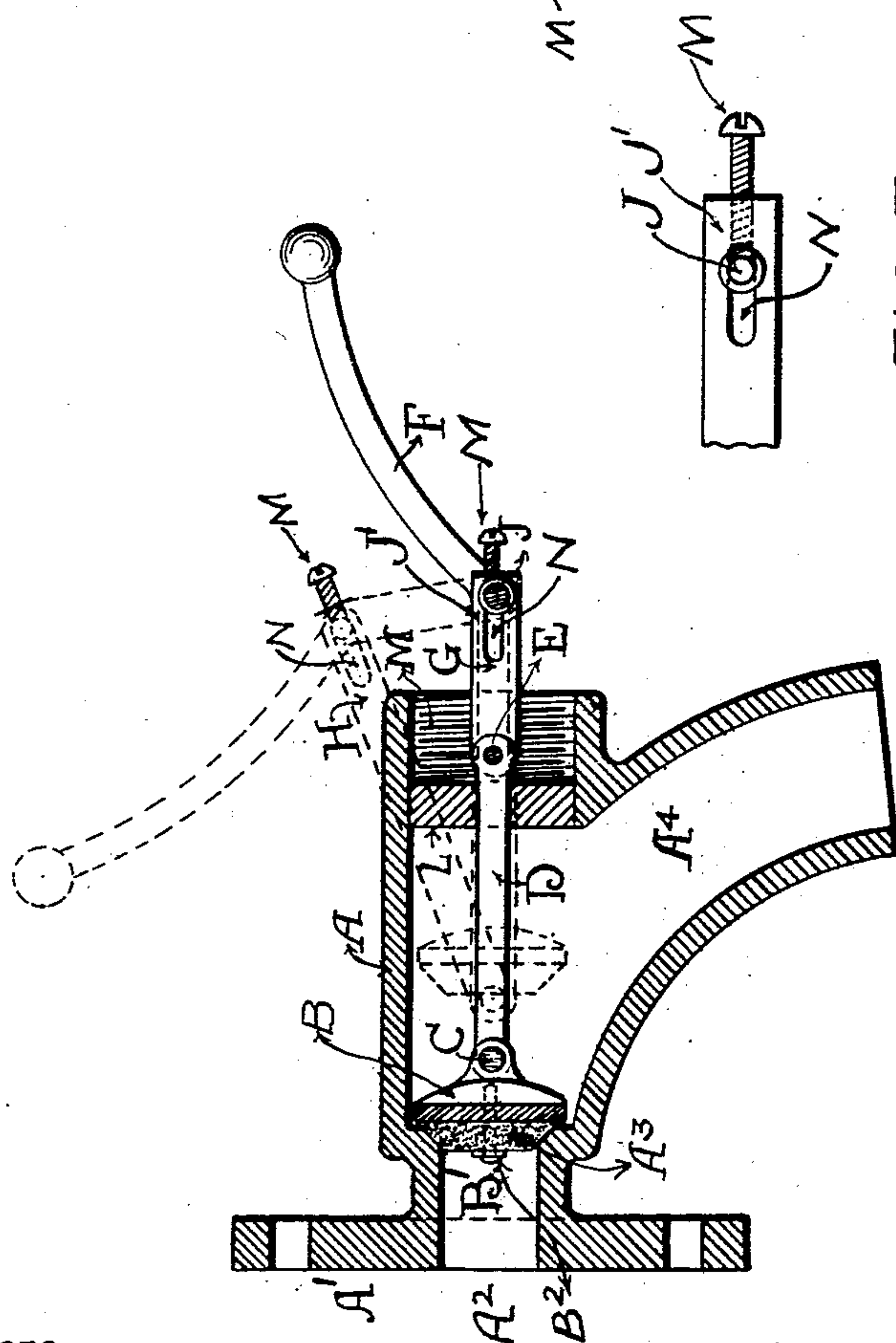


FIG 1

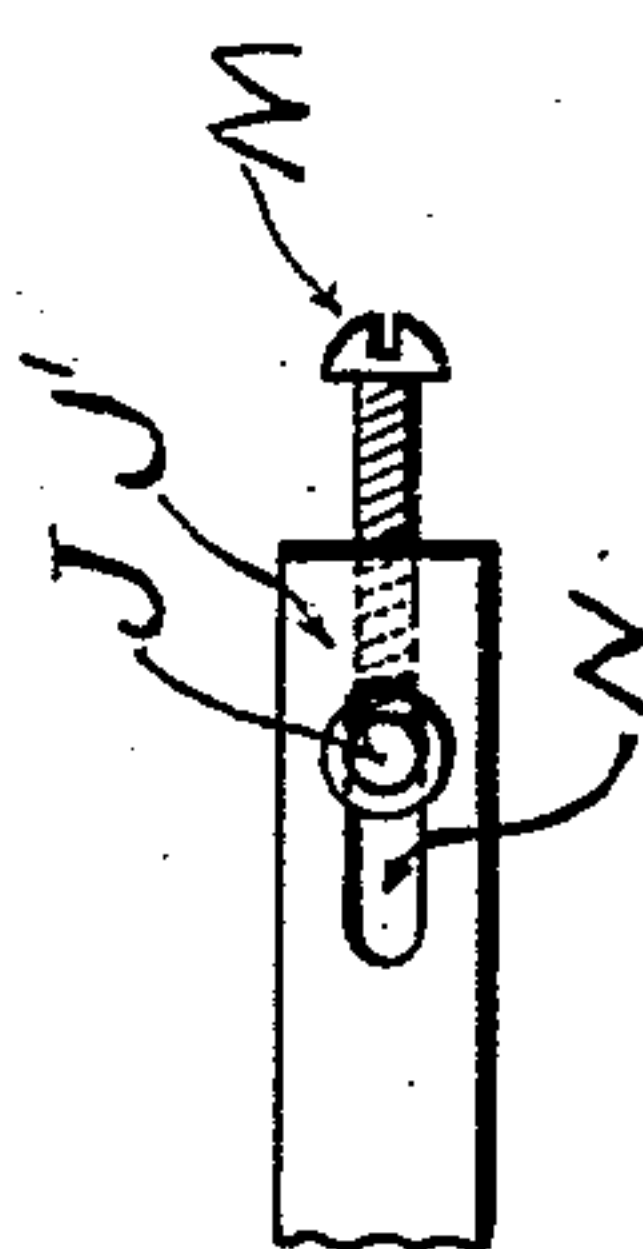


FIG 3

WITNESSES:

Dena Nelson.
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INVENTOR.

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BY

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ATTORNEY.

UNITED STATES PATENT OFFICE.

ERNEST BARTON HACK, OF DENVER, COLORADO, ASSIGNOR TO THE AMERICAN FILTER PRESS EXTRACTION COMPANY, OF DENVER, COLORADO, A CORPORATION OF COLORADO.

VALVE.

SPECIFICATION forming part of Letters Patent No. 745,827, dated December 1, 1903.

Application filed January 19, 1903. Serial No. 139,713. (No model.)

To all whom it may concern:

Be it known that I, ERNEST BARTON HACK, a subject of the King of Great Britain, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Valves; 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 valves.

My objects are to provide an easily and quickly opened device, to avoid friction at the point of contact with the flow-channel, to provide a simple device having few wearing parts, and to produce a valve of the faucet variety capable of efficient use with chemicals or solvents of metals and other liquids; and to these ends the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a vertical section taken through my improved faucet-valve. Fig. 2 is a top or plan view of the same. Fig. 3 is a fragmentary detail view, on a larger scale, illustrating the outer extremity of the swinging frame and showing an adjusting-screw for regulating the position of the pin connecting the extremities of the frame-arms.

The same reference characters indicate the same parts in all the views.

Let A designate the casing, provided with an apertured base A' for securing the device to a suitable support. The casing may, however, be secured in any other suitable manner. The base of the valve is provided with an inlet-passage A², one extremity of which is surrounded by a seat A³ for the gland B', which is secured to the disk B by a screw B². A rod D, forming a valve-stem, is connected with a valve-disk at C and passes through an opening formed in the plug L, screwed into an interiorly-threaded part M of the casing, said threaded part being located beyond the

discharge-channel A⁴. Pivotally connected with the rod or stem D where it projects through the plug L is a lever composed of arms G and F, fulcrumed at J on an exteriorly-located stirrup-shaped swinging frame composed of two arms H, pivotally connected beyond the casing by the fulcrum-pin J and spaced by a sleeve or tube J', surrounding the pin between the said arm extremities. The opposite extremities of the arms H are pivoted to the casing exteriorly, as shown at K.

When the valve is closed, the parts are in the position shown by full lines in Fig. 1. To open the valve, it is only necessary to raise the lever-arm F, when the parts will be thrown to the position shown by dotted lines in Fig. 1. To close the valve, the movement of the lever-arm is reversed.

In order to make compensating provision for the wear of the valve-gland B', I provide adjusting-screws M, threaded in the outer extremities of arms J' and engaging the pin J, whose extremities engage slots N, formed in the arms J'. As the gland wears the screws M are turned to throw the pin inwardly toward the valve, whereby the valve-stem is actuated to force the gland tightly against the valve-seat when the valve is closed, by virtue of the connection between the manipulating-lever and the valve-stem.

Having thus described my invention, what I claim is—

The combination with a casing, of a valve located therein and provided with a stem movable in a straight line to allow the valve to open and close, a lever connected with the outer extremity of the stem, a swinging frame mounted exteriorly on the casing, said frame having two arms provided with slotted outer portions, a pin connecting the two arms and engaging said slots, the lever being fulcrumed on said pin, and adjusting-screws threaded in the arms of the swinging frame and engaging said pin.

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

ERNEST BARTON HACK.

Witnesses:

DENA NELSON,
A. W. O'BRIEN.