

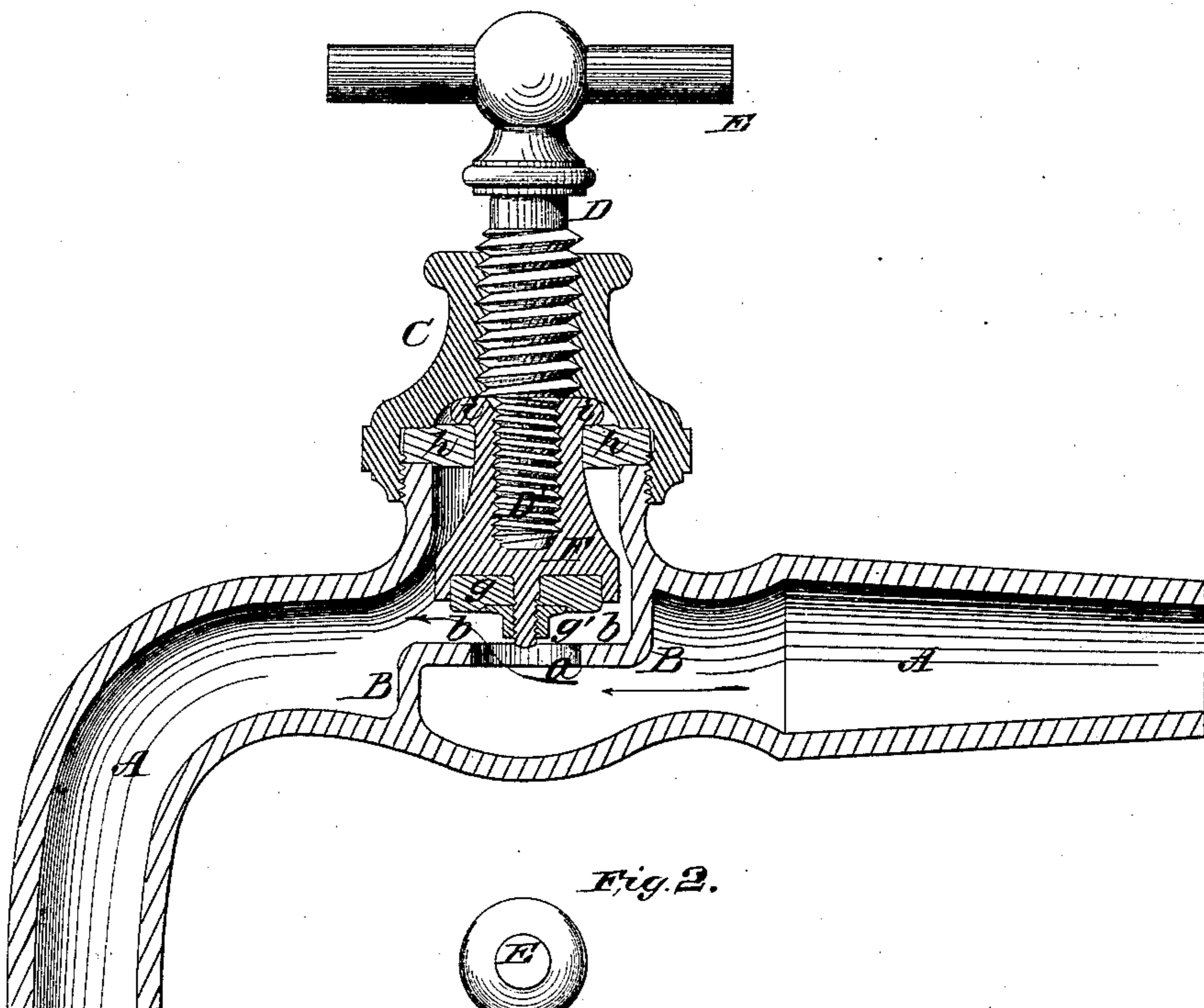
*J. Regester,*

*Globe Valve,*

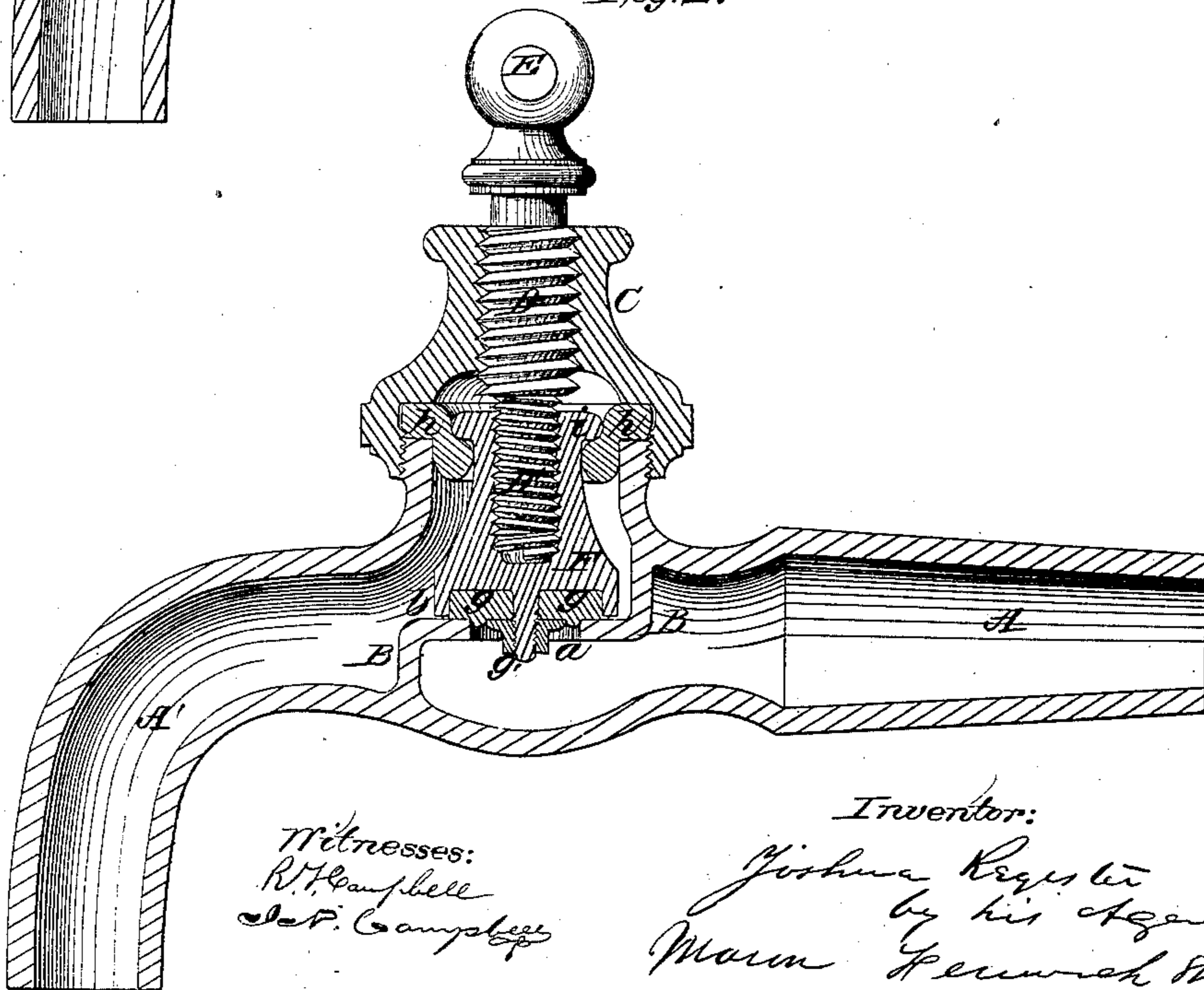
*N<sup>o</sup> 82,161,*

*Patented Sep. 15, 1868.*

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
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*Joshua Regester*  
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# United States Patent Office.

JOSHUA REGESTER, OF BALTIMORE, MARYLAND.

*Letters Patent No. 82,161, dated September 15, 1868.*

## IMPROVEMENT IN STOP-COCKS.

The Schedule referred to in these Letters Patent and making part of the same

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSHUA REGESTER, of the city and county of Baltimore, in the State of Maryland, have invented a new and useful Improvement in Stop-Cocks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a central longitudinal section through the improved stop-cock, showing the valve-plug open.

Figure 2 is a similar view of the same parts, showing the valve-plug closed.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to a novel improvement on metallic stop-cocks, which are designed for general use in drawing liquids, wherein the valve-chambers are provided with screw-caps and valve-stems, so that access can be had to said chambers, for cleaning them out and repairing the valves. This class of stop-cocks, as hitherto constructed, are very liable to leak around the joints of the screw-cap and valve-stem; and it is the object of my invention to prevent such leakage by providing for packing both the screw-cap and the valve-stem with an elastic diaphragm, and by employing, in conjunction therewith, a valve-stem, which has right-and-left screw-threads upon it for positively lifting and depressing a valve that is suspended by said elastic packing, and for facilitating these movements of the valve, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents the stem of the cock A<sup>1</sup>, its nozzle, A<sup>2</sup>, a cylindrical screw-cut collar, which receives upon it the cap C, and B the perforated division between the stem A, and nozzle A<sup>1</sup>, which forms the valve-seat b.

These parts are constructed in the well-known manner, which admits of the application of my invention to stop-cocks that are already in use, with the addition of very little expense. The valve F is constructed of a tapering form, and with a circular recess in its lower enlarged end, into which recess is fitted a packing, g, that is confined in place in any suitable manner.

This packing g is made of India rubber, and forms the valve-face, which, when it is forced down upon the flat seat b, will make a perfectly tight joint. The neck of this valve F is contracted, so as to leave above it an annular shoulder, i, and this valve is bored out centrally and screw-tapped, so as to form a deep socket for receiving the left-hand screw-cut portion D' of the valve-stem, which stem is also provided with a right-hand screw-portion, D, that is received by the thread through the centre of cap C.

Between the upper end of the collar A<sup>2</sup> and the bottom of the screw-cap C, a ring or diaphragm, h, of India rubber is interposed, which will be compressed at its outer edge, when the cap C is screwed down in place, and thus form a tightly-packed joint, which will prevent the escape of water between the cap and its collar. This ring or diaphragm h is stretched over the shoulder, i, of the valve, and allowed to contract and fit tightly around the neck of this valve, below said shoulder i, so that water cannot pass upward between the valve and its ring, and so that the ring is made to serve as a double packing.

It will be seen that, by having right-and-left screw-threads upon the valve-stem, and holding the valve F by the elastic diaphragm or ring h, so that this valve cannot turn, the turning of the valve-stem will cause the valve to be lifted or depressed much more rapidly than would be the case if the stem had but a single thread upon it.

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

1. The valve F, constructed with a flange, i, and embraced by an elastic packing, h, which is applied between the collar and cap of the stop-cock, substantially as described.

2. A right-and-left screw-valve stem, D D', a valve, F, and the packing h, combined and adapted to operate substantially as described.

JOSHUA REGESTER.

Witnesses:

SAM'L W. REGESTER,  
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