

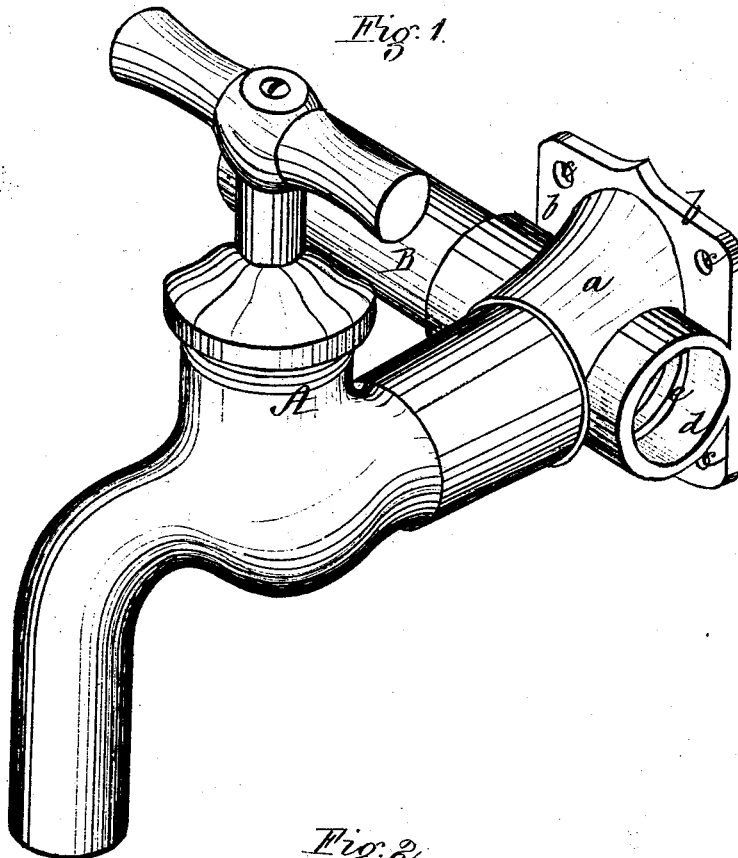
*W. H. Bate,*

*Draught Cock.*

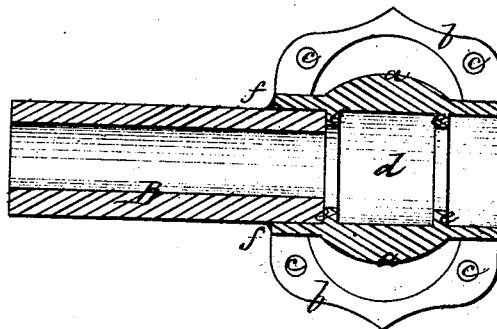
*No. 110,334.*

*Patented Dec. 20, 1870.*

*Fig. 1.*



*Fig. 2.*



*Witnesses,  
N. H. Stearns  
H. J. Cambridge*

*Inventor,  
W. H. Bate*

# United States Patent Office.

WALLACE H. BATE, OF EAST SOMERVILLE, MASSACHUSETTS.

Letters Patent No. 110,334, dated December 20, 1870.

## IMPROVEMENT IN DRAUGHT-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, WALLACE H. BATE, of East Somerville, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Draught-Cocks for Liquids, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of my improved cock, having the end of a lead pipe connected therewith.

Figure 2 is a section through the cock and pipe, showing the manner in which they are united.

This invention particularly relates to water-cocks which are to be attached to lead pipes.

The usual method of attaching a stop-cock to a piece of lead pipe is to make what is ordinarily termed a "wiped joint," which consumes a large quantity of solder, (about one pound,) and also requires much time and labor. It is also necessary to solder on one or more plates or back pieces, which are secured by screws to hold the pipe and cock in place.

The chief object of my present invention is to enable me to dispense with the wiped joint, to make which requires a skillful workman, and also to avoid the labor and expense incident thereto; and

My invention consists in a stop-cock, the rear portion of which is provided with an enlargement, preferably cast in one and the same piece therewith, the said enlargement having one or more apertures, connected with the interior of the cock, for the admission of the end of the pipe, which is secured therein by solder or otherwise, the back plate for supporting the pipe and cock in place being preferably cast in the same piece with the enlargement.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing—

A represents the stop-cock, at the rear end of which, and cast in the same piece therewith, is an enlargement, *a*, terminating in a back plate, *b*, provided with

holes *c* for the reception of the screws by which it is secured in place.

Extending through the enlargement at right angles to the passage through the cock, with which it communicates, is formed an aperture, *d*, each end of which is provided with a shoulder, *e*, against which the end of the lead pipe B is made to abut.

The diameter of the aperture *d* is a little greater than that of the lead pipe, so as to afford a space between the two, which is filled with a small quantity of solder, *f*, by means of which a tight joint of neat appearance is easily and expeditiously made at a very trifling cost, an ordinary mechanic being competent to perform this operation, whereas skilled labor is required to make a wiped joint, which is, moreover, quite expensive.

Where one pipe only is to communicate with the cock the side of the enlargement opposite to the end of the pipe may be closed or cast solid.

Where an iron or other hard-metal pipe is to be used, it may be provided with a screw-thread to fit a corresponding thread in the interior of the enlargement.

Instead of, or in addition to, the horizontal passage *d*, a vertical passage in the enlargement may be provided for the reception of one or more vertical pipes.

### Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

A stop-cock A, with its enlargement *a* and tack or flange *b*, and provided with one or more apertures, *d*, for the reception of the pipe, all constructed substantially as and for the purpose described.

Witness my hand this 14th day of October, A. D. 1870.

WALLACE H. BATE.

Witnesses:

N. W. STEARNS,  
W. J. CAMBRIDGE.