C. C. CLAPP.
FAUCETS.

No. 195,342. Patented Sept. 18, 1877.

Fig. 1.

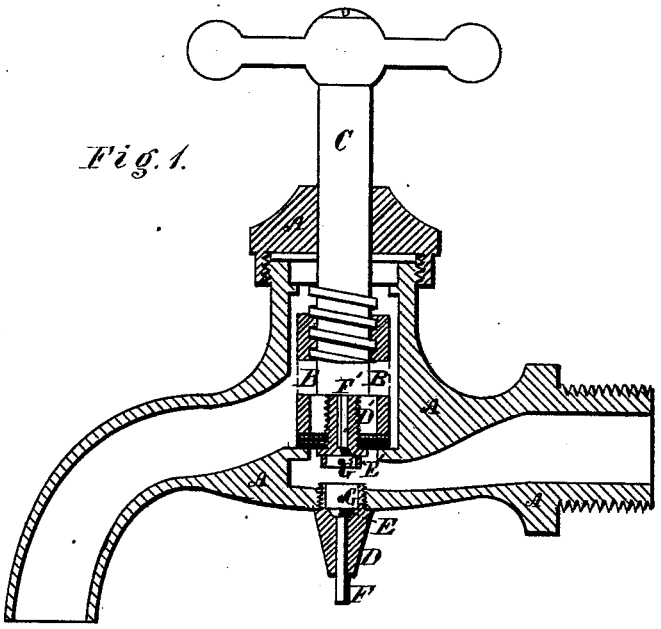

Fig. 2.

Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

CYRUS C. CLAPP, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN FAUCETS.

Specification forming part of Letters Patent No. **195,342**, dated September 18, 1877; application filed February 17, 1877.

To all whom it may concern:

Be it known that I, CYRUS C. CLAPP, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Faucets; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to such faucets as are generally used upon the distributing water-pipes in buildings.

My invention has for its object the admission of air through the several faucets attached to the supply-pipe when it is desired to draw off the water without opening the cocks; and my invention consists in an automatic check-valve applied to the faucets in such a manner as to accomplish this result.

In the accompanying drawing, Figure 1 is a section through my improved faucet. Fig. 2 is a bottom view of my automatic check-valve as placed in the plunger of the faucet. Fig. 3 is a bottom view of the automatic check-valve as placed in the bottom of the faucet.

The drawing shows two methods of applying my improvement. The valve for admitting the air may be placed at any point upon the pressure side of the water-channel, and it is shown in the drawing both in the bottom of the faucet and in the plunger which shuts off the stream of water.

A is the body of a water-faucet of the usual form and construction. B is the plunger which forms the valve or cock which shuts off the flow of water. C is the handle which raises and lowers the plunger B in the ordinary manner. D is a hollow plug screwed into the shell of the faucet at the bottom. This has a wide opening at the top, and is provided with a conical valve-seat to which is fitted the valve E. Attached to the lower side of this conical valve is a triangular stem, extending downward through a smaller cylindrical opening, in such a manner that the corners of the triangle rest against the sides of the opening and form guides for the valve, while the flat sides leave channels on the exterior for the passage of air when the valve E is raised.

G is a bar across the socket in the upper part of the plug D, to prevent the rise of the valve beyond a certain height.

The letters D′, E′, F′, and G′ indicate similar parts of my automatic air-valve when placed in the plunger B, the difference being that in one case the valve acts upward, and in the other it acts downward. When the valve is placed in the plunger the head is flattened on the sides, as shown in Fig. 2, in order to screw the plug D′ into its seat. An air-opening is also made into the outlet of the faucet, if one does not already exist. The pressure of the water back of the plunger in all cases keeps the valve tight to its seat.

It is not intended to use but one air-valve in each faucet, but the two methods of application are shown, as in some situations one may be more desirable than the other.

The operation of my invention is as follows: Under ordinary circumstances the pressure of the water in the pipes keeps the ventilating-valve closed. If the water is, for any reason, drawn off below the level of the faucet, the air-valve immediately opens and allows the air to enter, so that the contained water flows readily out of the pipe.

What I claim as my invention is—

The combination of the conical valve E, the triangular stem F, the bar G, and the plug D with an ordinary water-faucet, substantially as herein set forth.

CYRUS C. CLAPP.

Witnesses:

THEO. G. ELLIS,

WILMOT HORTON.