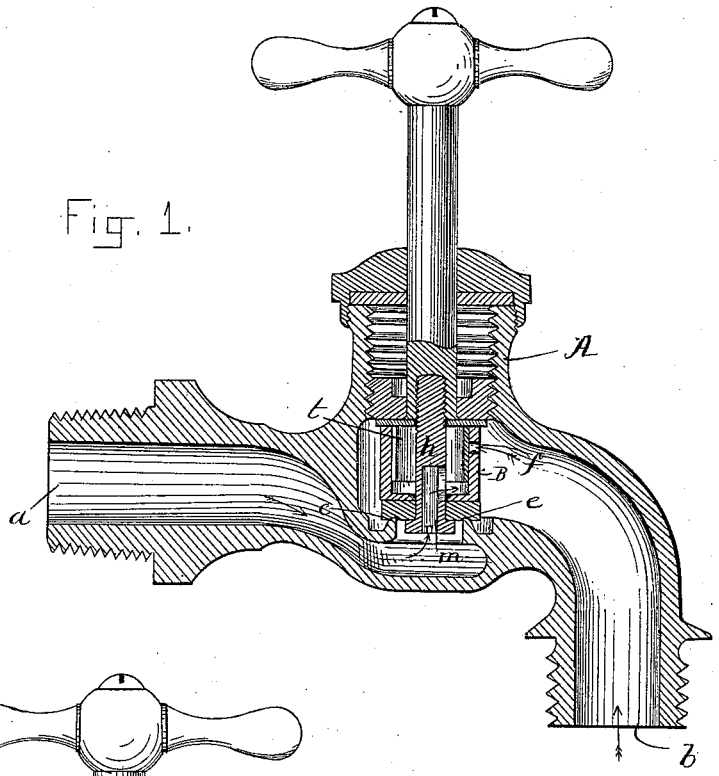
(No Model.)

L. E. CLARK.

WATER FAUCET.

No. 343,106. Patented June 1, 1886.

Fig. 1.



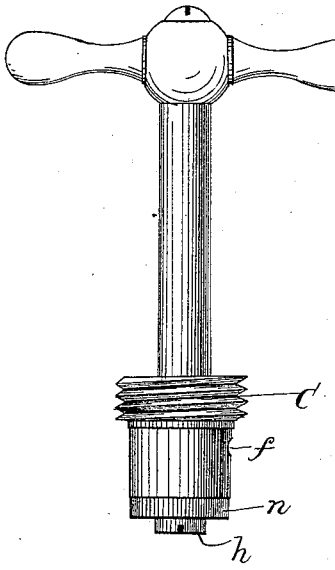


Fig. 3.

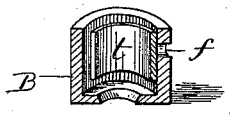


Fig. 2.

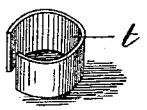


Fig. 4.

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LEWIS E. CLARK, OF LYNN, MASSACHUSETTS.

WATER-FAUCET.

SPECIFICATION forming part of Letters Patent No. 343,106, dated June 1, 1886.

Application filed December 21, 1885. Serial No. 186,393. (No model.)

To all whom it may concern:

Be it known that I, LEWIS E. CLARK, of Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Water-Faucets, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to water-faucets, and has for its object to provide means to allow the external air to enter the water-pipe while the faucet is closed to the exit of water, so that when the water is turned off and the pipe opened in rear of the faucet the contents of the pipe may exhaust without opening the faucet to admit air.

Referring to the drawings, Figure 1 is a longitudinal vertical section of a faucet embodying this invention. Fig. 2 is a sectional view of the valve-chamber and valve. Fig. 3 is a similar view of the spigot with the valve-chamber attached thereto. Fig. 4 shows the valve.

The bowl A of the faucet is constructed in the usual and customary way. It is provided with the usual supply-port, *a*, and the usual exhaust-port, *b*, and between these two ports, in the bowl of the faucet, is the usual valve-seat, *e*, on which the bottom end of the spigot is pressed in the usual way for the purpose of cutting off the supply of water. The cup B has its inner wall turned to a smooth surface, and through one side is a small opening, *f*. A piece of thin rubber, leather, or other flexible material is coiled in the chamber of the cup, and bears over this opening *f*. The cup is attached to the bottom end of the spigot C by a screw, *h*, which turns into the end of the spigot, as shown in Fig. 1, thereby holding the cup pressed firmly against the end of the spigot. Between the cup and the bottom of the spigot is a leather washer, *n*, to prevent water leaking through. The screw *h* has a passage, *m*, opening into the valve-chamber, through which water is admitted to the valve-chamber from the supply-port *a*. The bottom face of the cup or thimble B is covered by a leather washer, that bears upon the valve-seat *e* to stop the passage of water.

I have described the cup B as detachable from the spigot, and this is the way I prefer to make it; but it will be evident that the valve-chamber could be formed by tapping into the end of the spigot and covering the same by a metallic washer.

In case the cup is used as described, it simply extends the spigot downward by so much, and the end of the cup with its leather washer operates upon the valve-seat *e* the same as the end of an ordinary spigot now does.

When the faucet is in use and the water is admitted through the supply-passage *a*, it forces upward through the screw *h* into the valve-chamber, and, filling this chamber, it holds the rubber *t* pressed firmly over the opening *f*, thus preventing the escape of any water through this opening; but whenever the pipe is opened below the faucet, thus removing the pressure of the water, air will press inward the said rubber and enter into the valve-chamber through hole *f*, having entered thereto through the exhausted passage *b*, and will pass from the valve-chamber through the screw *h* down into the pipe to prevent the formation of a vacuum therein, and thus allow the water to discharge from the pipe in rear of the faucet.

It will be understood from the foregoing that the valve could be located directly in the water-pipe, instead of in the faucet, as described, though I prefer to put it in the faucet, as shown.

I am aware that it is not new to provide vent-faucets with valves adapted to lift with the water to close the vent-passage and to fall by gravity to open the same, and I do not claim, broadly, such construction.

I claim—

1. The combination, with a faucet having a partition between its inlet and outlet passages and a valve-plug provided with a passage communicating with the said inlet and outlet passages, of a disk of flexible material closing the opening to the exit-passage under pressure of water and opening under pressure of air when the water pressure is removed, substantially as described.

2. The combination of the faucet A, the spigot C, the valve-cup B, having port *f*, the valve, and screw *h*, all substantially as described.

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Witnesses:
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