

No. 651,289.

Patented June 5, 1900.

J. P. BENTON.
WATER COCK.

(Application filed Mar. 8, 1900.)

(No Model.)

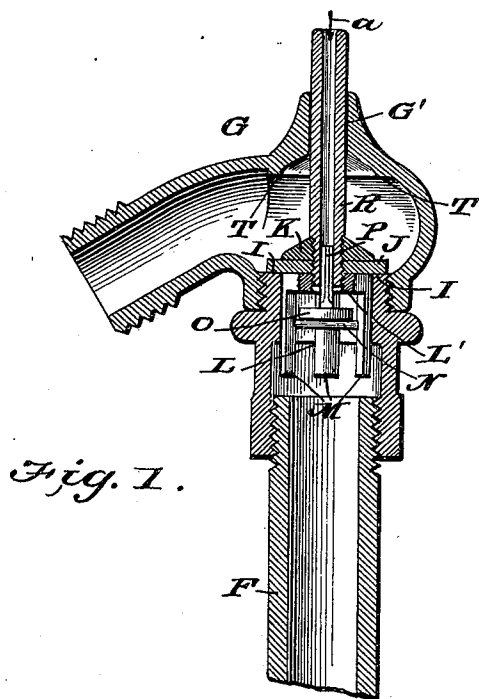


Fig. 1.

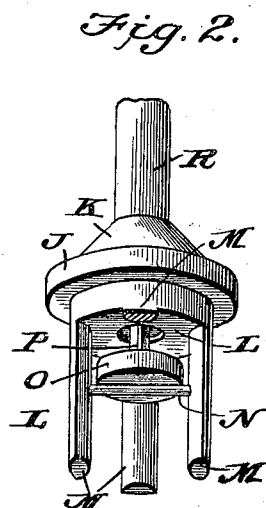
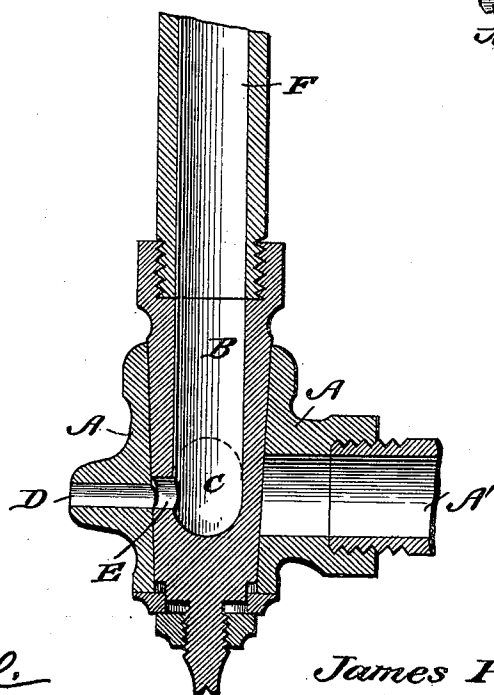


Fig. 2.



WITNESSES:

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JAMES P. BENTON, OF DALLES, OREGON.

WATER-COCK.

SPECIFICATION forming part of Letters Patent No. 651,289, dated June 5, 1900.

Application filed March 8, 1900. Serial No. 7,846. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. BENTON, of Dalles, in the county of Wasco and State of Oregon, have invented a new and useful Improvement in Water-Cocks, of which the following is a specification.

My invention relates to water-cocks and faucets, especially those which are intended to be used for outdoor purposes; and it has for its object a construction of device of this character whereby the automatic bleeding or venting of the water out of the stand-pipe may be easily and surely effected without siphoning the water in the hose back through the stand-pipe and also whereby the actuation of the bleeder will be caused by the stand-pipe itself instead of by keys, thereby bleeding or venting the stand-pipe every time the water is shut off.

The invention consists in certain details of construction and arrangements of the parts, which I shall hereinafter fully describe and claim.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a vertical transverse section of a water-cock embodying my invention, and Fig. 2 is a detail perspective of the piston and its valves.

Referring to the drawings, A designates the body of the bleeder, adapted to be secured by a lateral nipple to the water-supply pipe A' and formed with a discharge-passage D. B designates the cock, of any approved construction, provided with the opening C, adapted to be brought into communication with the opening in the supply-pipe in the usual manner and having a port E registering with the discharge-passage D when the water is shut off. In the upper end of the cock B screws the stand-pipe F, which has screwed onto its upper end the fitting G.

The fitting G is formed directly opposite the discharge-passage in the stand-pipe F with a vertically-disposed opening or bearing G', and a tubular piston R is fitted to move in such bearing, as shown particularly in Fig. 1. The piston R has a lower screw-threaded end, on which the valve J fits, said valve being held against upward displacement on the piston by the washer K and being adapted to rest on the seat I when the water-pressure is

off and on the seat T when the pressure is on. In the lower end of the piston R is fitted the triangular stem P of a puppet-valve O, which has movement in the cage L, the latter being provided with legs or guides M and a cross-bar N, as shown, and secured to the piston R below the valve J. The puppet-valve O moves up against the seat L' in the cage and closes the lower end of the piston R when the water-pressure is on, but drops to the cross-bar N when the pressure is off.

The operation of my invention is as follows: When the water-pressure is on in the stand-pipe F, the valve J will rise, carrying with it the piston R, the cage L, and the puppet-valve O, thus closing the space around the piston at the seat T and also the passage through the piston. When the water-pressure is turned off, the piston R and its concomitant parts will drop, with the valve J resting on the seat I and the puppet-valve O dropping to the cross-bar N, thereby shutting off communication between the outlet of the fitting and the stand-pipe and allowing air to enter through the piston in the direction of the arrow a, Fig. 1, and to pass around the stem P of the puppet-valve into the stand-pipe, thereby allowing the water in the stand-pipe to vent itself through the bleeder-outlet D and preventing siphoning the hose back through the bleeder.

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

1. In a device of the character described, the combination with the bleeder, of the fitting connected therewith and formed with juxtaposed valve-seats and an opening there-through in alinement with said valve-seats, a tubular piston fitted in said opening and carrying a valve which is adapted to rest alternately on the seats, and a puppet-valve having a stem guided in the piston and arranged to close the opening in the piston, as set forth.

2. In a device of the character described, the combination with the bleeder and stand-pipe, of the fitting connected therewith and formed with a lower valve-seat, an upper valve-seat, and an opening therethrough above said upper seat, a tubular piston fitted in said opening and carrying a valve adapted

to rest alternately on said seats, and a puppet-valve arranged to close the opening through said piston, as set forth.

3. In a device of the character described,
5 the fitting formed with a valve-seat and an opening thereabove, a tubular piston fitted in said opening and carrying a valve adapted to rest on said seat, a cage secured to said piston below said valve and formed with
10 guides and a cross-bar, and a puppet-valve formed with a stem fitted to slide in the lower

end of said piston with openings around it, said valve being adapted to close the opening through the piston and drop upon said cross-bar, as set forth.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JAMES P. BENTON.

Witnesses:

C. J. CRANDALL,
D. S. DUFUR.