

No. 755,150.

PATENTED MAR. 22, 1904.

A. MAJOR.
WATER SUPPLY.

APPLICATION FILED JUNE 4, 1903.

NO MODEL.

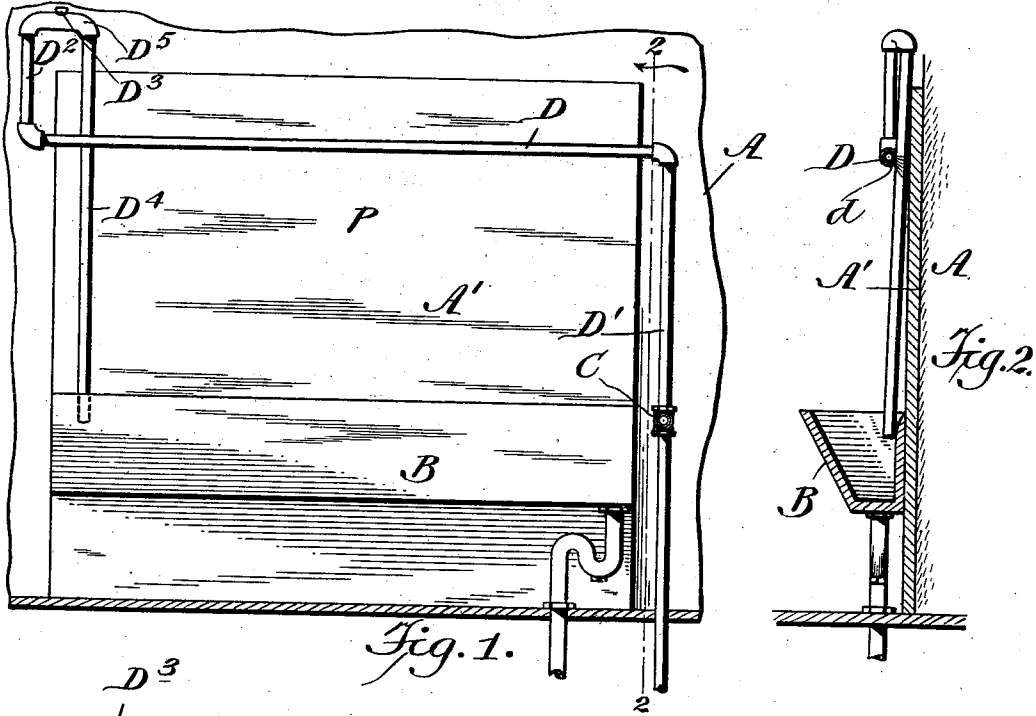


Fig. 1.

Fig. 2.

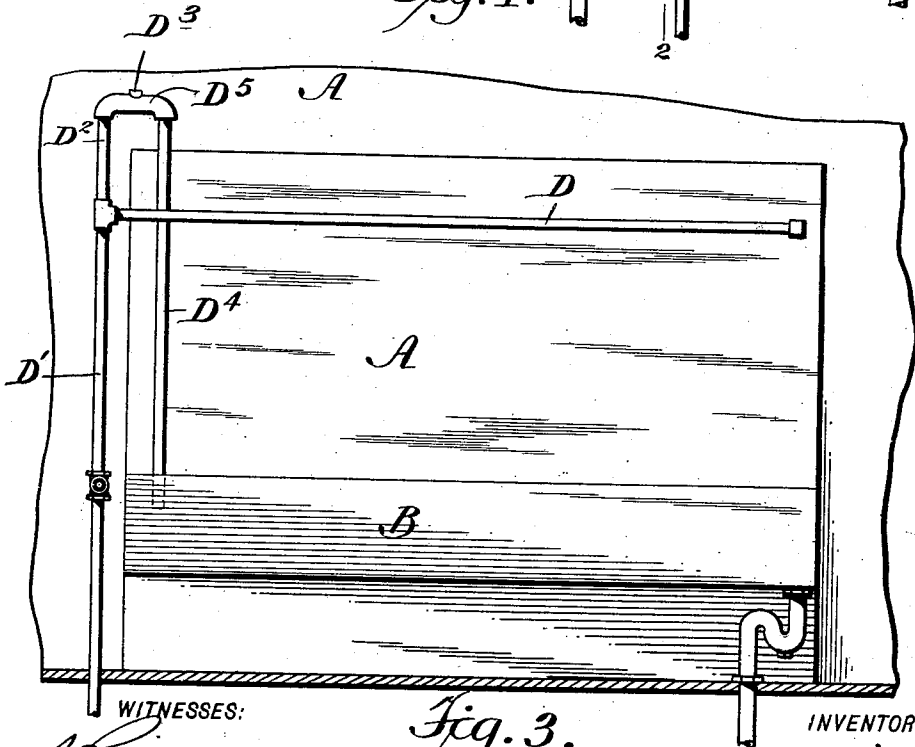


Fig. 3.

WITNESSES:

A. Appleman
M. F. Boyle

INVENTOR

Alphonse Major
BY
Thomas Drew Stetson
ATTORNEY

UNITED STATES PATENT OFFICE.

ALPHONSE MAJOR, OF NEW YORK, N. Y.

WATER-SUPPLY.

SPECIFICATION forming part of Letters Patent No. 755,150, dated March 22, 1904.

Application filed June 4, 1903. Serial No. 160,004. (No model.)

To all whom it may concern:

Be it known that I, ALPHONSE MAJOR, a citizen of the United States, residing at Flushing, in the borough of Queens, in the city and State of New York, have invented a certain new and useful Improvement in a Water-Supply, of which the following is a specification.

The improvement is intended more particularly for urinals, and will be described as thus applied. It is justly esteemed important to furnish the water in urinals under so much force as to cause the water to jet clear of the holes and against a vertical surface and wash down. With variable heads of water (such as is furnished in most cities where the consumption of water for a great variety of uses—as for steam-engines, laundries, &c.—lowers the pressure during business hours) there is a difficulty in attaining this without an excess of pressure being experienced at some periods. An excess tends to spatter the water and to work much mischief. My invention is intended to avoid the excess. Under ordinary conditions the water flows as usual. Whenever the pressure is too low, the flow stops in the same manner and with the same mildly-objectionable results as with the ordinary arrangement—that is to say, the delivery-pipe from which the water is jetted is clear of the surface against which it plays, so that no filth can be drawn backward through the jet-orifices and mingle with the water-supply of the city. When, on the contrary, the water-pressure rises so much above the pressure desired that it is liable to eject the water from the jets with too much force, my invention relieves the pressure.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 is a face view, and Fig. 2 a vertical section, on the line 2 2 in Fig. 1. Fig. 3 is a front view showing a modification.

Similar letters of reference indicate corresponding parts in all the figures.

A is the wall of the apartment, and A' a

slab of stone against which the jets are allowed to impinge and trickle down. 50

B is the trough or gutter, into which the water and the filth are allowed to descend and from which they flow away in the ordinary manner.

D is a horizontal pipe mounted at the usual height near the top of the slab and supported by ordinary means at the ordinary distance in front thereof. Its back face, that toward the slab, is provided with the usual small perforations *d*, adapted to discharge jets horizontally against the slab. 60

D' is the supply-pipe, through which the water is received from the street-main or from other supply liable to vary in force.

D² is an upright extension from any convenient point in the pipe D. This extends upward only to a moderate height. I prefer fourteen inches; but the height may vary within wide limits. It is sufficient that it shall retain the water to give a little above the preferable force from the jets, but not so much above as to induce spattering. From the top of the pipe D² extends a short length of horizontal pipe D³, with a short branch D³ extending upward, having its top open. From the opposite end of this short extension descends a pipe D⁴, adapted to convey any excess of water to pour it into the trough or gutter B, through which it will escape by the ordinary provisions. 80

C is a cock which can be set to give any required opening as the conditions shall be found to require. It must be open enough to give a sufficient flow when the pressure is moderate; but for economy of water care should be taken to set it so as to restrain the flow when the pressure is very high. Such cocks have long been used; but without my invention the apparatus is always liable either to give too little force to the jets when the water-pressure is low or to spatter when the water-pressure is high. With my apparatus the cock is easily set to avoid any great waste; but when the pressure is high there will always be some waste due to the flow of the water above what is discharged by the jets, 95

causing the water to ascend through the pipe D^2 , flow horizontally through the short lengths D^5 , and descend through the pipe D^4 . The only effect of the riser D^3 is to allow free vent
5 for air and avoid siphoning.

My apparatus insures absolutely against spattering under any ordinary or extraordinary pressure for which it has been adjusted.

10 Modifications may be made without departing from the principle or sacrificing the advantages of the invention. The point at which my relief device is located may vary within wide limits. I esteem it preferable to have the small amounts of water which are
15 thus discharged to flow through the pipe D . Such arrangement tends to wash away any solid matter of vegetable or other origin which may under any conditions come in with the water and lodge in the interior of the pipe
20 D against any of the orifices d . Such occasional discharge of a current through the pipe is an advantage; but some of the benefit of the invention may be realized with my relief parts at the entering end of the pipe D . Fig.
25 3 shows such an arrangement.

Parts can be used without the whole. I

can dispense with the adjusting-cock C , simply providing a pipe of so small size or providing so contracted a passage in the supply-pipe D' that there will be no serious waste
30 under any conditions liable to often occur.

I claim as my invention—

1. In a water-supply having a sprinkler D d , and surface A' , an upward-extending pipe D^2 connected with the supply, horizontal extension D^5 with vent D^3 and final descending pipe D^4 combined and arranged to serve substantially as herein specified. 35

2. In a water-supply having a sprinkler D d and surface A' , an upward-extending pipe D^2 connected with the supply after it has passed the sprinkler, horizontal extension D^5 with vent D^3 and final descending pipe D^4 combined and arranged to serve substantially as herein specified. 45

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

A. MAJOR.

Witnesses:

THOMAS DREW STETSON,
M. F. BOYLE.