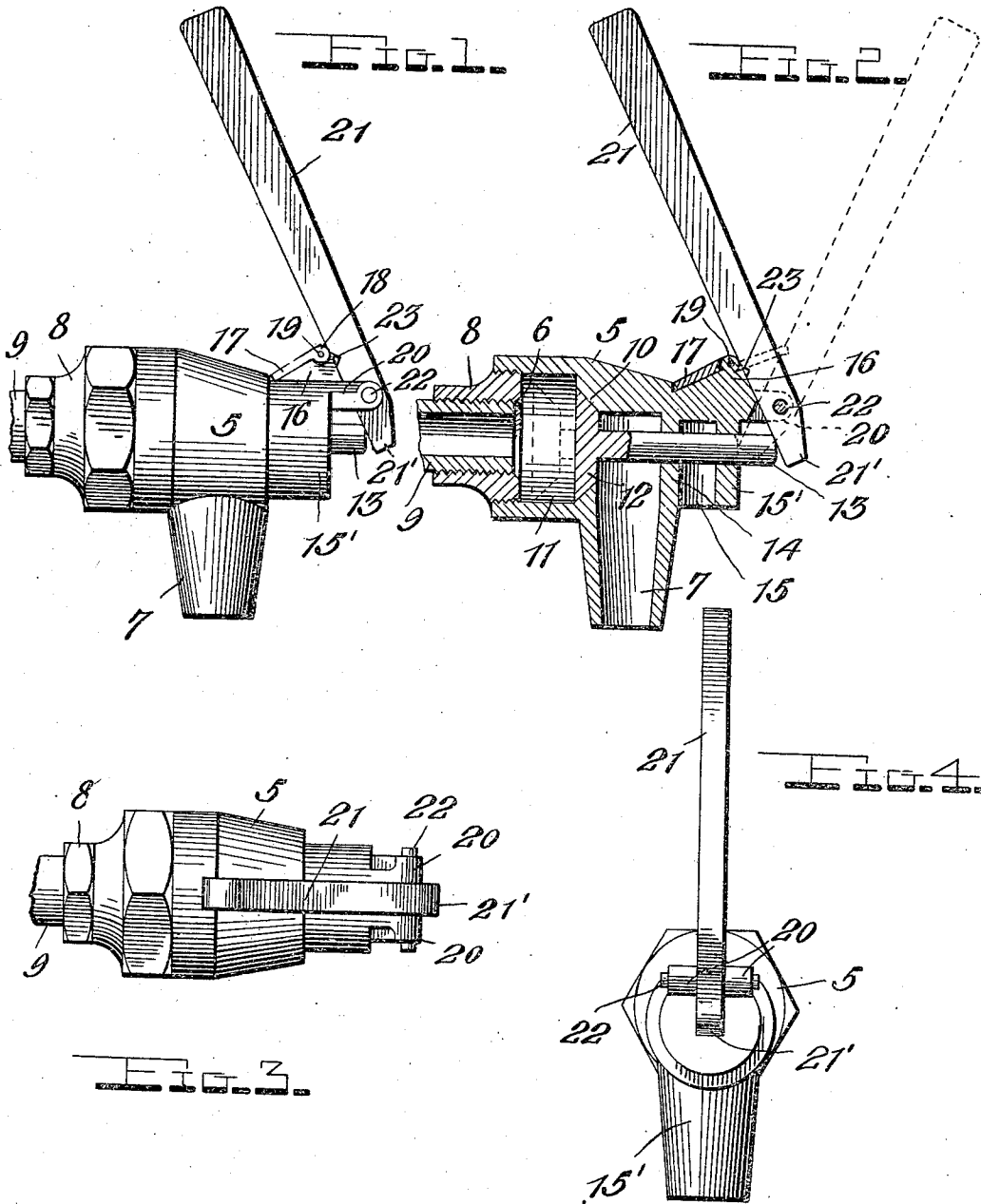


W. E. PORTER & O. B. THOMAS.
FAUCET.

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961,011.

Patented June 7, 1910.



Witnesses

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FAUCET.

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To all whom it may concern:

Be it known that we, WILLIAM E. PORTER and OTIS B. THOMAS, citizens of the United States, residing at Bisbee, in the county of Cochise and Territory of Arizona, have invented certain new and useful Improvements in Faucets, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain new and useful improvements in valves and more particularly to an improved faucet valve so constructed that the same may be instantly opened or closed.

Another object is to provide a reciprocatory valve normally held upon its seat by water pressure, and a new and novel means for opening said valve and holding the same in its opened position.

A further object resides in the provision of means integrally formed with the valve casing to direct the water which may escape between the valve stem and the casing.

With these and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which,

Figure 1 is a side elevation of a faucet valve constructed in accordance with our invention; Fig. 2 is a vertical longitudinal section, the valve being shown open in dotted lines; Fig. 3 is a top plan view; and Fig. 4 is a front end elevation.

Referring more particularly to the drawings 5 indicates a valve casing formed with the water inlet 6 and a depending outlet 7. The inlet of the valve casing has a plug 8 threaded therein and into this plug the end of the water supply pipe 9 is threaded.

Between the inlet and outlet 6 and 7, the valve seat 10 is formed within the casing, and between the seat and the inner end of the plug 8, a chamber 11 is provided, into which the water is discharged from the supply pipe 9 and exerts its pressure upon the valve 12 to normally hold the same upon its seat 10. The valve 12 is formed with a cylindrical stem 13 which is movably disposed through the casing wall 14, said wall forming the depending discharge or outlet spout 7. The valve casing is provided exteriorly of the outlet 7 and forwardly thereof with a chamber 15, and the valve stem 13

is also movable through the outer wall 15' of this chamber.

A lug 16 is formed upon the valve casing at its outer end, and a dog 17 is pivotally secured thereto. This dog is formed at one end with the laterally extending spaced ears 18 through which the pivot pin 19 extends to pivotally secure the dog upon the lug. Spaced ears 20 are also formed on the forward end of the valve casing and extend outwardly therefrom. These ears receive between them the lower end of the operating lever 21 which is pivotally mounted upon the transverse pin 22. The extremity of the lever 21 extends below the pin 22 and is engaged with the outer end of the valve stem 13 as shown at 21'. This lever is also provided in its inner edge with a notch or recess 23 which is adapted to receive the end of the pivoted dog 17 for the purpose which will be hereinafter set forth.

In the operation of our improved valve, the water is admitted to the chamber 11, and the pressure thereof upon the valve 12 will at all times retain the same in secure engagement with its seat. When, however, it is desired to open the valve, the lever 21 is grasped and moved to the position shown in dotted lines in Fig. 2. This movement will force the valve stem inwardly and lift the valve 12 from its seat whereupon the water will flow from the chamber 11 between the valve and its seat and through the outlet 7. Should it be desired to maintain the valve in its open position for any length of time, the dog 17 is lifted and swung outwardly to engage its free end in the notch 23 in the inner edge of the operating lever. Thus the valve will be held in its open position against the pressure of the water thereon. The valve is almost instantaneously closed by simply striking the dog 17 outwardly to disengage the same from the lever. The water pressure will then act upon the valve to seat the same. In this manner the comparatively great length of time required to fully open the ordinary valve has been eliminated, and a valve devised which is capable of being very quickly opened and automatically closed by the action of the water, thus obviating the waste of the water which is occasioned by the use of such valves as at present constructed. As there must necessarily be considerable leakage of the water around the valve stem

where it passes through the casing wall 14, we form the chamber 15 on the valve casing whereby this leakage is directed downwardly along the discharge spout 7 and into the receptacle being filled. Thus all of the water which passes through the valve may be used, and all liability of the waste of the water is overcome.

From the foregoing it is believed that the operation and many advantages of our improved valve will be readily understood without requiring a more extended description.

The device is simple, may be economically manufactured and is highly efficient and durable in use.

While we have shown and described the preferable embodiment of our invention, it will be obvious that the same is susceptible of numerous modifications without departing from the essential features and sacrificing any of the advantages thereof.

Having thus described the invention, what is claimed is:—

25 A faucet of the character described comprising a casing having an inlet and outlet and a valve seat formed within the casing

between the inlet and outlet, a deflecting wall depending from the outer end of said faucet casing in spaced relation to the outlet, a valve normally held upon the valve seat by the pressure of the water thereagainst, a stem formed on the valve, the stem of said valve being movably disposed through the casing wall and said deflecting wall, a lever fulcrumed on the outer end of said casing adjacent to its lower end, said end engaging with said valve stem, said lever being outwardly movable to remove the valve from its seat, a lug integrally formed on the faucet casing in line with the lever, and a dog pivoted on said lug and adapted to be swung upwardly and outwardly, the free end of said dog engaging in a notch in said lever to hold the same in its open position.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

WILLIAM E. PORTER.
OTIS B. THOMAS.

Witnesses:

O. C. CROOKE,
GEO. F. BLACK.