W. Z. Hatcher,

Waste Lock,

Nº211,550,

Patented Aug. 22, 1854.

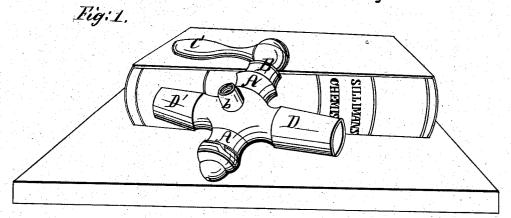
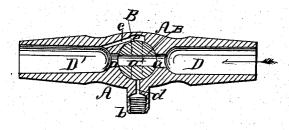


Fig. 2.



Witnesses

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Inventor; William Fi Hatcher

UNITED STATES PATENT OFFICE.

WILLIAM Z. HATCHER, OF PHILADELPHIA, PENNSYLVANIA.

STOP AND WASTE COCK.

Specification of Letters Patent No. 11,550, dated August 22, 1854.

To all whom it may concern:

Be it known that I, WILLIAM Z. HATCHER, of the city of Philadelphia and State of Pennsylvania, have invented a new and use5 ful Improvement on the Stop and Waste Cock; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed of drawings, making a part of this specification, in which—

Figure 1, shows a perspective view of one of these cocks as generally formed and adapted for the supply pipe of baths, and other similar purposes; and Fig. 2, a longitudinal section of the same, showing the construction and application of my improvement

The nature of my invention consists in constructing a waste way through the barrel of the cock, so that the water to be wasted may pass therefrom through the common supply way in the plug, to the outlet on the opposite side of the barrel, when the plug is turned to shut off the supply of water, in either direction; and whereby a notch or extra hole in the plug, and the very objectionable check pin and stops heretofore used to limit the motion of the plug, are entirely dispensed with, and a better and more durable stop and waste cock produced, and at a less cost.

In the annexed drawings, like letters indicate the same parts in both figures.

A is the barrel; B the plug; C, the handle; D and D¹ the tubes; a, a, the through ways; b, the outlet waste pipe; c the peculiar waste way through the barrel of the cock, leading from the tube D¹, to the plug (B), so that when the latter is turned in either direction so as to shut off the supply of water from the tube (D) its through way (a¹) is in the position of the dotted lines, and in communication with the peculiar way c, and also with the outlet waste pipe (C) through the waste hole (d) and the water in the tube (D¹) wastes at the outlet tube (b).

The peculiar waste way (c) is simply a small hole drilled from near the inner end 50 of one of the tubes (D or D¹) directly through or into the metal of the barrel, so as to reach a small recess (e) (left in casting) on the inside of the same. It will now be apparent that as the plug will be in 55 proper position to stop and waste, when

turned in either direction to shut off the supply of water, there is no necessity for the controlling pin and the accompanying stops, which have heretofore been necessary to insure the plug's being in the right position to stop and waste—and further, that a notch or extra hole is not required to be made in the plug as heretofore—and that my improvement is so simple and easily constructed and applied, as rather to diminish 65 the original cost, besides furnishing a more durable and convenient stop and waste cock. The plug and barrel, and also the through ways, and outlet waste hole and pipe, are all combined and arranged in the usual man-70 ner.

The improved waste way (c) is made, in diameter, to correspond with the diameter of the outlet waste hole (d)—say about an eighth of an inch—and the recess (e) may 75 be cut or made with a chisel, if not previously left in the casting—its object being mainly to give a more expanded opening at this part of the waste way (c) to insure an open communication with the through way 80 in the plug, should the latter not be turned an exact quarter round.

Having thus fully and clearly described the construction and operation of my improved stop and waste cock, I proceed to 85 state that I do not claim herein as my invention, the making a supply way in the barrel of the cock. Nor do I claim the outlet waste hole (d), the waste pipe (C), nor the through ways $(a^1, \text{ nor } a, a)$ as these are 90 old devices; but

What I claim as my invention and desire to secure by Letters Patent, is—

Making the waste way (c, e) in the barrel of the cock, so as to convey the water required to be wasted from the pipe, to the through way in the plug, that it may pass through the same to the outlet hole (d) and pipe (b) on the opposite side of the barrel, as described, and so that the plug 100 (B) may be turned in either direction, for the purpose; and the notch or extra hole in the plug, and the check pin and stops heretofore used may be dispensed with—as described.

WILLIAM Z. HATCHER.

Witnesses:
Benj. Morison,
Geo. C. Geyer.